
APPENDIX D
WELL, PROBE and CORE LOGS

REMEDIAL INVESTIGATION REPORT
ICS/NWC
SEATTLE, WASHINGTON
October 2025

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**MONITORING WELL LOGS
UPLAND ICS/NWC SITE**

**REMEDIAL INVESTIGATION REPORT
ICS/NWC
SEATTLE, WASHINGTON**

Key to Exploration Logs

Sample Descriptions

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits is estimated based on visual observation and is presented parenthetically on the test pit logs.

SAND or GRAVEL	Standard Penetration Resistance in Blows/Foot	SILT or CLAY	Standard Penetration Resistance in Blows/Foot	Approximate Shear Strength in TSF
Density		Consistency		
Very loose	0 - 4	Very soft	0 - 2	<0.125
Loose	4 - 10	Soft	2 - 4	0.125 - 0.25
Medium dense	10 - 30	Medium stiff	4 - 8	0.25 - 0.5
Dense	30 - 50	Stiff	8 - 15	0.5 - 1.0
Very dense	>50	Very stiff	15 - 30	1.0 - 2.0
		Hard	>30	>2.0

Moisture

Dry	Little perceptible moisture
Damp	Some perceptible moisture, probably below optimum
Moist	Probably near optimum moisture content
Wet	Much perceptible moisture, probably above optimum

Minor Constituents

Minor Constituents	Estimated Percentage
Not identified in description	0 - 5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

Legends

Sampling

BORING SAMPLES

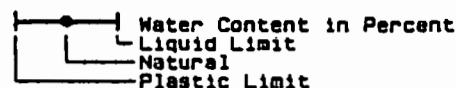
-  Split Spoon
-  Shelby Tube
-  Cuttings
-  Core Run
- * No Sample Recovery
- P Tube Pushed, Not Driven

TEST PIT SAMPLES

-  Grab (Jar)
-  Bag
-  Shelby Tube

Test Symbols

- GS Grain Size Classification
- CN Consolidation
- TUU Triaxial Unconsolidated Undrained
- TCU Triaxial Consolidated Undrained
- TCO Triaxial Consolidated Drained
- QU Unconfined Compression
- DS Direct Shear
- K Permeability
- PP Pocket Penetrometer
- TV Torvane
- CBR California Bearing Ratio
- MO Moisture Density Relationship
- AL Atterberg Limits



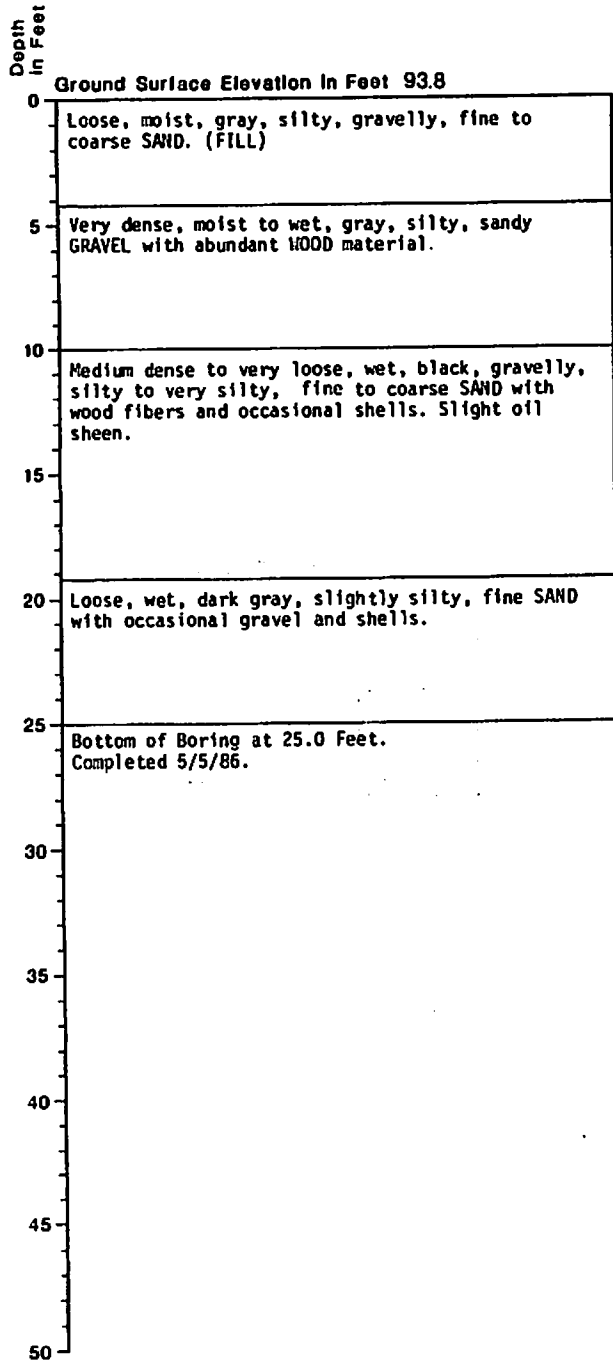
Ground Water Observations

-  Surface Seal
-  Ground Water Level on Date (ATD) At Time of Drilling
-  Observation Well Tip or Slotted Section
-  Ground Water Seepage (Test Pits)

HC-81

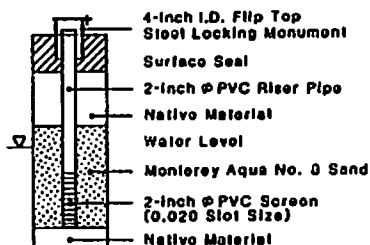
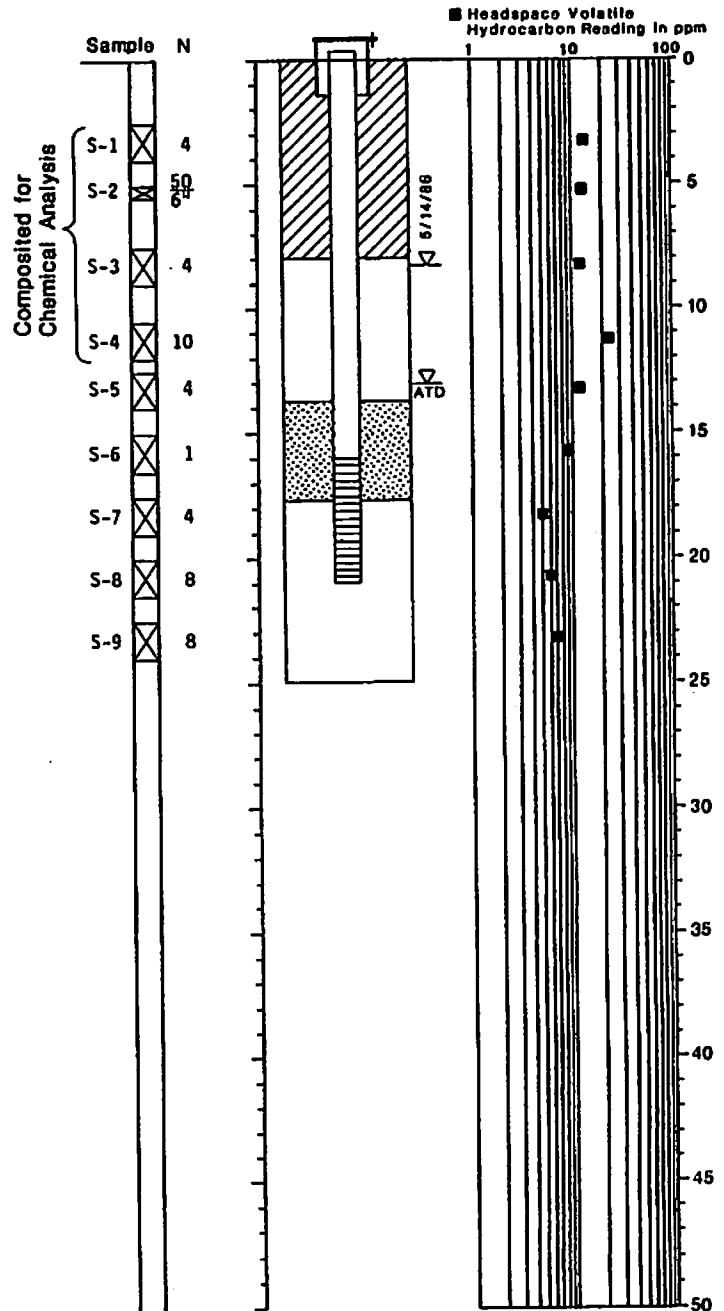
Boring Log and Construction Data for Well B-1

Geologic Log



Well Design

Top Casing Relative Elevation in Feet 95.3 (B-3=100.0)
Casing Stickup In Feet 1.5



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspaced Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photoluminescence Meter with a 10.2 eV Lamp.

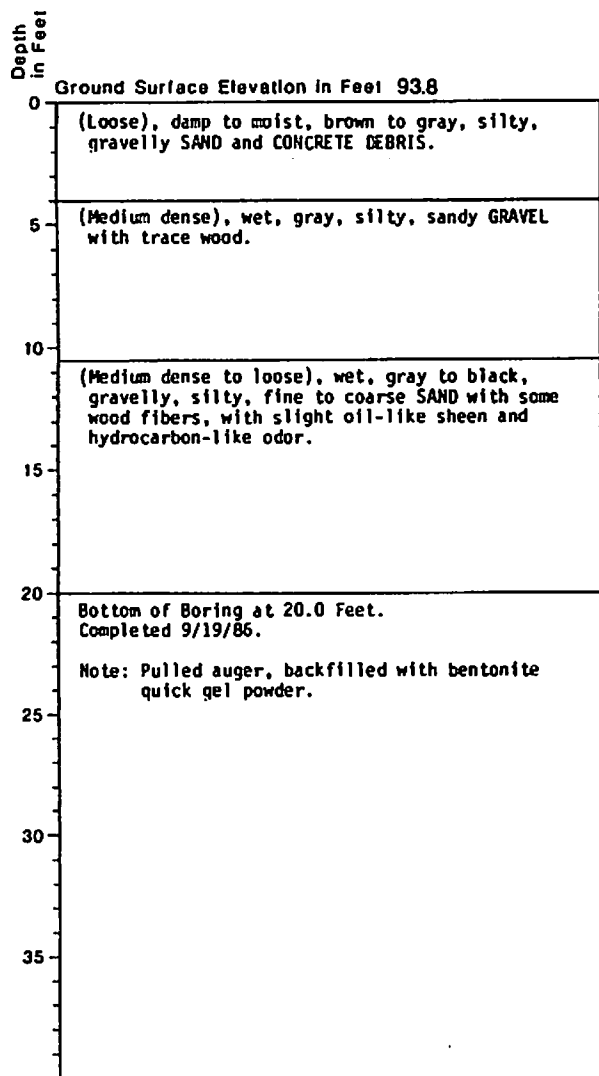
- 2-inch O.D. Split Spoon Sample Driven by 140-lb. Hammer 30-Inch Fall
- N Standard Penetration Resistance, Blows per Foot

J-1659 May 1986
HART-CROWSER & associates, Inc.
Figure A-2

Boring Log and Construction Data for Well B-1A

HC-31A

Geologic Log

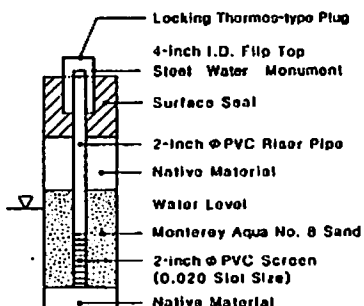
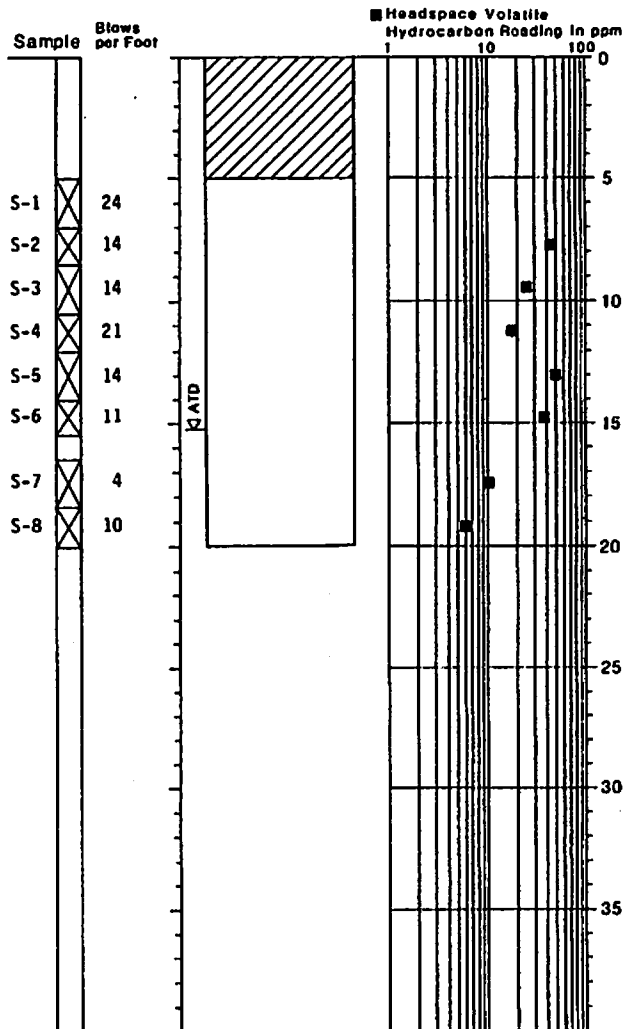


Well Design

Top Casing Relative

Elevation in Feet

Casing Stickup in Feet



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photolization Meter with a 10.2 eV Lamp.

2-1/2 Inch I.D. Split Spoon Sample
Driven by 140-lb. Hammer, 30-inch Fall

J-1659

September 1986

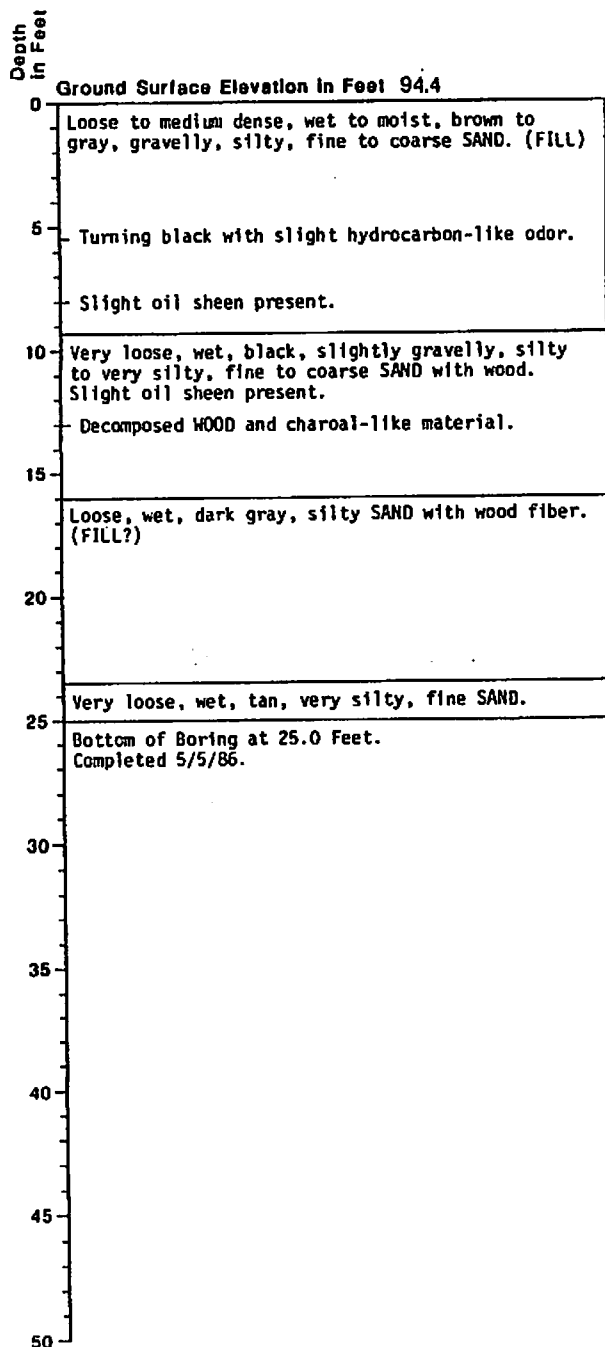
HART-CROWSER & associates, inc.

Figure A-3

Boring Log and Construction Data for Well B-2

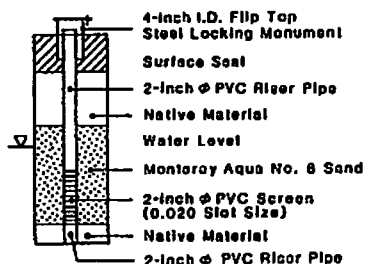
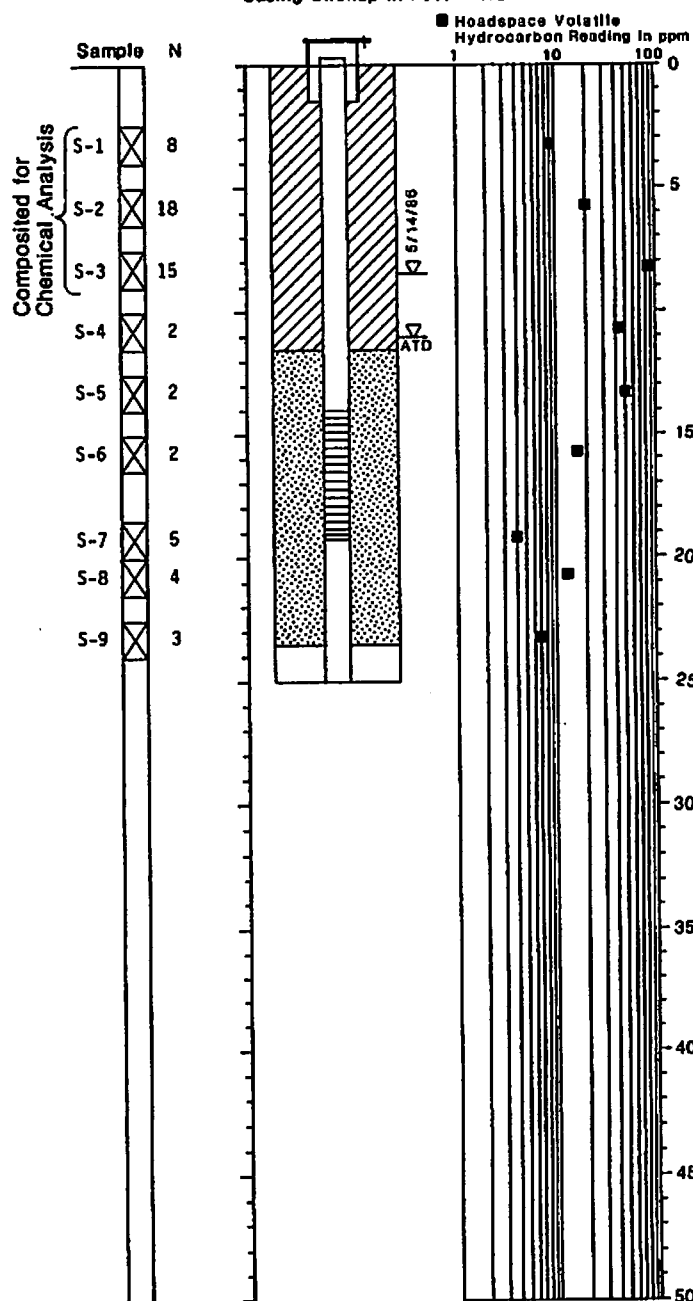
HC-B2

Geologic Log



Well Design

Top Casing Relative Elevation in Feet 95.4 (B-3=100.0)
Casing Stickup in Feet 1.0



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photoionization Meter with a 10.2 eV Lamp.

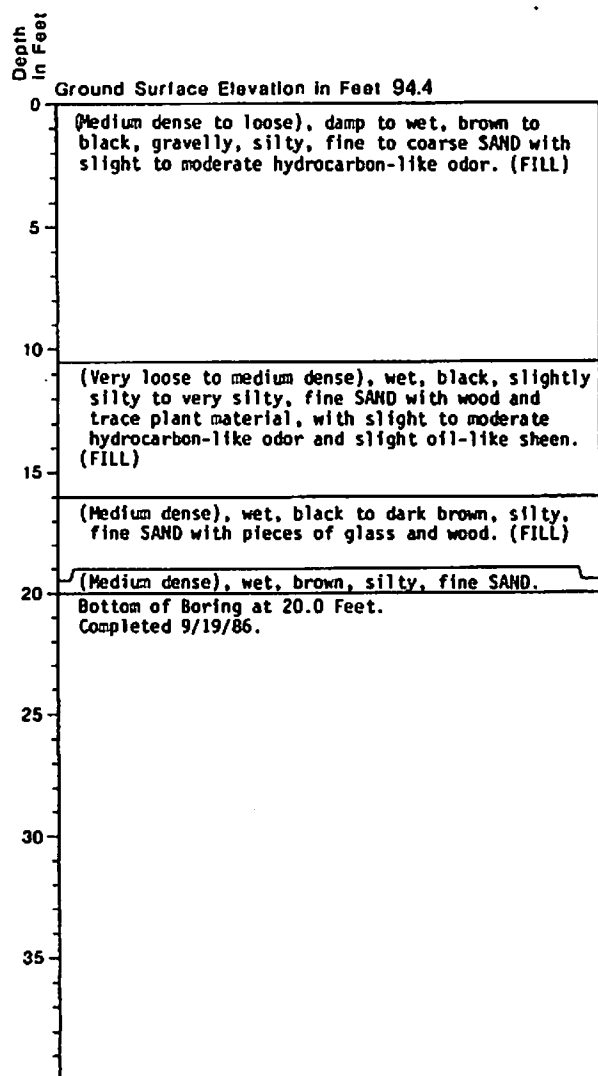
2-inch O.D. Split Spoon Sample Driven by 140-lb. Hammer 30-inch Fall
N Standard Penetration Resistance, Blows per Foot

J-1659 May 1986
HART-CROWSER & associates, inc.
Figure A-4

Boring Log and Construction Data for Well B-2A

HC-B24

Geologic Log

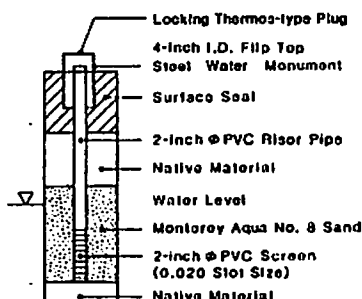
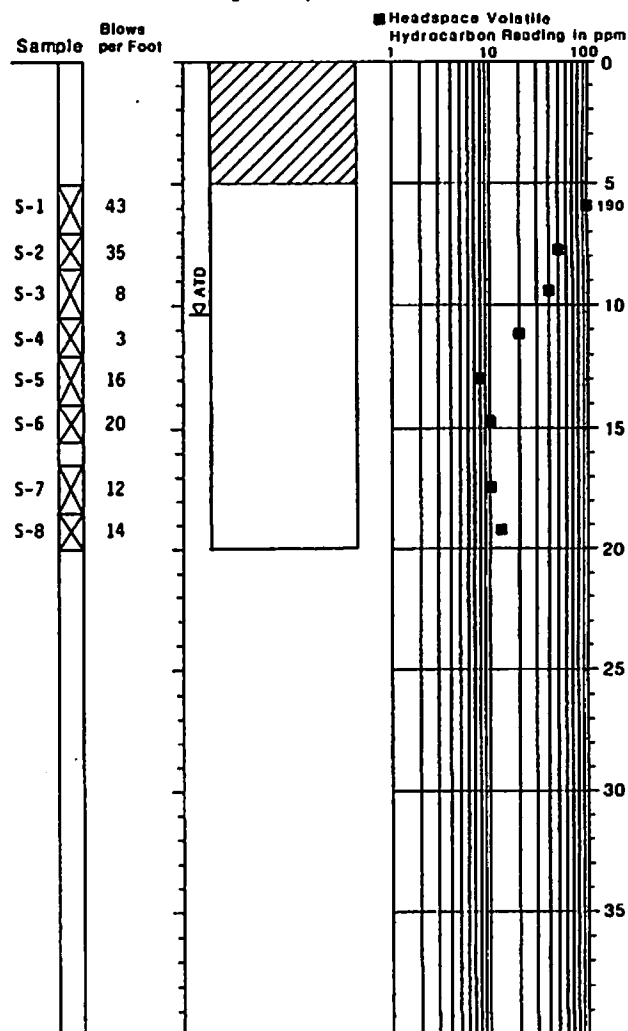


Well Design

Top Casing Relative

Elevation in Feet

Casing Stickup in Feet



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photoionization Meter with a 10.2 eV Lamp.

2-1/2 inch I.D. Split Spoon Sample
Driven by 140-lb. Hammer, 30-inch Fall

J-1659

September 1986

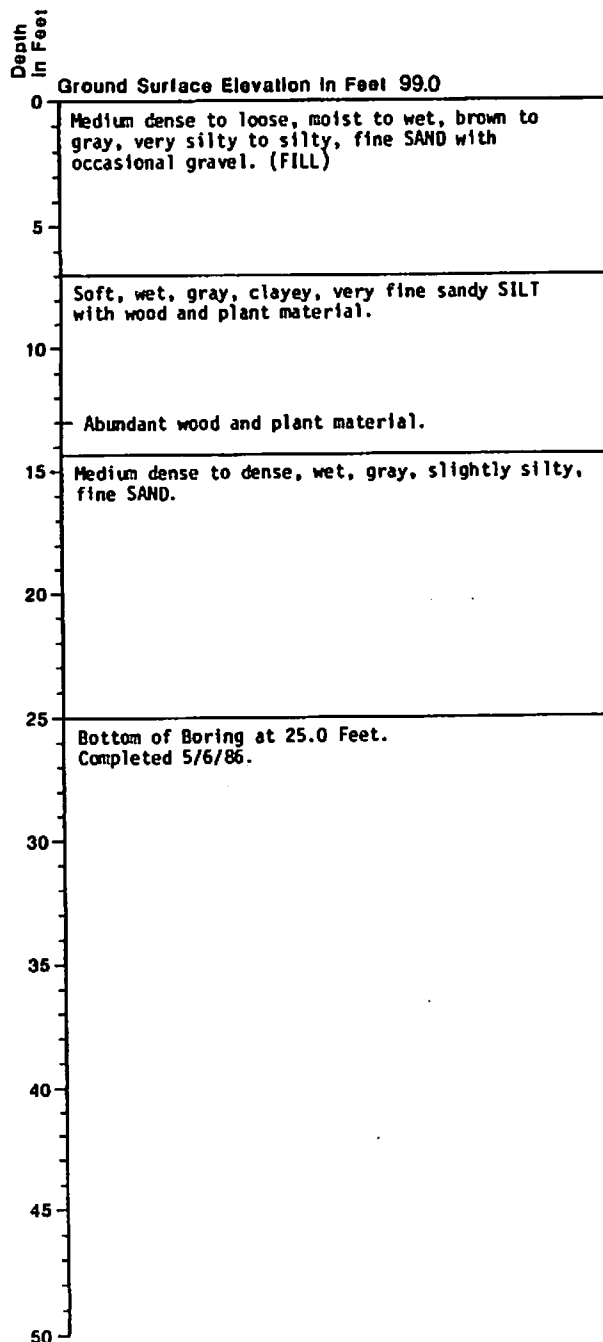
HART-CROWSER & associates, inc.

Figure A-5

Boring Log and Construction Data for Well B-3

4C8-3

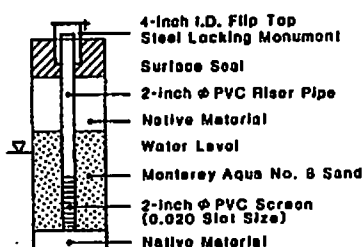
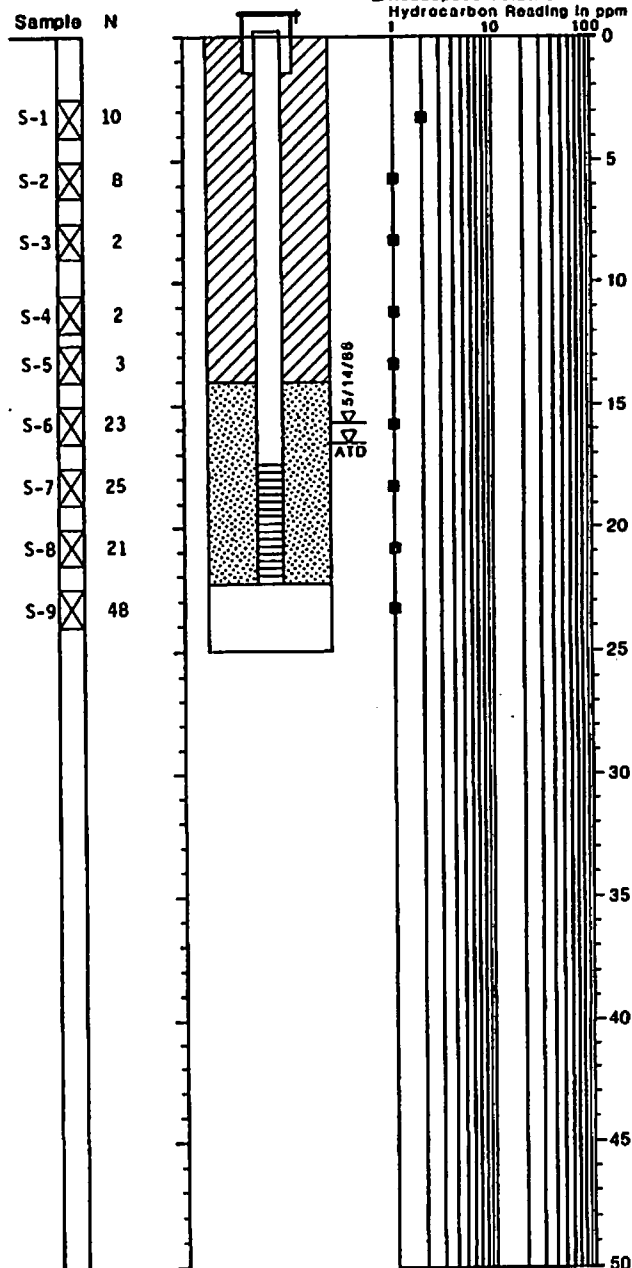
Geologic Log



Well Design

Top Casing Relative Elevation in Feet 100.0 (Arbitrary)

Casing Stickup in Feet 1.5



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photoionization Meter with a 10.2 eV Lamp.

- 2-Inch O.D. Split Spoon Sample Driven by 140-lb. Hammer 30-Inch Fall
- N Standard Penetration Resistance, Blows per Foot

J-1659 May 1986

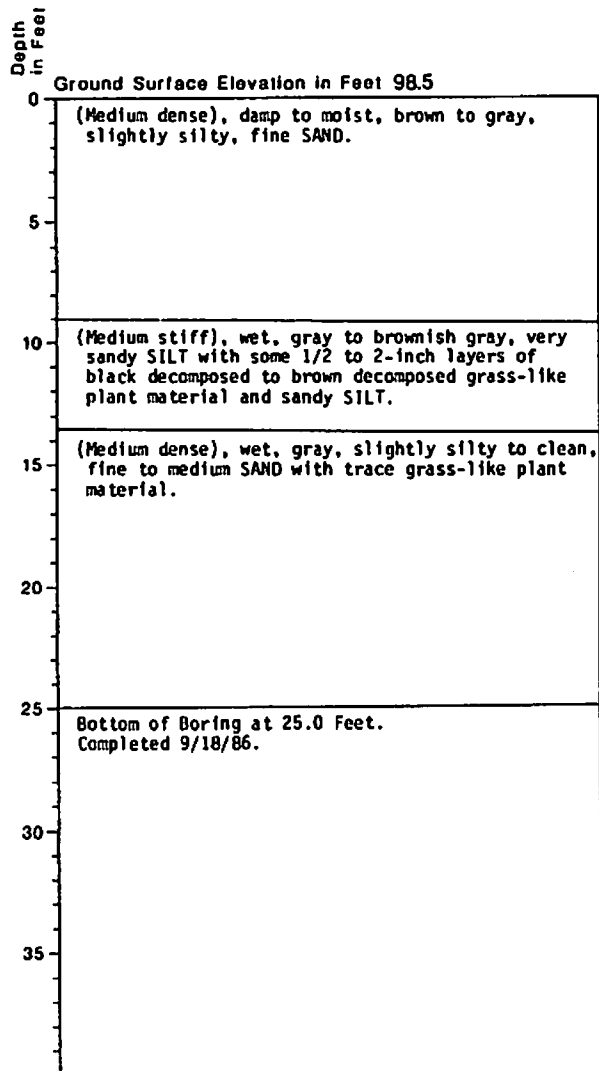
HART-CROWSER & associates, inc.

Figure A-6

Boring Log and Construction Data for Well B-4

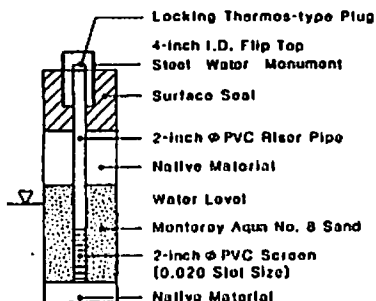
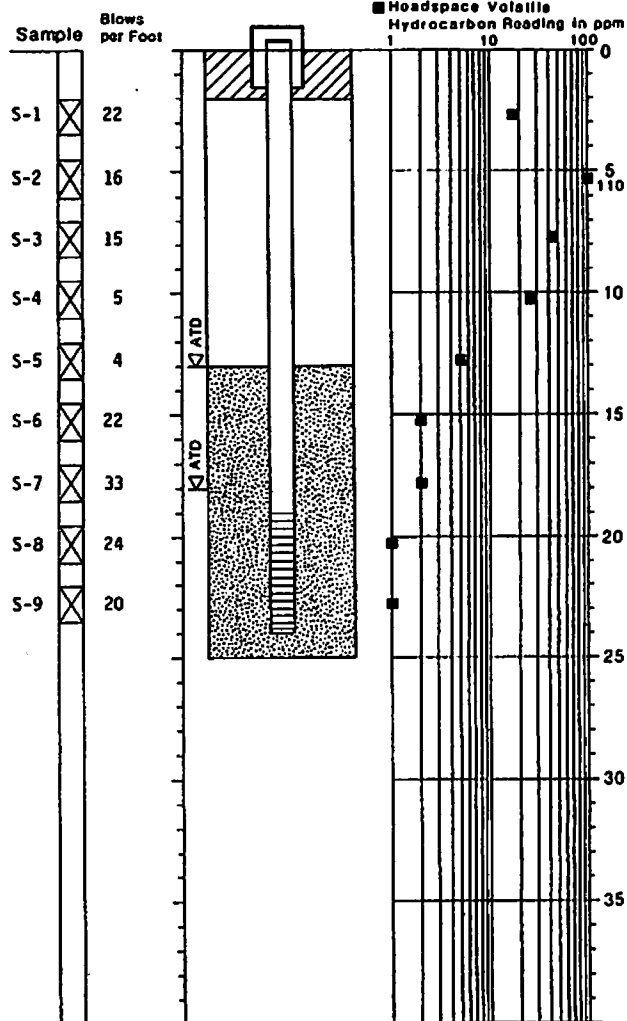
HL-34

Geologic Log



Well Design

Top Casing Relative
Elevation in Feet 99.0
Casing Stickup in Feet 0.5



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photolization Meter with a 10.2 eV Lamp.

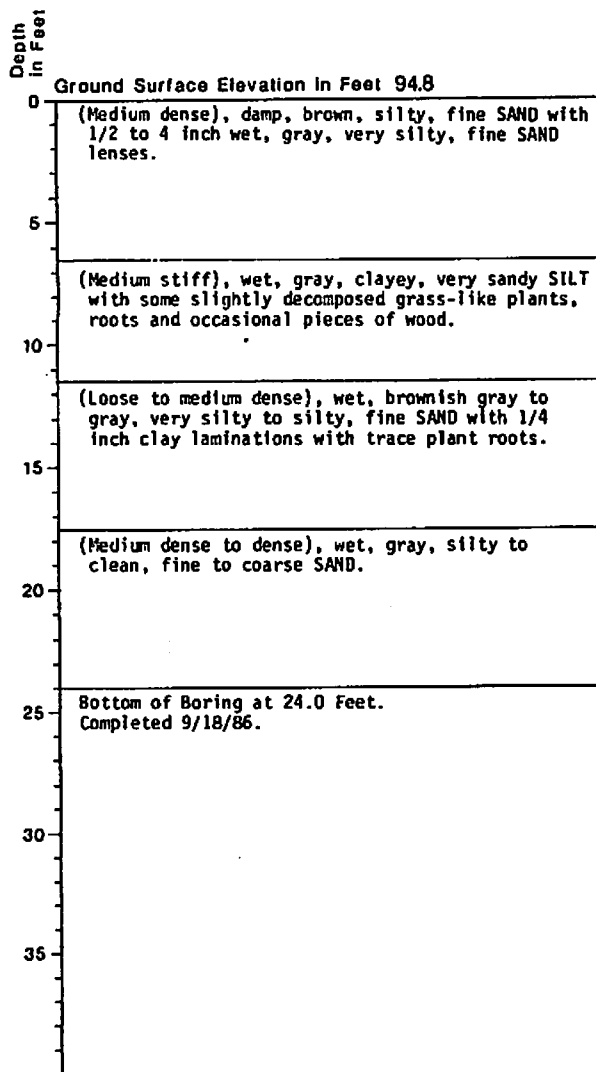


2-1/2 inch I.D. Split Spoon Sample
Driven by 140-lb. Hammer, 30-inch Fall

Boring Log and Construction Data for Well B-5

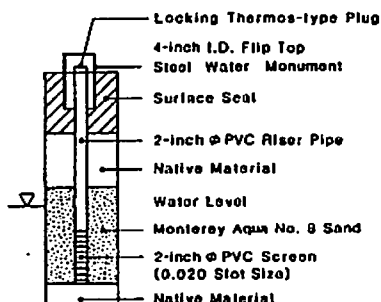
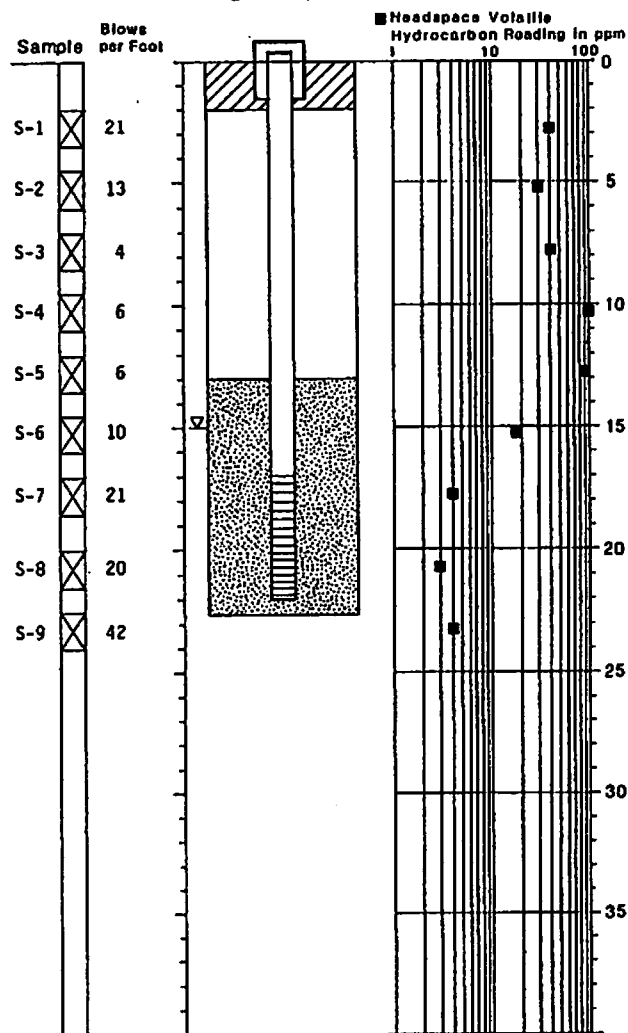
HC 35

Geologic Log



Well Design

Top Casing Relative Elevation in Feet 95.3
Casing Stickup in Feet 0.5



NOTES:

1. Soil descriptions are interpretive and actual changes may be gradual.
2. Water Level is for date indicated and may vary with time of year.
ATD: At time of drilling
3. Headspace Volatile Hydrocarbon Concentration as measured in jar samples using an H-Nu PI-101 Photoionization Meter with a 10.2 eV Lamp.

2-1/2 inch I.D. Split Spoon Sample
Driven by 140-lb. Hammer, 30-inch Fall



SOIL BORING LOG

BORING No: MW-1

SA-MW1

PAGE 1 of 3

PROJECT: EAA-2

DRILLER: Cascade Drilling, Inc.

WELL DIAMETER: 2-inch

LOCATION: 7152 1st Ave S, Seattle, WA

DRILL METHOD: Concrete Core/Hollow-stem Auger

WELL DEPTH: 24 feet

CLIENT: Department of Ecology

SAMPLE METHOD: Split Spoon

WELL CASING: 2-inch PVC, Schedule 40

DATE: 04/23/07

HOLE DIAMETER: 8.25 inches

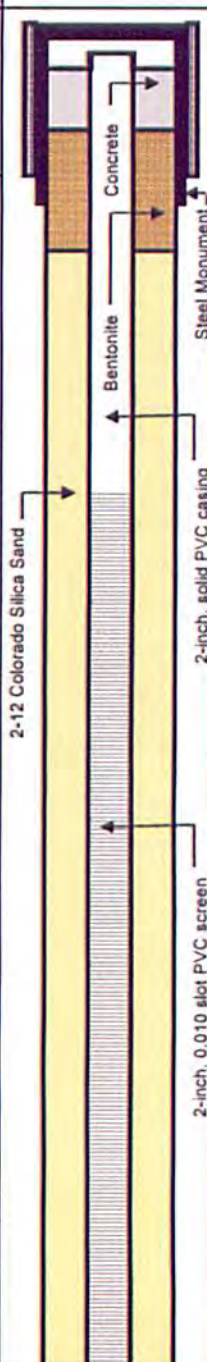
WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

LOGGED BY: Tina King

HOLE DEPTH: 25.5

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.54' TOC 12.57' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample		DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
				Recovery	Interval				
MW-1-5	4.7	4				1	Concrete	16 inches of Concrete	 Concrete Bentonite Steel Monument 2-12 Colorado Silica Sand 2-inch, solid PVC casing 2-inch, 0.010 slot PVC screen
						2	SM	Gray and brown silty fine to medium SAND with occasional coarse sand and fine gravel (dry, very loose), slight sheen, slight odor.	
						3			
						4			
	131	2				5	CL	Black silty CLAY with medium to coarse sand and fine gravel (moist, Stiff), heavy sheen, strong odor.	
						6			
						7			
	202	14				8	ML	Grades to a moderate sheen.	
						9			
						10			
	50.1	32				11	SM/ ML	Gray silty fine SAND (moist, very dense), slight sheen, slight odor.	

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample		DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
				Recovery	Interval				
MW-1-12.5	52.4	39 50/ 5"				11.5	SM/ML	Gray silty fine SAND (moist, very dense), slight sheen, slight odor.	
--	50.8	22 29 26				12.5 13.5 14.5	ML	Gray fine sandy SILT, trace clay (wet, hard), slight sheen, slight odor.	
--	2.6	30				15.5 16.5 17.5	ML	As above, grading to no clay and increasing sand, no odor.	2-12 Colorado Silica Sand
--	2.6	30				18.5 19.5 20.5	SM	Dark gray silty fine SAND (moist, medium dense), no sheen, no odor.	2-inch, 0.010 slot PVC screen
--	6.5	27 50/4"				21.5 22.5	SP	Gray fine SAND with trace silt (wet, very dense), no sheen, no odor.	



SOIL BORING LOG

BORING No: MW-1

SA-MW1

PAGE 3 of 3

PROJECT: EAA-2

LOCATION: 7152 1st Ave S, Seattle, WA

CLIENT: Department of Ecology

DATE: 04/23/07

LOGGED BY: Tina King

DRILLER: Cascade Drilling, Inc.

DRILL METHOD: Concrete Core/Hollow-stem Auger

SAMPLE METHOD: Split Spoon

HOLE DIAMETER: 8.25 inches

HOLE DEPTH: 25.5

WELL DIAMETER: 2-inch

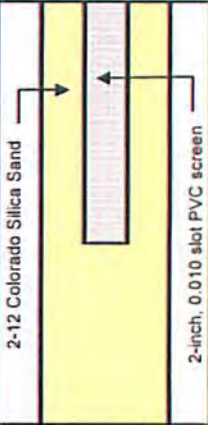
WELL DEPTH: 24 feet

WELL CASING: 2-inch PVC, Schedule 40

WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.54' TOC 12.57' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample Recovery Interval	DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
--	55.6	50/5"			23	SP	Gray fine SAND with trace silt (wet, very dense), no sheen, no odor.	
					24			
--	0	50/6"			25		Same as above.	
					26			
					27			
					28			
					29			
					30			
					31			
					32			
					33			



SOIL BORING LOG

BORING No: MW-2

SA-MW2

PAGE 2 of 3

PROJECT: EAA-2

LOCATION: 7152 1st Ave S, Seattle, WA

CLIENT: Department of Ecology

DATE: 04/23/07

LOGGED BY: Tina King

DRILLER: Cascade Drilling, Inc.

DRILL METHOD: Concrete Core/Hollow-stem Auger

SAMPLE METHOD: Split Spoon

HOLE DIAMETER: 8.25 inches

HOLE DEPTH: 26.5

WELL DIAMETER: 2-inch

WELL DEPTH: 24 feet

WELL CASING: 2-inch PVC, Schedule 40

WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.01' TOC 11.97' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample Recovery Interval	DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
--	102	12			12	SM	Black silty fine to coarse SAND with gravel and organics (wet, medium dense), slight sheen, slight odor.	2-12 Colorado Silica Sand 2-inch, 0.010 slot PVC screen
		12			13			
		17			14			
					15			
		8			16			
MW-2-15 FD-1-042407	50.8	8			17	CL	As above, grading to (wet, loose), heavy sheen, strong odor.	
		10			18			
					19			
					20			
--	212	8			21	SM	Black silty CLAY (wet/moist, stiff), no sheen, no odor.	
		14			22			
		17					Black silty fine SAND (wet, dense), no sheen, no odor.	
		20						
		22						



SOIL BORING LOG

BORING No: MW-2

SA-MW2

PAGE 3 of 3

PROJECT: EAA-2

LOCATION: 7152 1st Ave S, Seattle, WA

CLIENT: Department of Ecology

DATE: 04/23/07

LOGGED BY: Tina King

DRILLER: Cascade Drilling, Inc.

DRILL METHOD: Concrete Core/Hollow-stem Auger

SAMPLE METHOD: Split Spoon

HOLE DIAMETER: 8.25 inches

HOLE DEPTH: 26.5

WELL DIAMETER: 2-inch

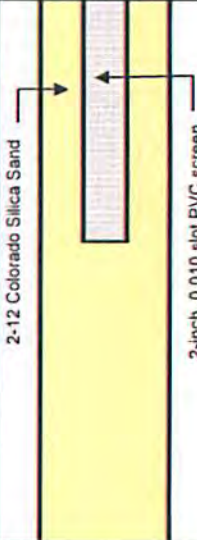
WELL DEPTH: 24 feet

WELL CASING: 2-inch PVC, Schedule 40

WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.01' TOC 11.97' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample		DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
				Recovery	Interval				
--	1.7	7 10 10				23 24	SP/S M	Black silty fine sand with shredded wood pieces (wet, medium dense), slight sheen, slight odor.	
--	2.9	15 20 22				25 26		Same as above grading to no sheen and some organics.	
						27 28 29 30 31 32 33			



SOIL BORING LOG

BORING No: MW-3

SA-MW3

PAGE 1 of 3

PROJECT: EAA-2

LOCATION: 7152 1st Ave S, Seattle, WA

CLIENT: Department of Ecology

DATE: 04/23/07

LOGGED BY: Tina King

DRILLER: Cascade Drilling, Inc.

DRILL METHOD: Concrete Core/Hollow-stem Auger

SAMPLE METHOD: Split Spoon

HOLE DIAMETER: 8.25 inches

HOLE DEPTH: 26

WELL DIAMETER: 2-inch

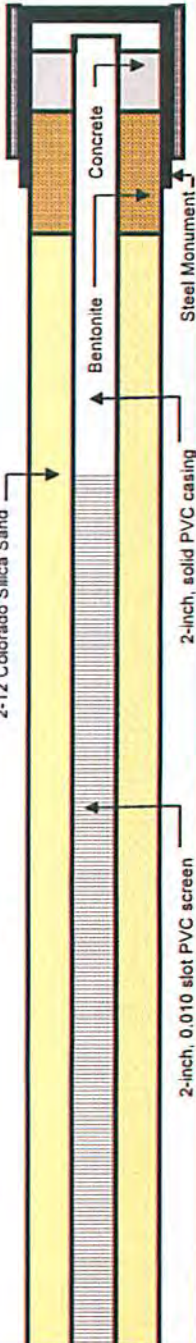
WELL DEPTH: 24 feet

WELL CASING: 2-inch PVC, Schedule 40

WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.61' TOC 12.57' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample Recovery Interval	DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details		
--	0.6	6				Con	5 inches of Concrete			
--	0.3	11				SM	Brown silty fine to medium SAND with occasional fine gravel grading to silty fine sand (moist, loose), no sheen, no odor.			
--	0.3	7				SM	Same as above, grading to trace of clay and increasing silt.			
--	101	50/6"				SM/ML	Brown silty fine SAND/fine sandy SILT (moist, loose/stiff), no sheen, no odor.			
MW-3-10	0.4	3	▽			SM/ML	Same as above, grading to orange mottling (wet, very loose/soft).			



SOIL BORING LOG

BORING No: MW-3

SA-MW3

PAGE 2 of 3

PROJECT: EAA-2

LOCATION: 7152 1st Ave S, Seattle, WA

CLIENT: Department of Ecology

DATE: 04/23/07

LOGGED BY: Tina King

DRILLER: Cascade Drilling, Inc.

DRILL METHOD: Concrete Core/Hollow-stem Auger

SAMPLE METHOD: Split Spoon

HOLE DIAMETER: 8.25 inches

HOLE DEPTH: 26

WELL DIAMETER: 2-inch

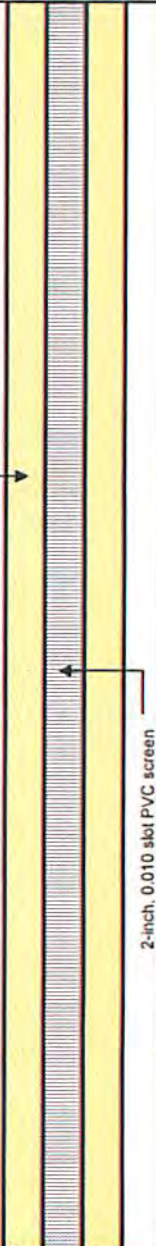
WELL DEPTH: 24 feet

WELL CASING: 2-inch PVC, Schedule 40

WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.61' TOC 12.57' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample		DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details		
				Recovery	Interval						
--	0.4	4				12	SM/ ML	Same as above.			
						13	SM	Brown silty fine SAND (wet, dense), no sheen, no odor.			
						14					
--	0.9	10				15		Same as above.			
						16	SP/S M	Brown silty fine SAND with increasing fine sand (wet dense), no sheen, no odor.			
						17					
--	0.01	15				18		Same as above, grading to dark brown at 18.5 and medium dense.			
						19	SP/S M				
						20					
--	7.1	50/6"				21		Grades to dark brown to black silty fine to medium sand (moist, very dense), no sheen, musty odor.			
						22					



SOIL BORING LOG

BORING No: MW-3

SA-MW3

PAGE 3 of 3

PROJECT: EAA-2

DRILLER: Cascade Drilling, Inc.

WELL DIAMETER: 2-inch

LOCATION: 7152 1st Ave S, Seattle, WA

DRILL METHOD: Concrete Core/Hollow-stem Auger

WELL DEPTH: 24 feet

CLIENT: Department of Ecology

SAMPLE METHOD: Split Spoon

WELL CASING: 2-inch PVC, Schedule 40

DATE: 04/23/07

HOLE DIAMETER: 8.25 inches

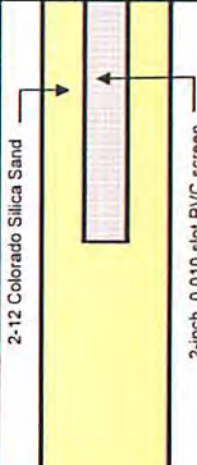
WELL SCREEN: 0.010-inch slot, 2-24 feet bgs

LOGGED BY: Tina King

HOLE DEPTH: 26

FILTER PACK: 2-12 Colorado Silica Sand

CASING ELEVATION: 12.61' TOC 12.57' NGVD88

Analytical Sample Number	PID (ppm)	BLOWS/6"	Water Level	Sample Recovery Interval	DEPTH (ft.)	SOIL TYPE	LITHOLOGY / DESCRIPTION	Well Completion Details
--	1.7	7			23	SP/S M	Same as above.	
		10			24	SM	Dark Brown Silty fin SAND, occasional medium sand (wet, Medium dense), no sheen, no odor.	
--	0.4	32			25	SP	Same as above grading to no sheen and some organics.	
		50/6"			26			
					27			
					28			
					29			
					30			
					31			
					32			
					33			

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW1

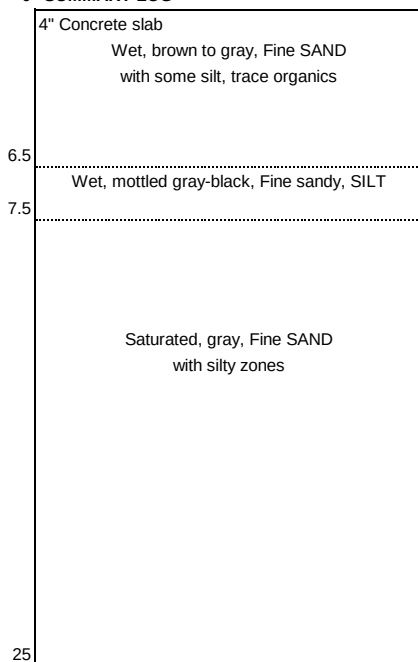
Field Rep: D. Cooper			Location: N199991 E1270150 NAD83			Ecology ID# BHS517		
Drilling Co.: Cascade			Ground surface elevation: 14.05' NAVD88					
Driller: Kasey Goble			Date Completed: 10/16/2012					
Drill Type: Power Probe 9600			Weather: Rain 60F					
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push					
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description	
A	grab @ 4-5'	1.6	0-5	48	-	1315	0.4-4.5' Moist, bwn, F SAND, w/some silt, ns, no 4.5-5' Wet, gry, F SAND, w/trace organics, ns, no	
B	grab @ 6.5-7.5'	1.2	5-10	60	-	1325	5-6.5' As above 6.5-7.5' Wet, mot gry-blk, F Sandy, SILT, ns, no 7.5-10' Sat, gry, F SAND, w/some silt, ns, no	
C	grab @ 11-12'	0.2	10-15	40	-	1335	10-15' Sat, gry, F SAND, ns, no	
			15-20	40	-		15-20' Sat, gry, silty, F SAND, ns, no	
			20-25	60	-		20-25' As above	

Bottom of boring @ 25.0'

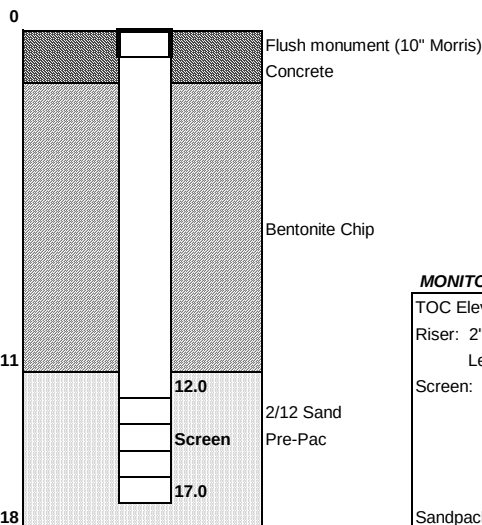
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

TOC Elevation: 13.74 NAVD88	
Riser: 2" dia. SCH 40 PVC	Length: 12.0'
Screen: 2" dia. SCH 40 PVC	Slot size: 0.010"
	Length: 5'
	(top/bot) 12.0/17.0
	0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand	
	10-20 backfill (top/bot) 11/18
Seal: Bentonite chip	
	(top/bot) 2/11
Monument: 10" dia. Flush Mount (Morris)	
	-0.3' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW2

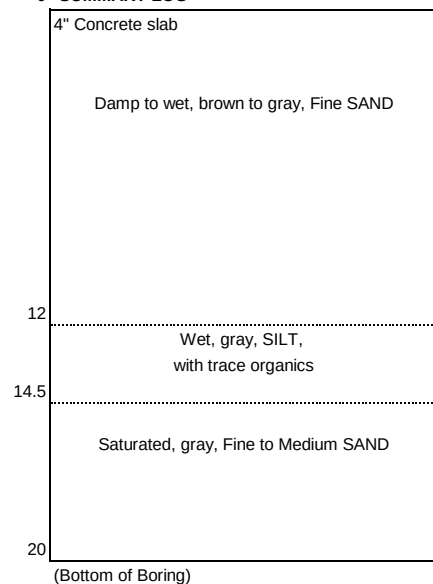
Field Rep: D. Cooper			Location: N199928 E1269979 NAD83			Ecology ID# BHS520	
Drilling Co.: Cascade			Ground surface elevation: 17.12' NAVD88				
Driller: Kasey Goble			Date Completed: 10/16/2012				
Drill Type: Power Probe 9600			Weather: Clear 60F				
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push				
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
A	grab @ 2-3'	1.3	0-5	40	-	1120	0.4-5' Damp, bwn, F SAND, ns, no
B	grab @ 8-9'	1.2	5-10	60	-	1130	5-9' As above 9-10' Wet, bwn-gry, F SAND, w/oxidation banding, ns, no
C	grab @ 12-13'	1	10-15	60	-	1140	10-12' As above 12-14.5' Wet, gry, SILT, w/trace organics 13-14', ns, no 14.5-15' Sat, gry, F-M SAND, ns, no
D	grab @ 16-17'	0.3	15-20	60	-	1150	15-20' As above

Bottom of boring @ 20.0'

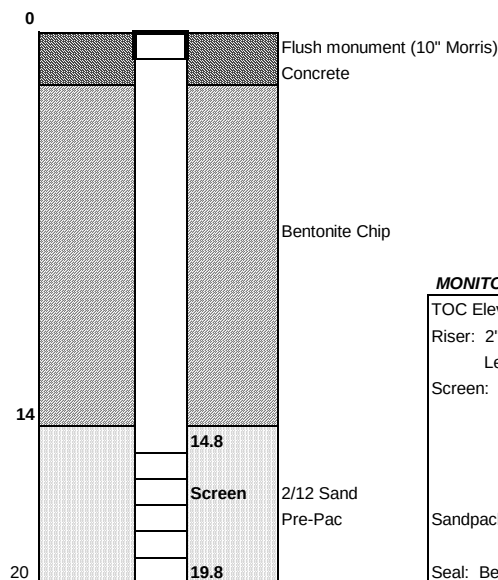
MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 16.80 NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 14.8'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 14.8/19.8
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 14/20
Seal: Bentonite chip
(top/bot) 2/14
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW3

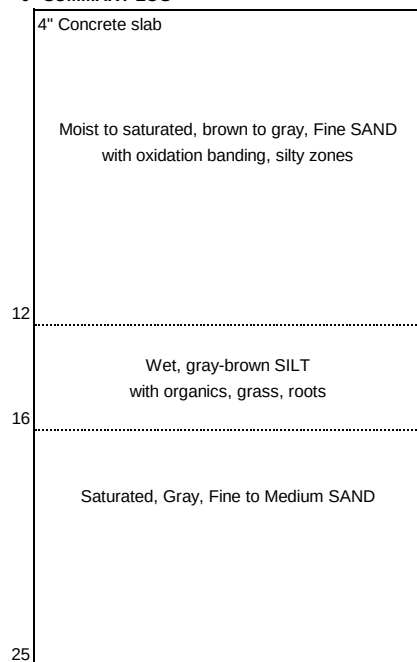
Field Rep: D. Cooper			Location: N199878 E1269775 NAD83			Ecology ID# BHS521		
Drilling Co.: Cascade			Ground surface elevation: 17.15' NAVD88					
Driller: Kasey Goble			Date Completed: 10/16/2012					
Drill Type: Power Probe 9600			Weather: Clear 60F					
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push					
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description	
A	grab @ 2-4'	0.8	0-5	48	-	1310	0.4-5' Moist, bwn, F SAND, ns, no	
B	grab @ 7-8'	0.4	5-10	55	-	1320	5-8' Moist to wet, bwn, F SAND, oxidation band @ 8', ns, no 8-10' Wet to sat, gry, F SAND, sat @ 8.5', ns, no	
C	grab @ 12-13'	0.9	10-15	55	-	1330	10-12' Sat, gry, silty F SAND, ns, no 12-13.5' Wet, gry, SILT, ns, no 13.5-15' Wet, bwn, SILT, w/organics, grass, roots	
D	grab @ 17-18'	0.9	15-20	36	-	1340	15-16' As above 16-20' Sat, gry, F-M SAND, ns, no	
			20-25	60	-		20-25' As above	

Bottom of boring @ 25.0'

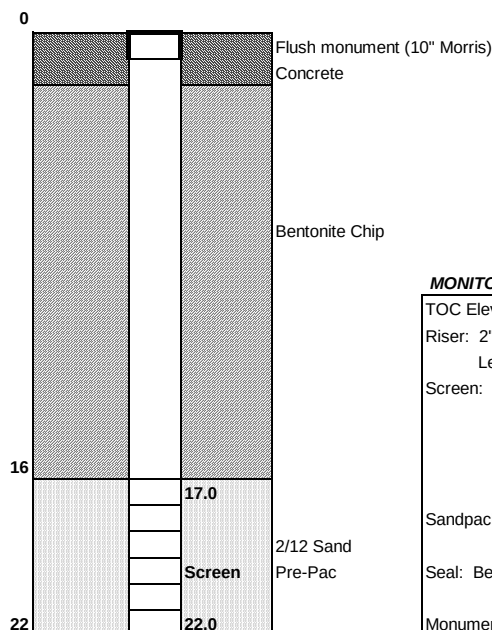
MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 16.79 NAVD88	
Riser: 2" dia. SCH 40 PVC	Length: 17.0'
Screen: 2" dia. SCH 40 PVC	Slot size: 0.010"
	Length: 5'
	(top/bot) 17.0/22.0
	0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand	10-20 backfill (top/bot) 16/22
Seal: Bentonite chip	(top/bot) 2/16
Monument: 10" dia. Flush Mount (Morris)	-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW4

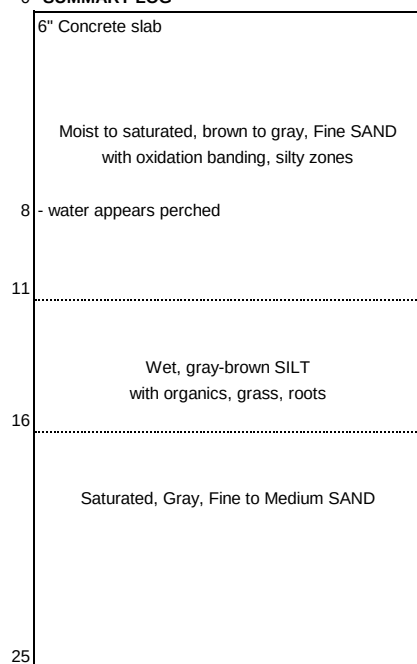
Field Rep: D. Cooper			Location: N199986 E1269797 NAD83			Ecology ID# BHS522	
Drilling Co.: Cascade			Ground surface elevation: 15.86' NAVD88				
Driller: Kasey Goble			Date Completed: 10/17/2012				
Drill Type: Power Probe 9600			Weather: Clear 50F				
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push				
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
A	grab @ 3-4'	24	0-5	36	-	0810	0.5-5' Moist, bwn-gry, F SAND, ns, no
B	grab @ 7-8'	2.3	5-10	48	-	0820	5-10' Wet, gry, F SAND, sat@ 8', ns, no (perched zone)
C	grab @ 10-11'	3.1	10-15	55	-	0830	10-11' Sat, gry, F SAND w/ some silt, ns, no 11-12' Wet, gry, SILT, ns, no 12-15' Wet, bwn, organic SILT, w/scattered fibrous organics
D	grab @ 16-17'	3.2	15-20	55	-	0840	15-16' As above 16-17' Sat, gry, fine SAND, ns, no 17-20' Sat, gry, F-M SAND, ns, no
			20-25	60	-		20-25' As above

Bottom of boring @ 25.0'

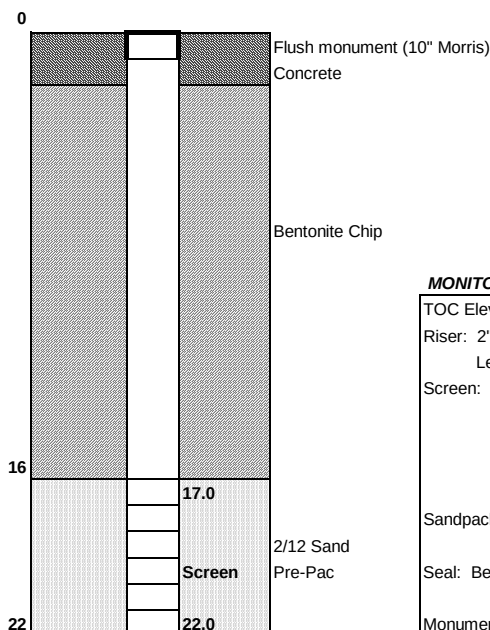
MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 15.54 NAVD88
 Riser: 2" dia. SCH 40 PVC
 Length: 17.0'
 Screen: 2" dia. SCH 40 PVC
 Slot size: 0.010"
 Length: 5'
 (top/bot) 17.0/22.0
 0.3' end cap
 Sandpack: Pre-Pac 2/12 colorado sand
 10-20 backfill (top/bot) 16/22
 Seal: Bentonite chip
 (top/bot) 2/16
 Monument: 10" dia. Flush Mount (Morris)
 -0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 Sat. - saturated
 mot - mottled
 ns - no sheen
 no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW5

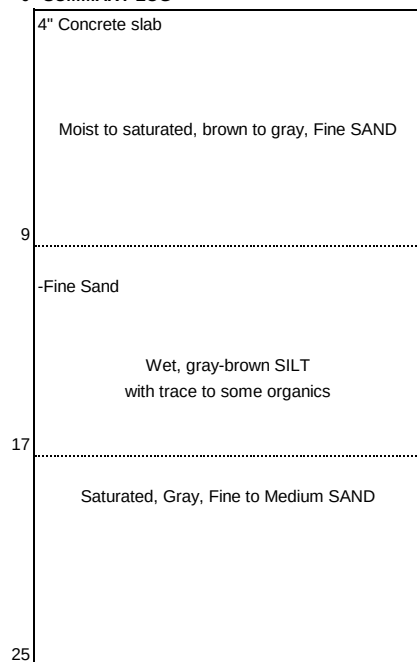
Field Rep: D. Cooper			Location: N200065 E1269721 NAD83			Ecology ID# BHS523	
Drilling Co.: Cascade			Ground surface elevation: 15.51' NAVD88				
Driller: Kasey Goble			Date Completed: 10/17/2012				
Drill Type: Power Probe 9600			Weather: Clear 55F				
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push				
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
A	grab @ 3-4'	3.6	0-5	40	-	1010	0.4-5' Moist, bwn, F SAND, ns, no
B	grab @ 7-8'	0.5	5-10	55	-	1020	5-6' As above 6-9' Wet-sat, gry, F SAND, saturated @ 7.5' ns, no 9-10' Wet, gry, SILT, w/trace organics, ns, no
C	grab @ 12-13'	0.8	10-15	55	-	1030	10-10.5' Sat, gry, F SAND, ns, no 10.5-11.5' Wet, gry, F sandy, SILT, ns, no 11.5-15' Wet, bwn, SILT, w/trace to some organics, ns, no
D	grab @ 17-18'	1.1	15-20	55	-	1040	15-17' Wet, bwn, organic, SILT, soft, ns, no 17-20' Sat, gry, F-M SAND, ns, no
			20-25	60	-		20-25' As above

Bottom of boring @ 25.0'

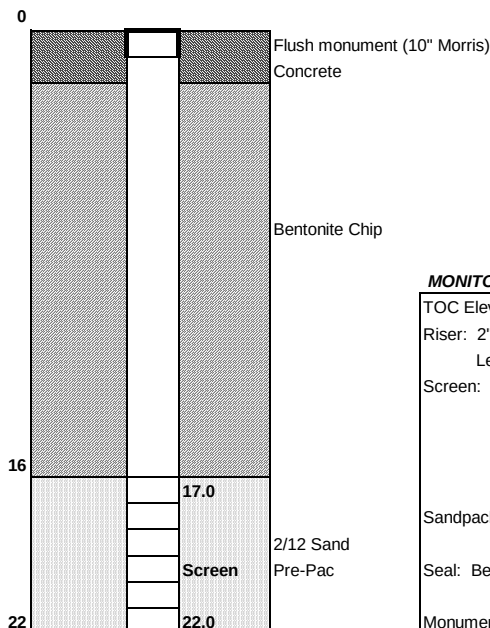
MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 15.14 NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 17.0'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 17.0/22.0
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 16/22
Seal: Bentonite chip
(top/bot) 2/16
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW6

Field Rep: D. Cooper			Location: N200249 E1269827 NAD83			Ecology ID# BHS524	
Drilling Co.: Cascade			Ground surface elevation: 11.88' NAVD88				
Driller: Kasey Goble			Date Completed: 10/17/2012				
Drill Type: Power Probe 9600			Weather: Clear 55F				
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push				
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
A	grab @ 3-5'	98	0-5	40	-	1150	0.4-2' Moist, gry, F-M SAND, w/brick fragments 2-5' Wet, gry, F SAND, strong oily odor, light sheen 4-5'
B	grab @ 6-8'	130	5-10	60	-	1200	5-8' As above, becomes saturated @ 6.5' slight sheen
C	grab @ 9-10	2.2				1210	8-8.5' Wet, gry, F SAND, ns, slight odor 8.5-10' Wet, bwn, organic, SILT, ns, no
D	grab @ 12-13	0.9	10-15	60	-	1220	10-12' As above, soft, grading F sandy, ns, no 12-15' Sat, gry, F SAND, grading coarser, ns, no
			15-20	60	-		15-20' Sat, gry, F-M SAND, ns, no

Bottom of boring @ 20.0'

MONITORING WELL DIAGRAM

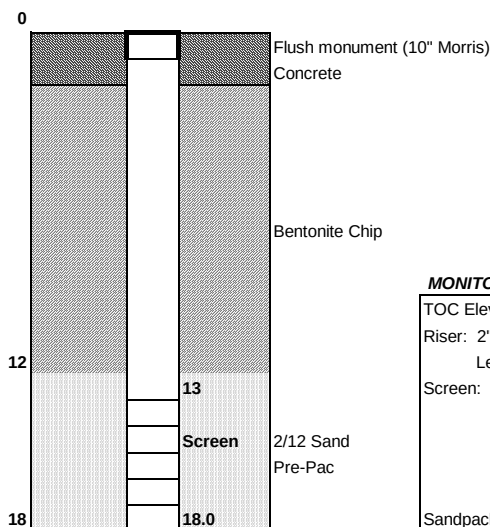
Depth(ft.)

SUMMARY LOG

0	4" Concrete slab
2	Moist, gray, Fine to Medium SAND
	Damp to wet to saturated, gray, Fine SAND oily odor, Sheen
8.5	
	Wet, brown, organic, SILT
12	-grading fine sandy
	Saturated, gray, Fine to Medium SAND
20	

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 11.53 NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 13.0'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 13.0/18.0
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 12/18
Seal: Bentonite chip
(top/bot) 2/12
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW7

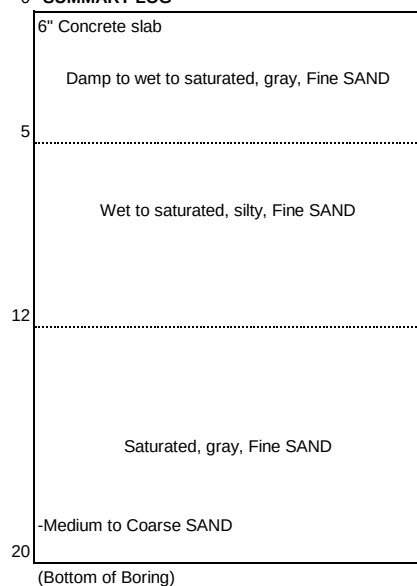
Field Rep: D. Cooper			Location: N200185 E1269970 NAD83			Ecology ID# BHS519	
Drilling Co.: Cascade			Ground surface elevation: 13.02' NAVD88				
Driller: Kasey Goble			Date Completed: 10/16/2012				
Drill Type: Power Probe 9600			Weather: Clear 55F				
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push				
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
A	grab @ 3-4'	7.5	0-5	36	-	0940	0.5-5' Moist, gry, F SAND, ns, no
B	grab @ 7-8'	4.5	5-10	50	-	0950	5-10' Wet-sat, gry, silty, F SAND, w/F Sand interbeds, ns, no saturated @ 7'
C	grab @ 11-12'	2.5	10-15	55	-	1000	10-12' As above 12-15' Sat, gry, F SAND, w/trace silt, ns, no
D	grab @ 16-17'	0.8	15-20	50	-	1010	15-20' As above grading coarser @ 19' to medium to coarse SAND

Bottom of boring @ 20.0'

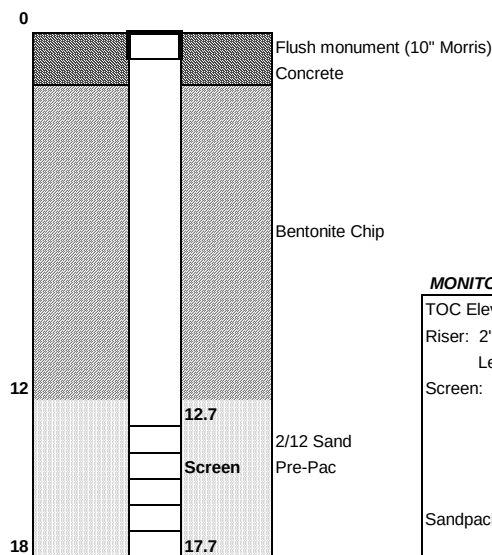
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 12.67 NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 12.7'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 12.7/17.7
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 12/18
Seal: Bentonite chip
(top/bot) 2/12
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

DOF-MW8

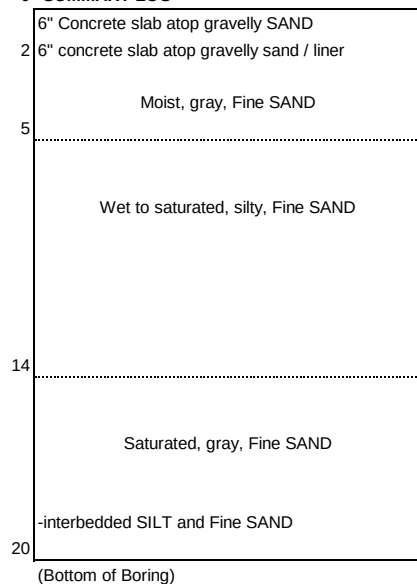
Field Rep: D. Cooper			Location: N200097 E1270036 NAD83			Ecology ID# BHS518		
Drilling Co.: Cascade			Ground surface elevation: 13.84' NAVD88					
Driller: Kasey Goble			Date Completed: 10/16/2012					
Drill Type: Power Probe 9600			Weather: Clear 55F					
Size/Type Casing: 2.5"			Sampler: 2" macro w/acrylic liner, 5' continuous push					
Spl. No.	Type Sample Saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description	
A	grab @ 3-4'	1.5	0-5	56	-	0810	0.5-1' Wet, bwn, gravelly, SAND 1-1.5' concrete slab 1.5-2' Wet, gray, gravelly, SAND, w/some silt poured rubber liner at 2' (Gaco deck like) 2-5' Moist, gry, F SAND, ns, no	
B	grab @ 7-8'	1.8	5-10	50	-	0820	5-10' Wet-sat, gry, silty, F SAND, ns, no saturated @ 8'	
C	grab @ 11-12'	1.0	10-15	50	-	0830	10-14' As above 14-15' Sat, gry, F SAND, w/trace silt, ns, no	
D	grab @ 15-16'	0.8	15-20	55	-	0840	15-18.5' As above 18.5-20' interbedded silt and F SAND, 4" layers	

Bottom of boring @ 20.0'

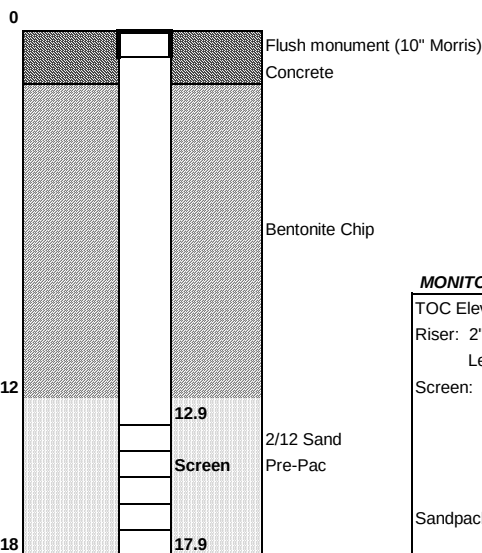
MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.



MONITORING WELL INFORMATION

TOC Elevation: 13.51 NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 12.9'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 12.9/17.9
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 12/18
Seal: Bentonite chip
(top/bot) 2/12
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-Ap

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

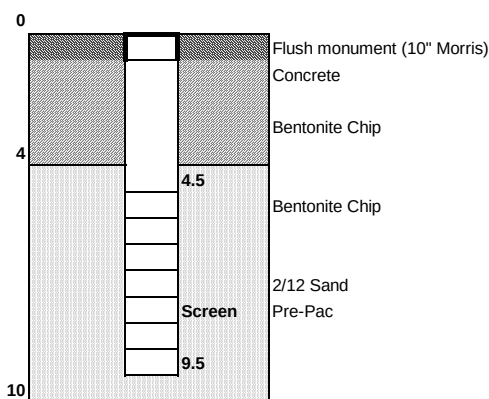
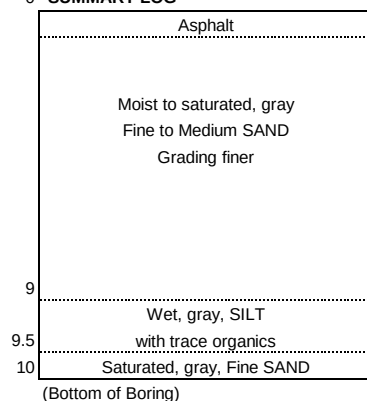
Field Rep: D. Cooper				Location: N200173 E1269797 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.5 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/5/2015			
Drill Type: GeoProbe 7822DT				Weather: Clear 70F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
Ap-4	3.5-4.5	0.8	NO/NS	0-5	40	1045	0-0.4 Aspnalt 0.4-5' Moist, bwn-gry, F-M SAND
Ap-7	6.5-7.5	0.7	NO/NS	5-10	60	1050	5-9' Moist-sat, bwn-gry, F SAND 9-9.5' Wet, gry, SILT, w/trace organics
Ap-10	9.5-10	1.4	NO/NS			1055	9.5-10' Sat. gry. F SAND

Bottom of boring @ 10.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID# BJE902
TOC Elevation: 13.08 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 4.5/9.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 4/9.5
Seal: Bentonite chip
(top/bot) 1/4
Monument: 10" dia. Flush Mount (Morris)
-0.4' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

MW-Bp

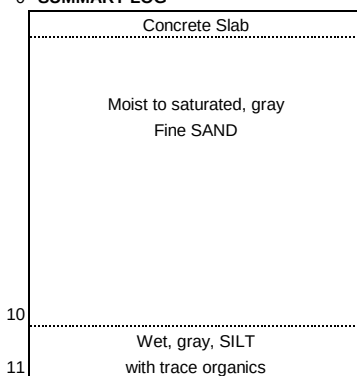
Field Rep: D. Cooper				Location: N200095 E1269852 NAD83			
Drilling Co.: Holt				Ground surface elevation: 15.9 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/5/2015			
Drill Type: GeoProbe 7822DT				Weather: Clear 70F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
Bp-4	3.5-4.5	0.8	NO/NS	0-5	50	0930	0-0.4 Concrete Slab (Interior of building) 0.4-5' Damp, gry, F SAND
Bp-7	6.5-7.5	1.5	NO/NS	5-10	40	0935	5-10' As above, saturated @ 9'
Bp-10	9-10	1.3	NO/NS			0940	
				10-11	12		10-11' Wet, gry, SILT, w/trace organics, very soft

Bottom of boring @ 10.0'

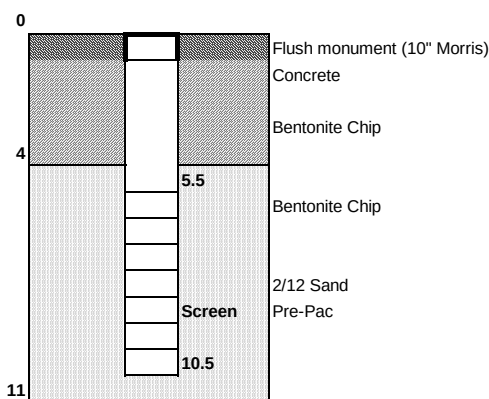
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID# BJE901
TOC Elevation: 15.60 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 5.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 5.5/10.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 4/10.5
Seal: Bentonite chip
(top/bot) 1/4
Monument: 10" dia. Flush Mount (Morris)
-0.4' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

MW-Cp

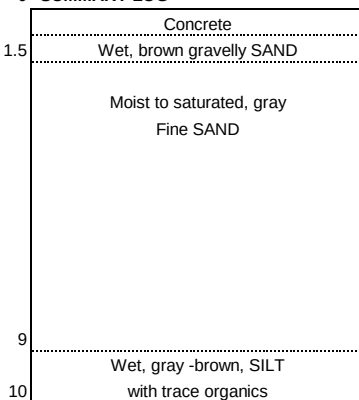
Field Rep: D. Cooper				Location: N199995 E1269943 NAD83			
Drilling Co.: Holt				Ground surface elevation: 14.0 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: GeoProbe 7800				Weather: Rain 60F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
Cp-4	3-5	0.7	NO/NS	0-5	50	0935	0-0.4 Concrete Slab 0.4-1' Wet. Bwn, gravelly, SAND 1-1.5' Moist, mot bwn, silty, SAND, w/trace gravel 1.5-5' Wet, gry, F SAND
Cp-7	6-8	1.3	NO/NS	5-10	60	0940	5-8' As above, saturated @ 6'
Cp-10	9-10	1.8	NO/NS			0945	8-9' Wet, gry, SILT, w/trace sand 9-10' Wet, bwn, SILT, w/trace organics

Bottom of boring @ 10.0'

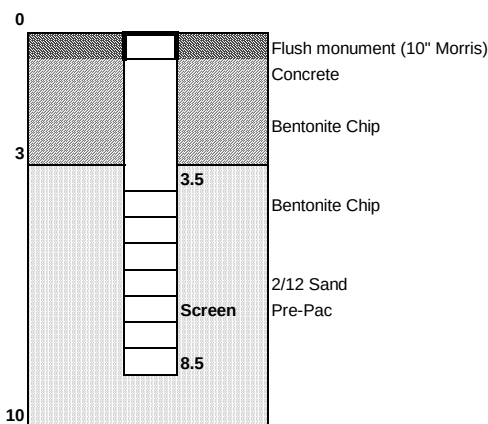
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID# BJE916
TOC Elevation: 13.69 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 3.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 3.5/8.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 3/8.5
Seal: Bentonite chip
(top/bot) 1/3
Monument: 10" dia. Flush Mount (Morris)
-0.4' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-Dp

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N200271 E1269723 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.8 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	40		0-0.5' Concrete slab 0.5-1' Moist, mot bwn, SAND, w/trace gravel 1-5' Moist, bwn, F SAND
				5-10	50		5-7' As above 7-9' Moist-sat, gry, F SAND, w/some silt 9-9.5' Wet, gry, F Sandy, SILT 9.5-10' Sat, gry, F SAND, w/silty interbeds
				10-15	60		10-11' Wet, bwn, Organic, SILT 11-13.5' Wet, gry, silty, F SAND, w/trace organics 13.5-15' Sat, gry, F SAND

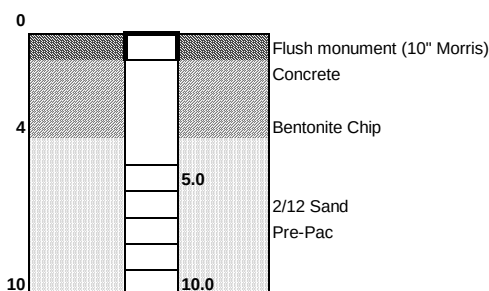
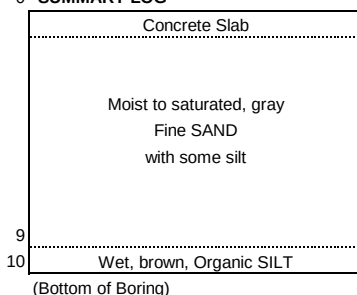
Note: Above log based on adjacent boring Du

Bottom of boring @ 12.0'

MONITORING WELL DIAGRAM

Depth(ft.)

0 SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID#	BJE904
TOC Elevation:	13.53 Ft. NAVD 88
Riser:	2" dia. SCH 40 PVC
Length:	5.0'
Screen:	2" dia. SCH 40 PVC
Slot size:	0.010"
Length:	5'
(top/bot)	5/10
	0.3' end cap
Sandpack:	Pre-Pac 2/12 colorado sand
	10-20 backfill (top/bot) 4/10
Seal:	Bentonite chip
	(top/bot) 1/4
Monument:	10" dia. Flush Mount (Morris)
	-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MW-Du

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

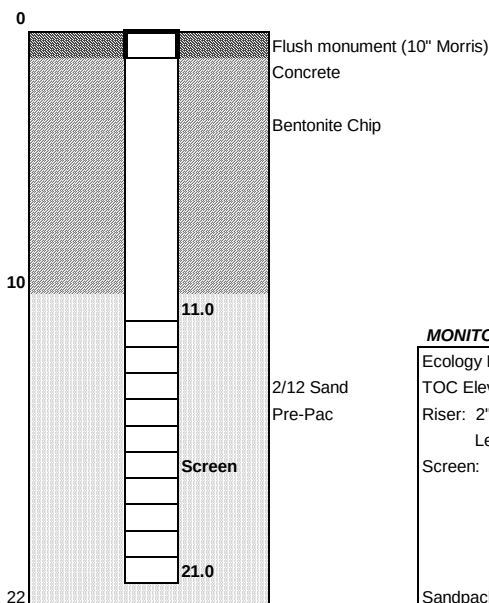
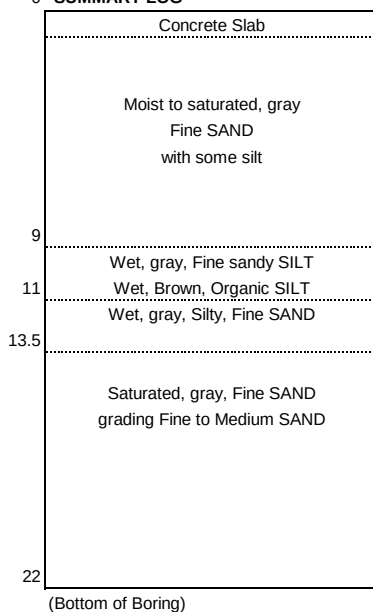
Field Rep: D. Cooper				Location: N200273 E1269723 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.8 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
Du-4	3.5-5.5	0.5	NO/NS	0-5	40	1340	0-0.5' Concrete slab 0.5-1' Moist, mot bwn, SAND, w/trace gravel 1-5' Moist, bwn, F SAND
Du-7	6-8	0.2	NO/NS	5-10	50	13445	5-7' As above
Du-10	9-10	0.4	NO/NS			1350	7-9' Moist-sat, gry, F SAND, w/some silt 9-9.5' Wet, gry, F Sandy, SILT 9.5-10' Sat, gry, F SAND, w/silty interbeds
Du-13	12-14	0.4	NO/NS			1355	10-11' Wet, bwn, Organic, SILT 11-13.5' Wet, gry, silty, F SAND, w/trace organics 13.5-15' Sat, gry, F SAND
Du-16	15-17	0.3	NO/NS	15-20	60	1400	15-20' As above, grading to F-M SAND
Du-21	19-22	0.6	NO/NS	20-22	24	1405	20-22' Sat, gry, F-M SAND

Bottom of boring @ 12.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID# BJE903
TOC Elevation: 13.57 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 11.0'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 11/21
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 10/21
Seal: Bentonite chip
(top/bot) 1/10
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

MW-Eu

Field Rep: D. Cooper				Location: N200297 E1270058 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.2 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	40		4" slab 0.4-5' Wet, mot gry, silty, SAND, w/some gravel, wood, coal
				5-10	60		5-7' Wet, blk, gravelly, SAND 7-10' Wet, mot gry, gravelly, SAND, w/some silt, wood
				10-15	30		10-15' As Above, loose/soft
				15-20	60		15-15.5' Wet, blk, SILT 15.5-16' Sat, gry-blk, F SAND 16-16.5' Wet, blk, SILT 16.5-20' Sat, gry, F SAND, w/trace silt, wood

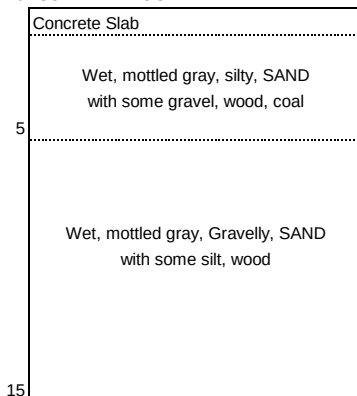
Note: Above log based on adjacent boring P30

Bottom of boring @ 15.0'

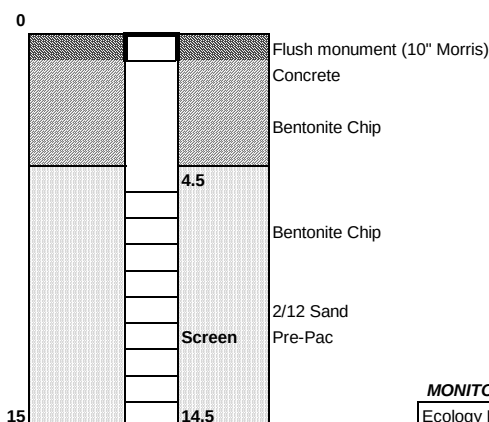
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID# BJE908
TOC Elevation: 11.83 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 4.5/14.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 11/18
Seal: Bentonite chip
(top/bot) 1/3.5
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

PID - photoionization detector - MiniRAE 3000

F - fine

M - medium

Sat. - saturated

mot - mottled

Abbreviations: ns - no sheen

no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MW-Fu

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N200170 E1270230 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.1 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	40		0-1' Moist, Mot Bwn, gravelly, SAND, w/some silt 1-5' Moist, bwn, F-M SAND
				5-10	50		5-10' Wet-Sat, Mot bwn, F-M SAND, w/silty F Sand interbeds oxidation @ 9'
				10-15	60		10-11.5' Sat, bwn, F-M SAND, w/silt clasts, reddish oxidized 11.5-15' Sat, gry, F SAND, w/thin silty sand interbeds

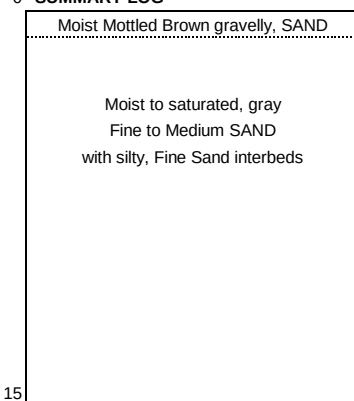
Note: Above log based on adjacent boring FI

Bottom of boring @ 15.0'

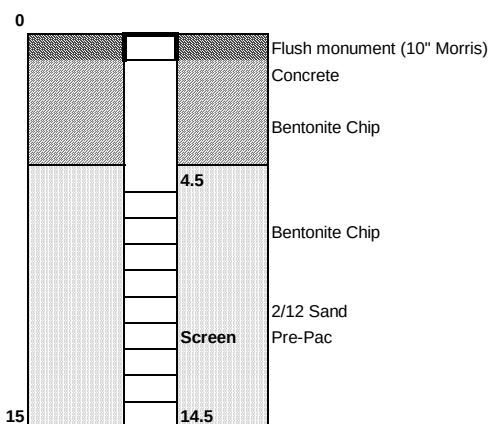
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID#	BJE920
TOC Elevation:	12.68 Ft. NAVD 88
Riser:	2" dia. SCH 40 PVC
Length:	4.5'
Screen:	2" dia. SCH 40 PVC
Slot size:	0.010"
Length:	10'
(top/bot)	4.5/14.5
	0.3' end cap
Sandpack:	Pre-Pac 2/12 colorado sand
	10-20 backfill (top/bot) 11/18
Seal:	Bentonite chip
	(top/bot) 1/3.5
Monument:	10" dia. Flush Mount (Morris)
	-0.3' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-FL

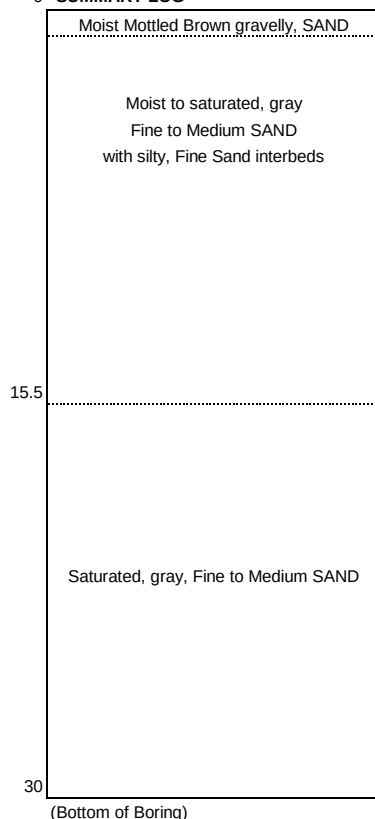
DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N200168 E1270230 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.1 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
FL-4	3-5	1.7	NO/NS	0-5	40	1205	0-1' Moist, Mot Bwn, gravelly, SAND, w/some silt 1-5' Moist, bwn, F-M SAND
FL-7	6-8	2.7	NO/NS	5-10	50	1210	5-10' Wet-Sat, Mot bwn, F-M SAND, w/silty F Sand interbeds
FL-10	9-10	2.5	NO/NS			1215	oxidation @ 9'
FL-13	12-14	2.6	NO/NS	10-15	60	1220	10-11.5' Sat, bwn, F-M SAND, w/sil clasts, reddish oxidized 11.5-15' Sat, gry, F SAND, w/thin silty sand interbeds
FL-16	15.5-17	3	NO/NS	15-20	60	1225	15-15.5' As above 15.5-20' Sat, gry, F-M SAND
FL-21	20-22	2.5	NO/NS	20-25	60	1230	20-25' As Above w/occasional silty F Sand interbeds
				25-30	60		25-30' Sat, gry, F-M SAND, w/red flecs

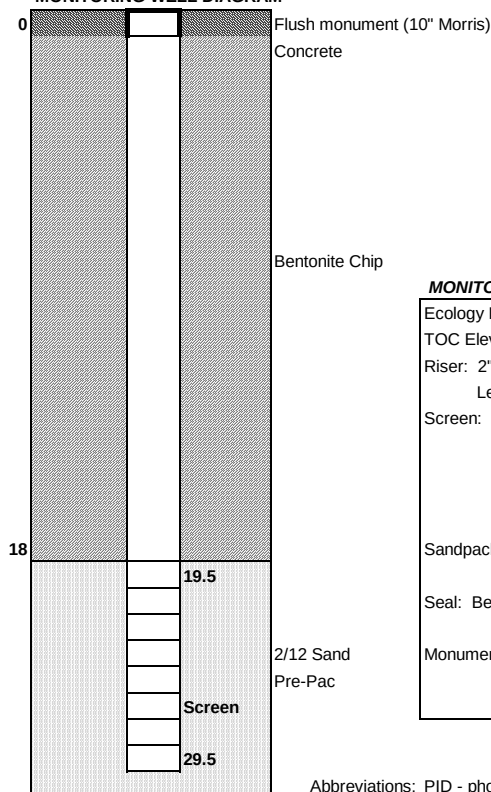
Bottom of boring @ 30.0'

Depth(ft.)

0 SUMMARY LOG



MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID# BJE919
TOC Elevation: 12.80 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 19.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.5/29.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 18/30
Seal: Bentonite chip
(top/bot) 1/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

MW-Gu

Field Rep: D. Cooper				Location: N200055 E1270222 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.5 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	30		0-1' 1.5" minus crushed rock 1-2' Damp mot bwn, sandy gravel, w/some silt
				5-10	6		Wet gry, silty, SAND
				10-15	0		No recovery

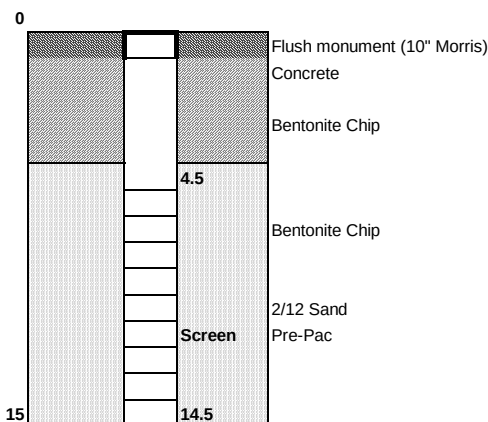
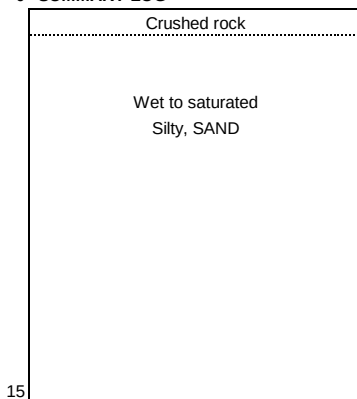
Note: Above log based on adjacent boring GI

Bottom of boring @ 15.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID# BJE917
TOC Elevation: 13.13 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 4.5/14.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 11/18
Seal: Bentonite chip
(top/bot) 1/3.5
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-GL

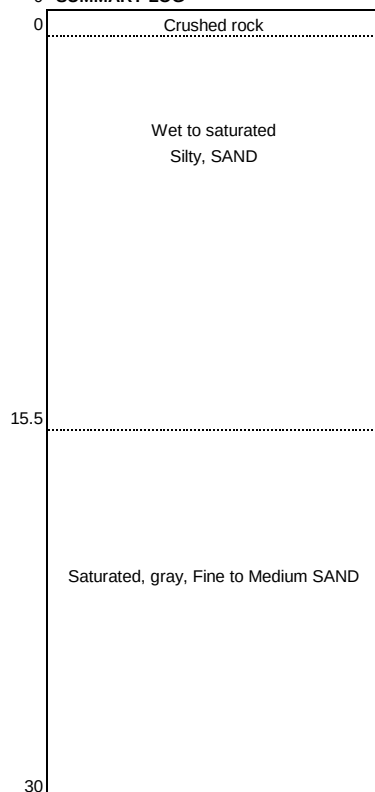
DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N200055 E1270221 NAD83			
Drilling Co.: Holt				Ground surface elevation: 13.7 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/8/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
		1.3	NO/NS	0-5	30		0-1' 1.5" minus crushed rock 1-2' Damp mot bwn, sandy gravel, w/some silt
		1.2	NO/NS	5-10	6		Wet gry, silty, SAND
				10-15	0		No recovery
		1.5	NO/NS	15-20	60		15-20' Sat, gry, silty, F SAND, very soft/loose
		0.4	NO/NS	20-25	60		20-25' Sat, gry, F-M SAND, red flecs, scattered shells
		0.5	NO/NS	25-30	60		25-30' As above

Bottom of boring @ 30.0'

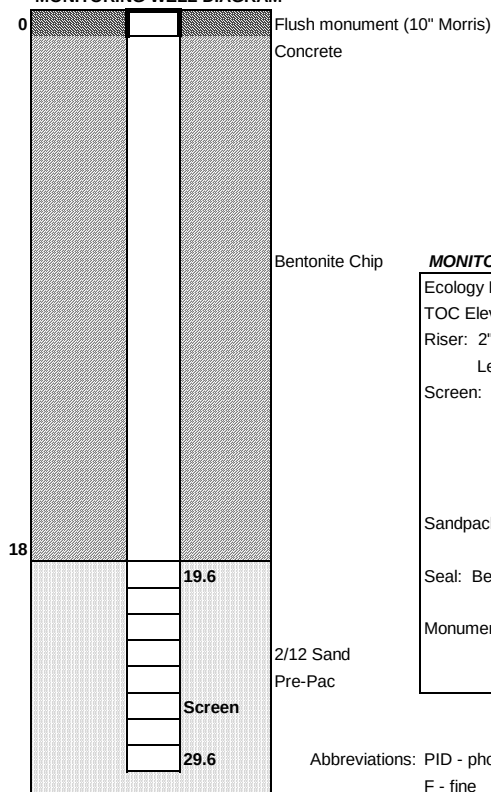
Depth(ft.)

SUMMARY LOG



NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID# BJE919
TOC Elevation: 13.32 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 19.6'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.6/29.6
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 18/30
Seal: Bentonite chip
(top/bot) 1/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-H_L

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

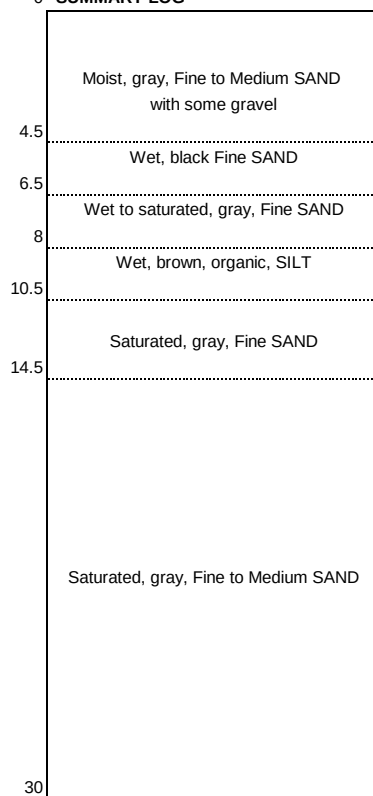
Field Rep: D. Cooper				Location: N200269 E1269831 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.0 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: GeoProbe 7822DT				Weather: Rain 60F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	12		Post holed 3' near gas line 0-4.5' Moist, gry, F-M SAND w/some gravel 4.5-5' Wet, black, F SAND
				5-10	60		5-6.5 As Above 6.5-6.7' Thin SILT interbed 6.7-8' Sat, gry, F SAND 8-10' Wet, bwn, organic, SILT
				10-15	60		10-10.5' As Above 10.5- 14.5' Sat, gry, F SAND, w/zones of trace silt 14.5-15' Sat, gry, F-M SAND
				15-20	60		15-20' As Above
				20-25	60		20-25' As Above

Note: Above log based on adjacent Probe P17

Bottom of boring @ 30.0'

Depth(ft.)

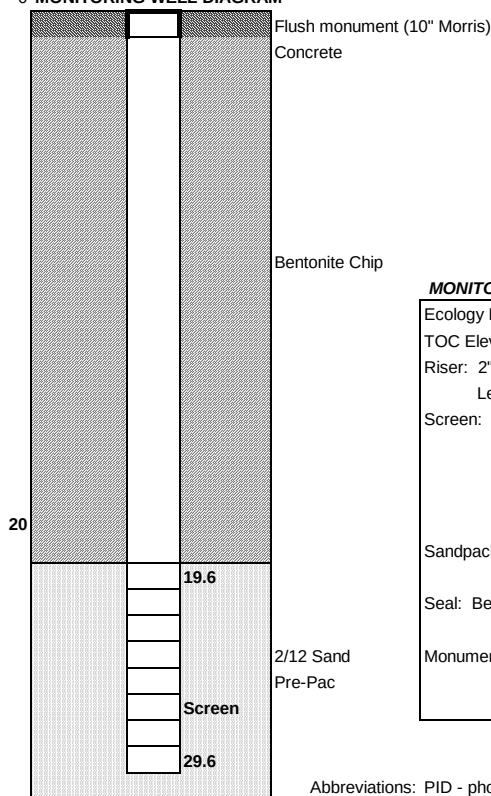
0 SUMMARY LOG



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

0 MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID# BJE911
TOC Elevation: 11.73 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 10.0'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.6/29.6
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 18/30
Seal: Bentonite chip
(top/bot) 1/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-IL

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

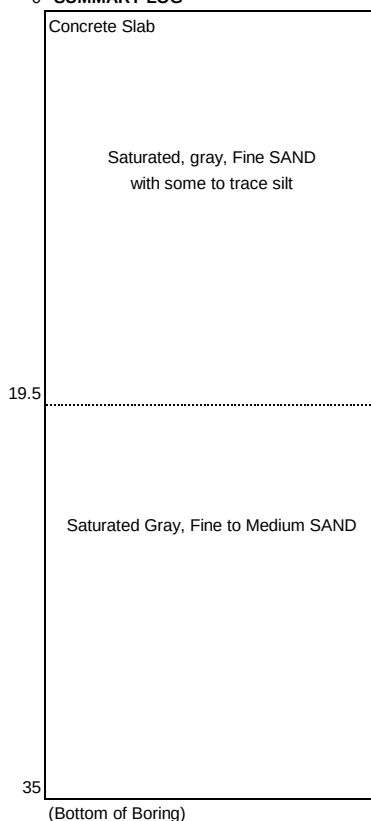
Field Rep: D. Cooper				Location: N200248 E1270172 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.9 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: GeoProbe 7822DT				Weather: Rain 60F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	40		4" slab 0.4-1.5' Moist, bwn, F-M SAND 1.5-5' Wet, bwn, F SAND, w/some silt, thin roots
				5-10	60		5-8" As Above 8-10' Sat, gry, F SAND, w/silty sand interbeds
				10-15	60		10-15' As Above
				15-20	60		15-19.5' As Above 19.5-20' Sat, gry, F-M SAND
				20-25	50		20-25' As Above
				25-30	50		25-30' As Above
				30-35	50		30-35' As Above

Note: Above log based on adjacent Probe P31

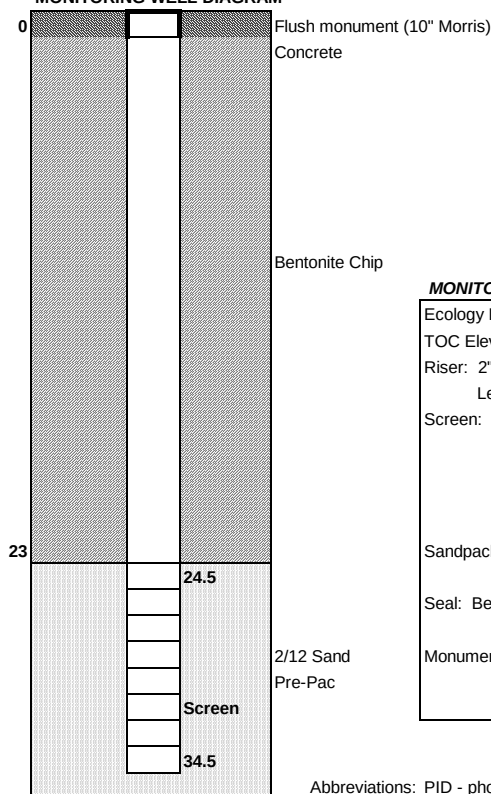
Bottom of boring @ 35.0'

Depth(ft.)

0 SUMMARY LOG



MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID#	BJE912
TOC Elevation:	12.59 Ft. NAVD 88
Riser:	2" dia. SCH 40 PVC
Length:	24.5'
Screen:	2" dia. SCH 40 PVC
Slot size:	0.010"
Length:	10'
(top/bot)	24.5/34.5
0.3' end cap	
Sandpack:	Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot)	23/35
Seal:	Bentonite chip
(top/bot)	1/24
Monument:	10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC	

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MW-Ju

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

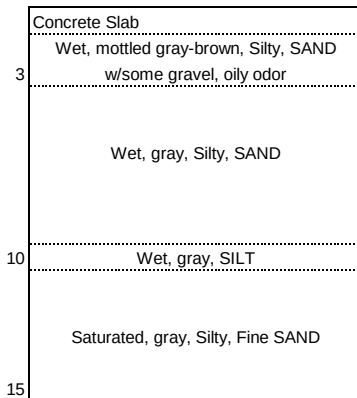
Field Rep: D. Cooper				Location: N200282 E1270134 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.5 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: GeoProbe 7800				Weather: Rain 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
Ju-4	3-4	1.9	SO/NS	0-5	40		0-0.5' 3" Concrete slab on sand 0.5-1.5' Wet, bwn, silty SAND, w/some gravel 1.5-3' Wet, dk gry, silty, SAND, w/some gravel, oily odor no sheen 3-3.5' Cored wood
Ju-7	no sample			5-10	18		5-6' Poor recovery - wood core atop Wet, gry, Silty, SAND, w/some gravel
Ju-10	10-11	2.9	NO/NS				
Ju-13	12.5-13.5	0.4	NO/NS	10-16	60		10-10.5' Wet, gry, SILT, sulfurous odor 10.5-11.5' Wet, mot gry-bwn, silty, SAND, w/scatered organics 11.5-14' Sat, gry, silty, F SAND
Ju-15	14-15	0.3	NO/NS				14-15' Sat, gry, F SAND, w/organics
Bottom of boring @ 15.0'							

Bottom of boring @ 15.0'

MONITORING WELL DIAGRAM

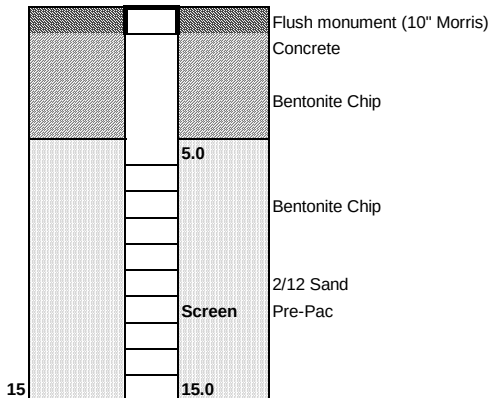
Depth(ft.)

0 SUMMARY LOG



(Bottom of Boring)

0



MONITORING WELL INFORMATION

Ecology ID#	BJE913
TOC Elevation:	12.18 Ft. NAVD 88
Riser:	2" dia. SCH 40 PVC
Length:	5.0'
Screen:	2" dia. SCH 40 PVC
Slot size:	0.010"
Length:	10'
(top/bot)	5/15
0.3' end cap	
Sandpack:	Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot)	4/15
Seal:	Bentonite chip
(top/bot)	1/4
Monument:	10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC	

PID - photoionization detector - MiniRAE 3000

F - fine

Abbreviations: M - medium

Sat. - saturated

mot - mottled

ns - no sheen

no - no odor; so - slight odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

MW-Ku

Field Rep: D. Cooper				Location: N199927 E1270348 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.0 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: Power Probe 9600				Weather: Rain 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
KL-4	3-5	0.1	NO/NS	0-5	40	1305	0-1' Moist, Mot Bwn, gravelly, silty, SAND 1-5' Moist, bwn-gry, F-M SAND, w/some silt
KL-7	7-9	0.3	NO/NS	5-10	50	1310	5-10' As above
KL-12	11-13	0.3	NO/NS	10-15	60	1315	10-15' Sat, gry, F SAND, w/trace to some silt

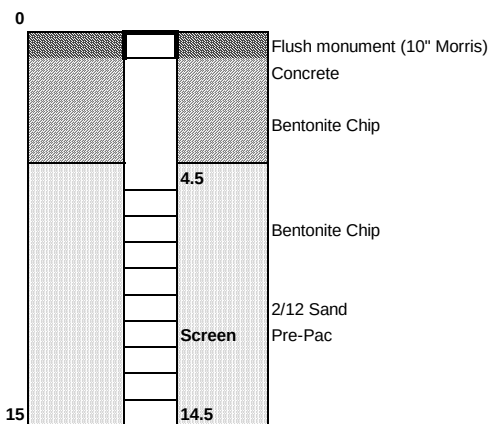
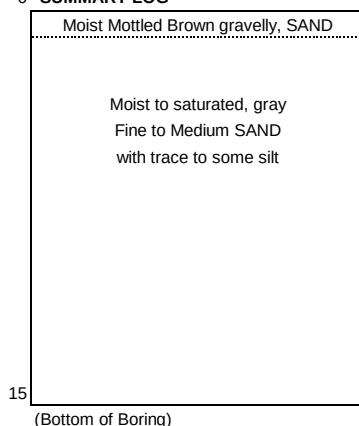
Note: Above log based on adjacent boring KI

Bottom of boring @ 15.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID#	BJE915
TOC Elevation:	11.59 Ft. NAVD 88
Riser:	2" dia. SCH 40 PVC
Length:	4.5'
Screen:	2" dia. SCH 40 PVC
Slot size:	0.010"
Length:	10'
(top/bot)	4.5/14.5
	0.3' end cap
Sandpack:	Pre-Pac 2/12 colorado sand
	10-20 backfill (top/bot) 11/18
Seal:	Bentonite chip
	(top/bot) 1/3.5
Monument:	10" dia. Flush Mount (Morris)
	-0.3' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-K_L

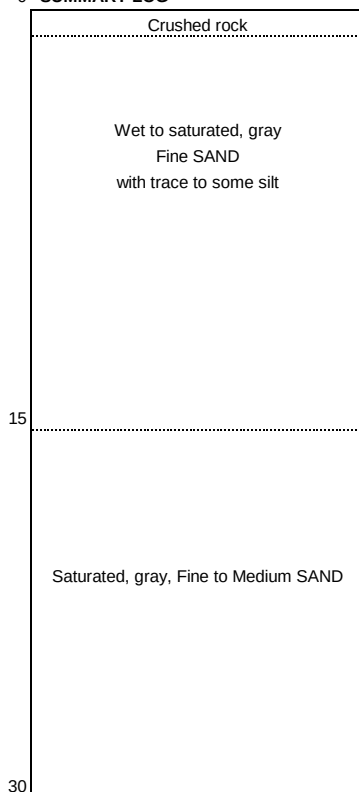
DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N199925 E1270348 NAD83			
Drilling Co.: Holt				Ground surface elevation: 11.9 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/7/2015			
Drill Type: Power Probe 9600				Weather: Rain 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
KL-4	3-5	0.1	NO/NS	0-5	40	1305	0-1' Moist, Mot Bwn, gravelly, silty, SAND 1-5' Moist, bwn-gry, F-M SAND, w/some silt
KL-7	7-9	0.3	NO/NS	5-10	50	1310	5-10' As above
KL-12	11-13	0.3	NO/NS	10-15	60	1315	10-15' Sat, gry, F SAND, w/trace to some silt
KL-17	16-18	0.2	NO/NS	15-20	60	1320	15-20' Sat, gry, F SAND
KL-22	21-23	0.1	NO/NS	20-25	60	1325	20-25' As above, grading coarser
				25-30	60		25-30' Sat, gry, F-M SAND

Bottom of boring @ 30.0'

Depth(ft.)

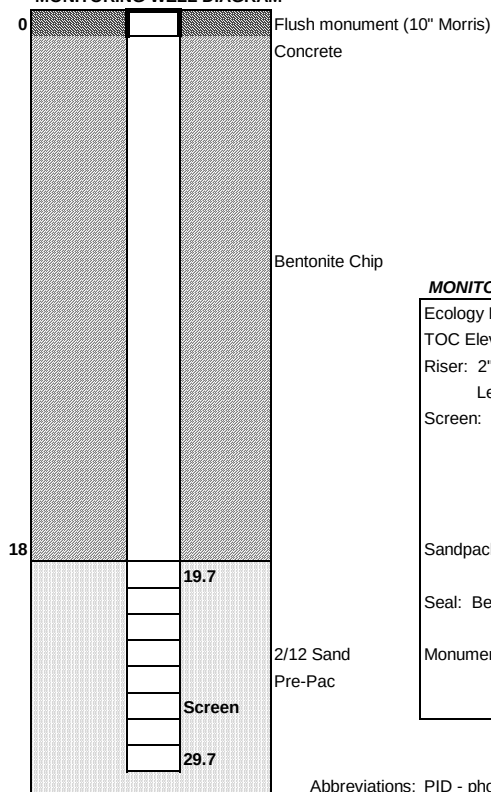
0 SUMMARY LOG



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID# BJE914
TOC Elevation: 11.57 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 19.7'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.7/29.7
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 18/30
Seal: Bentonite chip
(top/bot) 1/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-Lu

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N199901 E1270258 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.0 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	45		0-1' Wt, bwn, gravelly, SAND, w/some silt 1-5' Moist, gry, F-M SAND
				5-10	60		5-6' As above 6-6.1' Wet, bwn, organic, SILT 6.1-10' Sat, bwn-gry, silty, F SAND
				10-15	60		10-15' As Above grading sandy

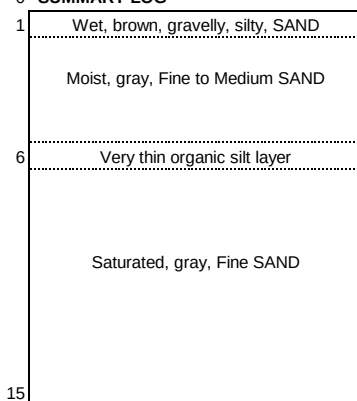
Note: Above log based on adjacent boring P27

Bottom of boring @ 15.0'

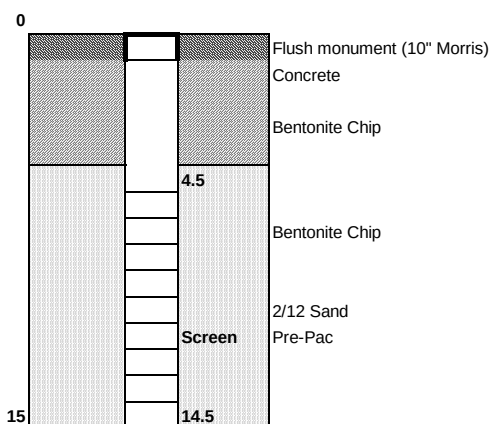
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID# BJE906
TOC Elevation: 11.69 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 4.5/14.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 11/18
Seal: Bentonite chip
(top/bot) 1/3.5
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

MW-L_L

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N199899 E1270260 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.0 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	45		0-1' Wt, bwn, gravelly, SAND, w/some silt 1-5' Moist, gry, F-M SAND
				5-10	60		5-6' As above 6-6.1' Wet, bwn, organic, SILT 6.1-10' Sat, bwn-gry, silty, F SAND
				10-15	60		10-15' As Above grading sandy
				15-20	60		15-20' Sat, gry, F-M SAND
				20-25	60		20-25' Sat, gry, F SAND. w/some silt
				25-30	60		25-30' Sat, gry, F SAND

Note: Above log based on adjacent boring P27

Bottom of boring @ 30.0'

Depth(ft.)

0 SUMMARY LOG

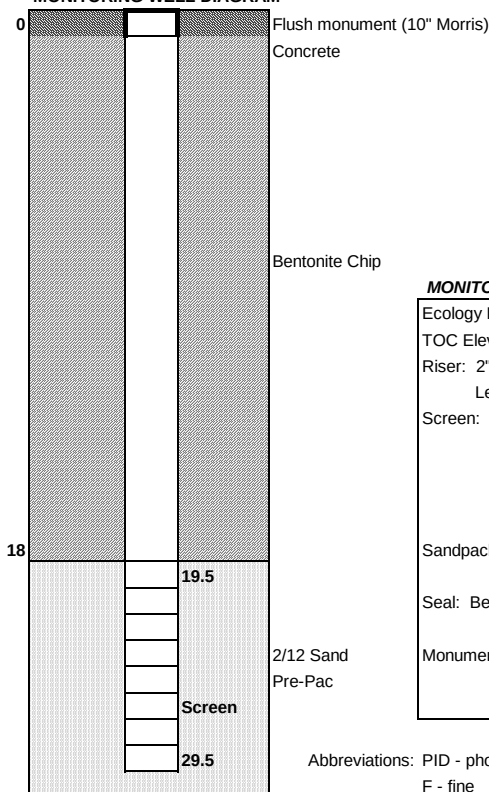
Wet, brown, gravelly, silty, SAND
Moist, gray, Fine to Medium SAND
Very thin organic silt layer
Saturated, gray, Fine SAND or Fine to Medium SAND

30

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

Ecology ID# BJE905
TOC Elevation: 11.65 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 19.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.5/29.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 18/30
Seal: Bentonite chip
(top/bot) 1/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

HC-B2(R)

Field Rep: D. Cooper				Location: N200186 E1270108 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.8 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	48		0-2.5' Moist, mot gry-bwn, gravelly, silty, SAND 2.5-5' Moist-sat, gry, F SAND
				5-10	52		5-10' As above

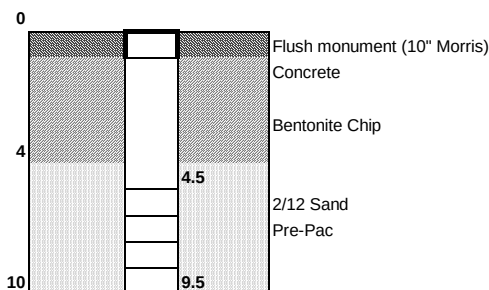
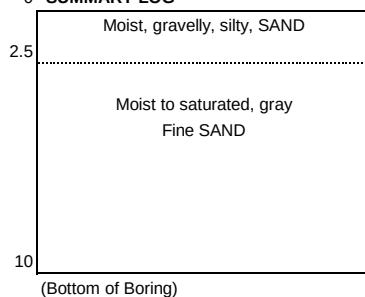
Note: Above log based on adjacent boring P18

Bottom of boring @ 10.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID# BJE907
TOC Elevation: 12.50 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.5'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 4.5/9.5
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 4/10
Seal: Bentonite chip
(top/bot) 1/4
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

LNAPL-1

Field Rep: D. Cooper				Location: N200212 E1270040 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.6 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-5	40		6" concrete slab 0.5-1' Wet, mot bwn, sandy, GRAVEL 1-5' Wet, mot gry, silty, SAND, w/some gravel, wood
				5-10	60		5-9.5' Wet-sat, gry, F SAND, w/trace silt 9.5-10' Wet, gry, F SAND

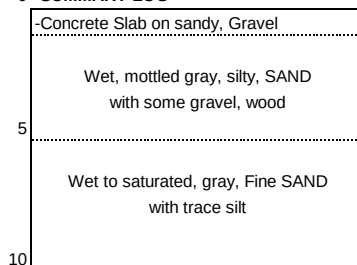
Note: Above log based on adjacent boring P29

Bottom of boring @ 10.0'

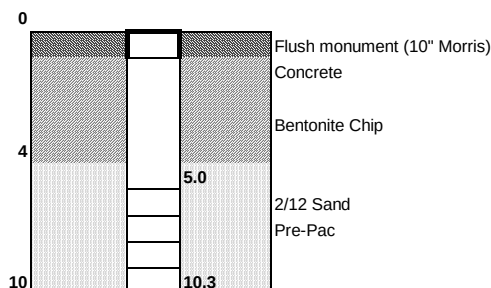
MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



(Bottom of Boring)



MONITORING WELL INFORMATION

Ecology ID# BJE910
 TOC Elevation: 12.24 Ft. NAVD 88
 Riser: 2" dia. SCH 40 PVC
 Length: 4.5'
 Screen: 2" dia. SCH 40 PVC
 Slot size: 0.010"
 Length: 5'
 (top/bot) 5.0/10.0
 0.3' end cap
 Sandpack: Pre-Pac 2/12 colorado sand
 10-20 backfill (top/bot) 4/10
 Seal: Bentonite chip
 (top/bot) 1/4
 Monument: 10" dia. Flush Mount (Morris)
 -0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
 M - medium
 Sat. - saturated
 mot - mottled
 ns - no sheen
 no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

LNAPL-2

Field Rep: D. Cooper				Location: N200254 E1269921 NAD83			
Drilling Co.: Holt				Ground surface elevation: 12.2 Ft. NAVD 88			
Driller: Louie				Date Completed: 10/6/2015			
Drill Type: GeoProbe 7800				Weather: Coudy 65F			
Size/Type Casing: 2"				Sampler: 2" macro w/acrylic liner, 5' continuous push			
Spl. No.	Sample Interval (ft. bgs.)	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Time	Sample Description
				0-4	40		4" concrete
							0.5-1.5' wet, mot gry, gravelly, SAND, w/metal parts, oily odor, heavy sheen
							1.5-4' damp, gry, F-M SAND, no odor, no sheen
				4-8	48		4-8' moist-wet, gry, F-M SAND, w/trace silt, brick, gravel slight odor, no sheen
				8-12	48		8-10' as above becoming sat
							10-12' sat gry, silty F SAND, w/wood debris, moderate odor, slight sheen

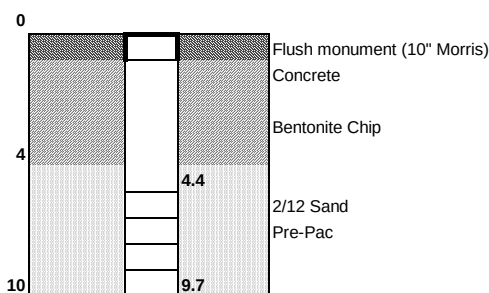
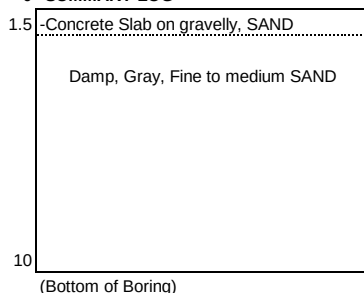
Note: Above log based on adjacent boring P8

Bottom of boring @ 10.0'

MONITORING WELL DIAGRAM

Depth(ft.)

SUMMARY LOG



MONITORING WELL INFORMATION

Ecology ID# BJE909
TOC Elevation: 11.96 Ft. NAVD 88
Riser: 2" dia. SCH 40 PVC
Length: 4.4'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 5'
(top/bot) 4.4/9.4
0.3' end cap
Sandpack: Pre-Pac 2/12 colorado sand
10-20 backfill (top/bot) 4/10
Seal: Bentonite chip
(top/bot) 1/4
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations: PID - photoionization detector - MiniRAE 3000

F - fine
M - medium
Sat. - saturated
mot - mottled
ns - no sheen
no - no odor

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

**PUSH PROBE LOGS
UPLAND ICS/NWC SITE**

**REMEDIAL INVESTIGATION REPORT
ICS/NWC
SEATTLE, WASHINGTON**

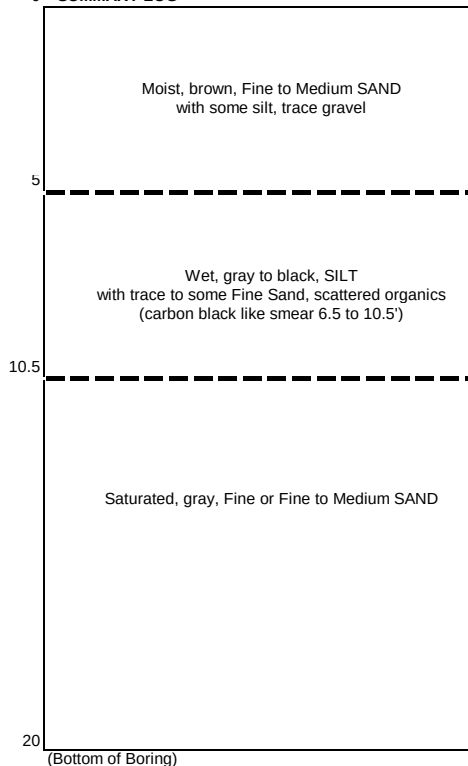
BORING - DESCRIPTION OF SAMPLES & DATA

LP1

Field Rep: DG Cooper			Location: N199889 E1270243 NAD83			
Drilling Co.: Cascade			Elevation (Ft.): Approx. 15 ft. MLLW		Ground Surface: Quarry spalls	
Driller: Kasey			Date Completed: 10/15/12			
Drill Type: Geoprobe 6600			Weather: Rain 55F			
Size/Type Casing: 2" Rod			Hammer Type: Direct push		Sampler Type: 2" Macro w/ acrylic liner	
Spl.No.	Type sample saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
			0-5	48		0-5' Most, bwn, F-M SAND, w/some silt, trace gravel, ns, no
A	Grab 3-5'	1.0			0845	
			5-10	40		5-6.5' Wet, gry-blk, F sandy, SILT, ns, no
B	Grab 6.5-8'	220			0855	6.5-10' Wet, blk, SILT, w/trace sand, scattered organics, ns, no
						carbon black -like smear
			10-15	40		10-10.5' As above
C	Grab 10.5-12'	0.9			0905	10.5-15' Sat, gry, F SAND, ns, no
D	Grab 16-18'	0.9	15-20	50	0915	15-20' Sat, gry, F-M SAND, ns, no

Depth(ft.)

SUMMARY LOG



NOTES: Completed boring backfilled with granular bentonite
gry = gray; bwn = brown; blk = black
ns = no sheen
no = no odor
F = fine; M = medium
Sat = Pores saturated with water

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

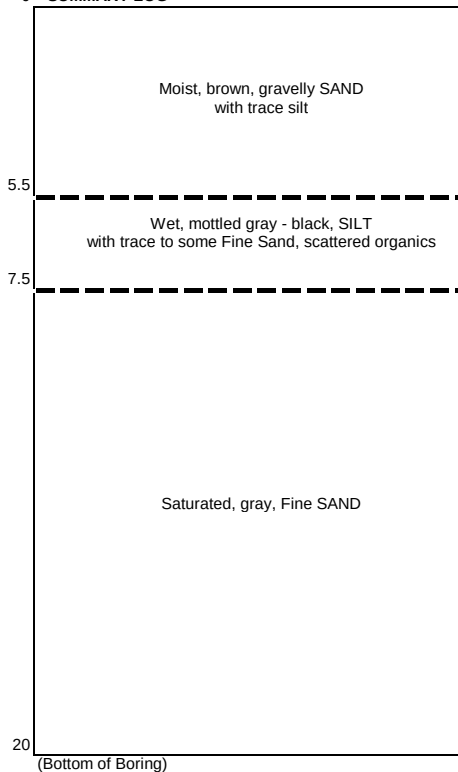
BORING - DESCRIPTION OF SAMPLES & DATA

LP2

Field Rep: DG Cooper			Location: N199970 E1270215 NAD83			
Drilling Co.: Cascade			Elevation (Ft.): Approx. 15 ft. MLLW		Ground Surface: Quarry spalls	
Driller: Kasey			Date Completed: 10/15/12			
Drill Type: Geoprobe 6600			Weather: Rain 55F			
Size/Type Casing: 2" Rod			Hammer Type: Direct push		Sampler Type: 2" Macro w/ acrylic liner	
Spl.No.	Type sample saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
			0-5	48		0-5' Most, bwn, gravelly, SAND, w/trace silt, ns, no
A	Grab 3-5'	2.3			1000	2-5' Moist, mot-bwn, silty SAND w/trace gravel, ns, no
			5-10	50		5-5.5' Wet, bwn, F Sandy, SILT, ns, no
B	Grab 5.5-7.5'	40			1010	5.5-7.5' Wet, mot gry-blk, SILT, w/trace F sand, ns, no
						7.5-10' Sat, gry, F SAND, w/trace silt, wood, organics
			10-15	60		10-15' Sat, gry, F SAND, ns, no
C	Grab 8-10'	1.3			1020	
D	Grab 15-16'	0.9	15-20	60	1030	15-20' As above

Depth(ft.)

SUMMARY LOG



NOTES: Completed boring backfilled with granular bentonite
mot - mottled
gry = gray; bwn = brown; blk = black
ns = no sheen
no = no odor
F = fine; M = medium
Sat = Pores saturated with water

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

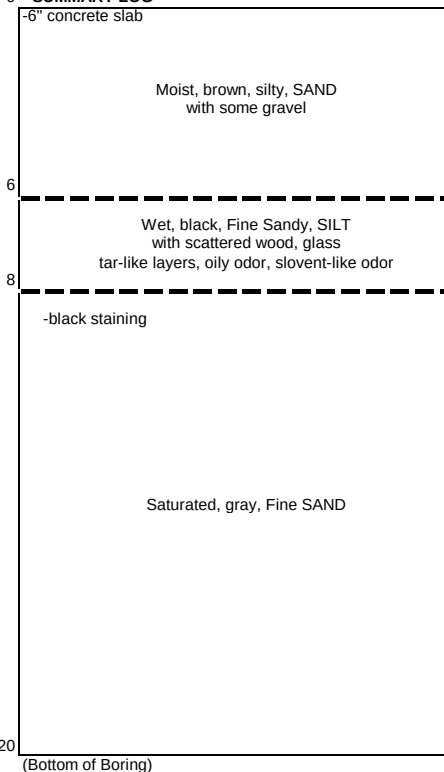
BORING - DESCRIPTION OF SAMPLES & DATA

LP3

Field Rep: DG Cooper			Location: N200044 E1270155 NAD83			
Drilling Co.: Cascade			Elevation (Ft.): Approx. 15.5 ft. MLLW		Ground Surface: Concrete slab	
Driller: Kasey			Date Completed: 10/15/12			
Drill Type: Geoprobe 6600			Weather: cloudy 55F			
Size/Type Casing: 2" Rod			Hammer Type: Direct push		Sampler Type: 2" Macro w/ acrylic liner	
Spl.No.	Type sample saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
			0-5	36		0-5' Moist, bwn, silty, SAND, w/some gravel, ns, no
A	Grab 3-5'	3.1			1045	
			5-10	40		5-6' As above
B	Grab 6-8'	340			1055	6-8' Wet, blk, F Sandy, SILT, w/scattered, wood, glass
						Tar-like layers, oily odor, solvent-like odor, no sheen
						8-10' Sat, blk-gry, F SAND, ns, no
			10-15	48		10-15' As above, with silty zones, becoming grayer with depth
C	Grab 10-12'	1.5			1105	
D	Grab 15-16'	1.0	15-20	60	1115	15-20' Sat, Dk gry, F SAND, ns, no

Depth(ft.)

SUMMARY LOG



NOTES: Completed boring backfilled with granular bentonite
gry = gray; bwn = brown; blk = black
ns = no sheen
no = no odor
F = fine; M = medium
Sat = Pores saturated with water

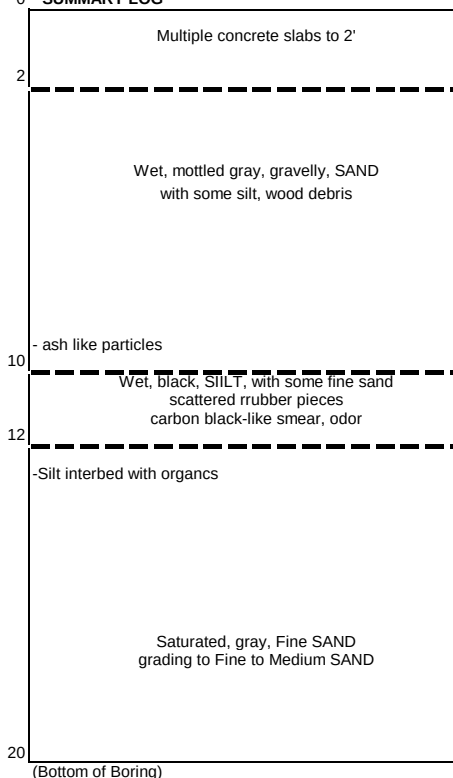
BORING - DESCRIPTION OF SAMPLES & DATA

LP4

Field Rep: DG Cooper			Location: N200125 E1270110 NAD83			
Drilling Co.: Cascade			Elevation (Ft.): Approx. 16 ft. MLLW		Ground Surface: Concrete slab	
Driller: Kasey			Date Completed: 10/15/12			
Drill Type: Geoprobe 6600			Weather: Cloudy 60F			
Size/Type Casing: 2" Rod			Hammer Type: Direct push		Sampler Type: 2" Macro w/ acrylic liner	
Spl.No.	Type sample saved	PID (ppm)	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
			0-5	36		0-2' Multiple concrete slabs, cored to 24"
						2-5' Wet, mot, gry-blk, gravelly, SAND, w/some silt, wood
			5-10	24		5-8' Poor recovery, slurry
A	Grab 8-10'	6.7			1400	8-10' Wet, mot gry, gravelly, SAND, w/wood, ash-like particles
			10-15	60		10-12' Wet, blk, SILT, w/some F Sand, scattered rubber
B	Grab 10-12'	920			1410	carbon black-like smear, slight odor, ns
C	Grab 14-15'	2.4			1420	12-12.5' Wet, gry-blk, F SAND, ns, no
						12.5-13' Wet, gry-blk, SILT, w/organics
						13-15' Sat, gry, F SAND, ns, no
D	Grab 17-18'	1.2	15-20	60	1430	15-20' Sat, gry, F SAND, ns, no
						grading to F-M SAND

Depth(ft.)

SUMMARY LOG



NOTES Initial boring (N200127.5 E1270115.8) encountered a void from 4-5' The void contained approximately 1' of black oily fluid with the consistency of bunker oil or paint, paint thinner-like odor. A NAPL sample was collected as ICS-LP4-NAPL-101512 The boring was backfilled with bentonite chip. Drill rig was moved 5' to the west and Probe LP4 was advanced.

gry = gray; bwn = brown; blk = black
ns = no sheen
no = no odor
F = fine; M = medium
Sat = Pores saturated with water

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

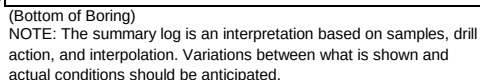
P1

Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead



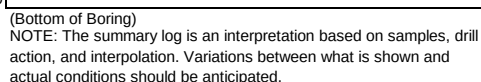
P2

Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead

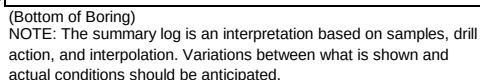


P3

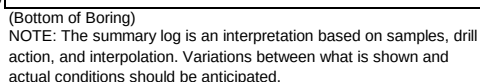
Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead



Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead



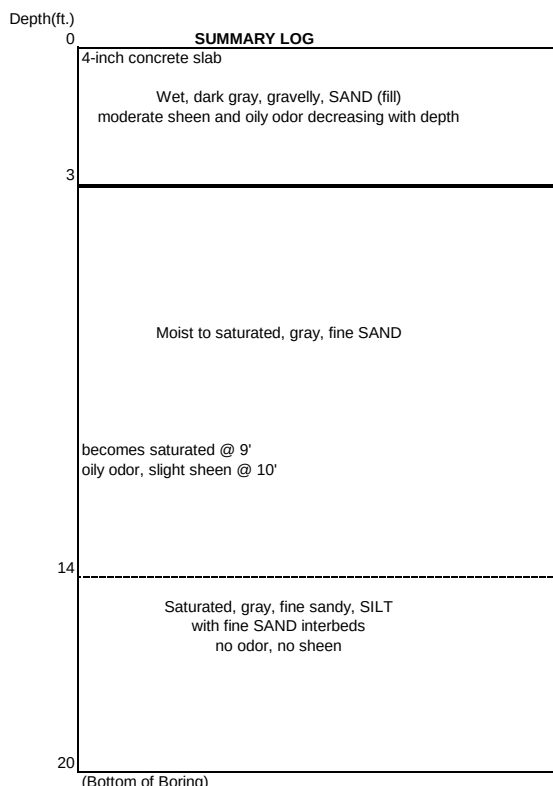
Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead



BORING - DESCRIPTION OF SAMPLES & DATA

Field Rep: DG Cooper				Location: 7152 1st Ave. S, Seattle, WA			
Drilling Co.: Cascade				Elevation (Ft.):		Ground Surface: Concrete Slab	
Driller: Frank				Date Completed: 7/21/08			
Drill Type: AMS 9630 Power Probe				Weather: Sunny 80F			
Size/Type Casing: 2"				Hammer Type: Percussion		Sampler Type: 4' long x 2" dia. Macro Core w/ acrylic sleeve	
Spl.No.	Type sample saved	Drill Action	Testing	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
		smooth		0-4	36		4" concrete
P6-A	grab @ 0.5'					1135	0.5-1.5' moist, blk, gravelly, SAND, stained, moderate sheen, odor
P6-B	grab @ 2.5'					1140	1.5-3' moist, mot bwn, gravelly, silty SAND, slight oil odor
							3-4' moist, mot gry, F-M SAND, slight odor, no sheen
				4-8	36		4-6' as above
P6-C	grab @ 5'		A1, A2, A3			1145	6-8' moist to we, gry, F SAND, no odor, no sheen
P6-D	grab @ 7.5'					1150	
				8-12	48		8-10.5' as above becoming sat
P6-E	grab @ 10'		A1, A2, A3			1155	10.5-12' sat, gry-blk, F SAND, w/trace silt, organics
							moderate odor, sheen
				12-16	48		12-14' as above
P6-F	grab @ 12.5'					1200	14-16' wet, gry-bwn, F sandy, SILT, no odor, no sheen
P6-G	grab @ 15'		A1, A2, A3			1205	
				16-20	48	1210	16-18' as above w/trace organics
P6-H	grab @ 17.5'				piston	1220	19-10' sat, gry-bwn, F sandy SILT w/ F SAND interbeds
P6-I	grab @ 19.5'						no odor, no sheen

Testing Notes: Analytical A1 - NWTPH-DX
A2 - PCBs
A3 - Lead

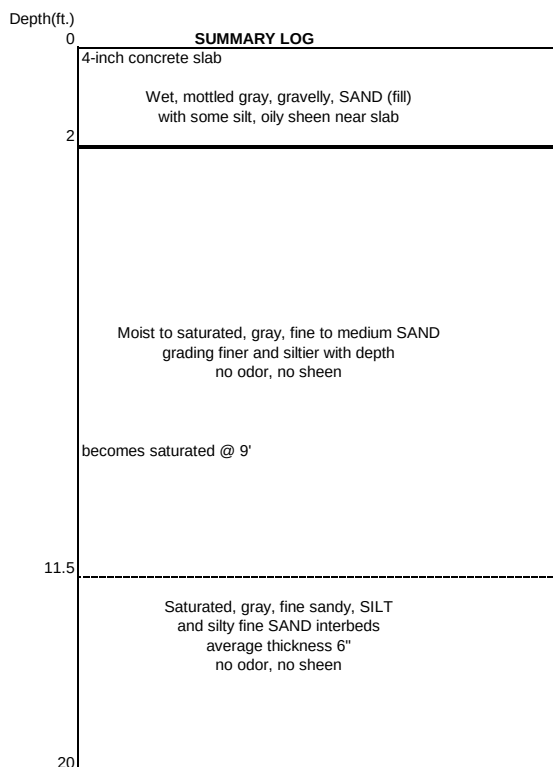


NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

BORING - DESCRIPTION OF SAMPLES & DATA

Field Rep: DG Cooper				Location: 7152 1st Ave. S, Seattle, WA			
Drilling Co.: Cascade				Elevation (Ft.):		Ground Surface: Concrete Slab	
Driller: Frank				Date Completed: 7/21/08			
Drill Type: AMS 9630 Power Probe				Weather: Sunny 80F			
Size/Type Casing: 2"				Hammer Type: Percussion		Sampler Type: 4' long x 2" dia. Macro Core w/ acrylic sleeve	
Spl.No.	Type sample saved	Drill Action	Testing	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
		smooth		0-4	40		4" concrete
P7-A	grab @ 0.5'					0900	0.5-2.0' moist, mot gry, gravelly, SAND w/some silty, oily sheen near slab contact
P7-B	grab @ 2.5'					0905	2-4' moist, gry, F-M SAND, no odor, no sheen
				4-8	48		4-7.5' as above
P7-C	grab @ 5'		A1, A2, A3			0910	7.5-8' wet gry, silty, F SAND, no odor, no sheen
P7-D	grab @ 7.5'					0915	
				8-12	48		8-11.5' as above becoming sat
P7-E	grab @ 10'		A1, A2, A3			0920	11.5-12' wet, gry, F sandy, SILT, no odor no sheen
				12-16	48		12-13' as above
P7-F	grab @ 12.5'					0925	13-16' wet to sat, gry, alternating layers of silty F SAND with F sandy SILT
P6-G	grab @ 15'		A1, A2, A3			0930	average thickness of beds 6", no odor, no sheen
				16-20	48	0935	16-20' as above, no odr, no sheen
P7-H	grab @ 17.5'				piston	0940	
P7-I	grab @ 19.5'						

Testing Notes: Analytical A1 - NWTPH-DX
A2 - PCBs
A3 - Lead

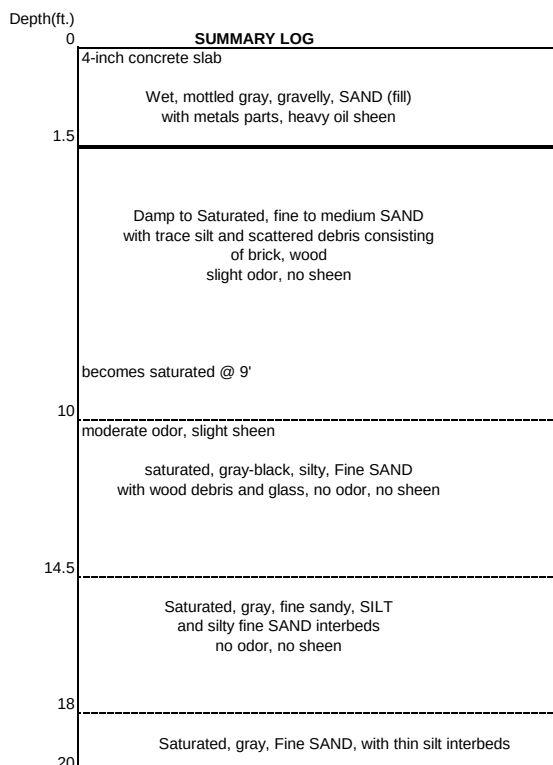


(Bottom of Boring)
NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and

BORING - DESCRIPTION OF SAMPLES & DATA

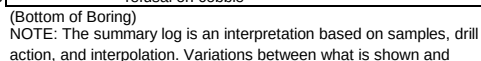
Field Rep: DG Cooper			Location: 7152 1st Ave. S, Seattle, WA				
Drilling Co.: Cascade			Elevation (Ft.):		Ground Surface: Concrete Slab		
Driller: Frank			Date Completed: 7/21/08				
Drill Type: AMS 9630 Power Probe			Weather: Sunny 80F				
Size/Type Casing: 2"			Hammer Type: Percussion		Sampler Type: 4' long x 2" dia. Macro Core w/ acrylic sleeve		
Spl.No.	Type sample saved	Drill Action	Testing	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
		smooth		0-4	40		4" concrete
P8-A	grab @ 0.5'		A1, A2, A3			1000	0.5-1.5' wet, mot gry, gravelly, SAND, w/metal parts, oily odor, heavy sheen
P8-B	grab @ 2.5'					1005	1.5-4' damp, gry, F-M SAND, no odor, no sheen
				4-8	48		4-8' moist-wet, gry, F-M SAND, w/trace silt, brick, gravel
P8-C	grab @ 5'		A1, A2, A3			1010	slight odor, no sheen
P8-D	grab @ 7.5'					1015	
				8-12	48		8-10' as above becoming sat
P8-E	grab @ 10'		A1, A2, A3			1020	10-12' sat gry, silty F SAND, w/wood debris, moderate odor, slight sheen
				12-16	48		12-14.5' as above with glass, wood debris, no odor, no sheen
P8-F	grab @ 12.5'					1025	14.5-16' sat, gry-blk, F sandy, SILT, w/trace organics, no sheen
P8-G	grab @ 15'		A1, A2, A3			1030	
				16-20	48	1035	16-18' as above, no odr, no sheen
P8-H	grab @ 17.5'				piston	1040	18-20' sat, gry, F SAND, w/thin silt interbeds, no odor, no sheen
P8-I	grab @ 19.5'						

Testing Notes: Analytical A1 - NWTTPH-DX
A2 - PCBs
A3 - Lead



(Bottom of Boring)
NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and

Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead

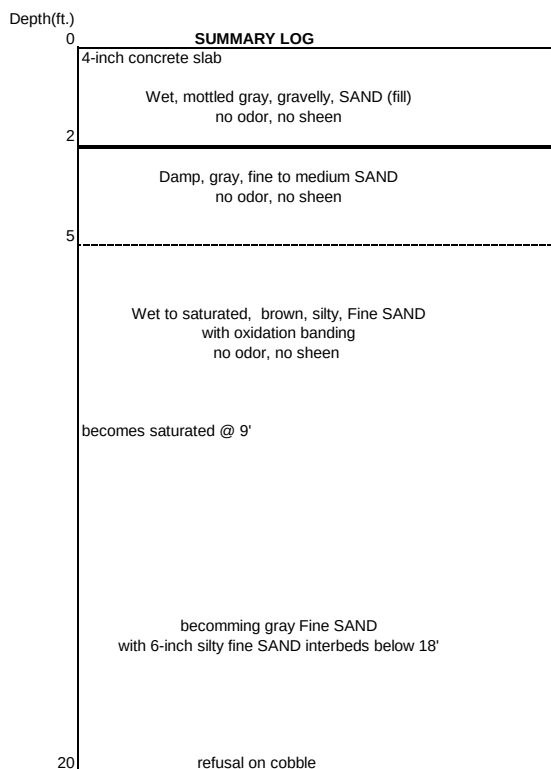


BORING - DESCRIPTION OF SAMPLES & DATA

P10

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Frank Drill Type: AMS 9630 Power Probe Size/Type Casing: 2"				Location: 7152 1st Ave. S, Seattle, WA Elevation (Ft.): Date Completed: 7/21/08 Weather: Sunny 80F Hammer Type: Percussion				Ground Surface: Concrete Slab Sampler Type: 4' long x 2" dia. Macro Core w/ acrylic sleeve	
Spl.No.	Type sample saved	Drill Action	Testing	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description		
		smooth		0-4	30		6" concrete		
P10-A	grab @ 2'					1515	0.5-2.0' moist, mot gry-bwn, gravelly, SAND, no odor, no sheen		
							2.0-4' damp, gry, F-M SAND, no odor, no sheen		
				4-8	48		4-5' as above,thin gravel layer @ 5', no odor, no sheen		
P10-B	grab @ 5'		A1, A2, A3			1520	5-8' moist to wet, bwn, silty, F SAND		
P10-C	grab @ 7.55'					1525			
				8-12	48		8-12' wet to sat, bwn, silty F SAND, w/oxidation banding, no odor sheen		
P10-D	grab @ 10'		A1, A2, A3			1530			
				12-16	0		no recovery, gravel blocking cutter head		
				16-20	48		16-20' sat, gry, F SAND, with 6" silty F SAND interbeds below 18'		
P10-E			A1, A2, A3		piston	1535	no odor, no sheen		
P10-F						1540			

Testing Notes:	Analytical	A1 - NWTPH-DX
		A2 - PCBs
		A3 - Lead



(Bottom of Boring)
NOTE: The summary log is an interpretation based on samples, drill
action, and interpolation. Variations between what is shown and

P11

SUMMARY LOG

Depth (ft.)	Soil Description
0	Concrete slab
2.5	Moist to saturated, gray, Fine SAND or Fine to Medium SAND, with trace to some silt
9.5	Wet, gray, SILT
11	Saturated, gray, Fine SAND with trace silt, silty sand interbeds
16	Saturated, gray, Fine to Medium SAND
25	

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P12

SUMMARY LOG

Depth (ft.)	Soil Description
0 - 8.5	Concrete slab
8.5 - 9.8	Wet to saturated, gray, Fine SAND with some silt, grading cleaner with depth
9.8 - 15	Wet, brown, SILT with some organics
15 - 22	Saturated, gray, Fine SAND with trace silt
22 - 25	Saturated, gray, Fine to Medium SAND

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P13

SUMMARY LOG

Depth (ft.)	Soil Description
0	Concrete slab
9.5	Moist to saturated, gray, Fine SAND with silty sand or sandy silt zones
16.5	Wet, brown, SILT with some organics
25	Saturated, gray, Fine to Medium SAND

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Temperature - 15.1C
pH - 6.8
Conductivity - 1138 uS/cm
Turbidity - 73 ntu

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P14

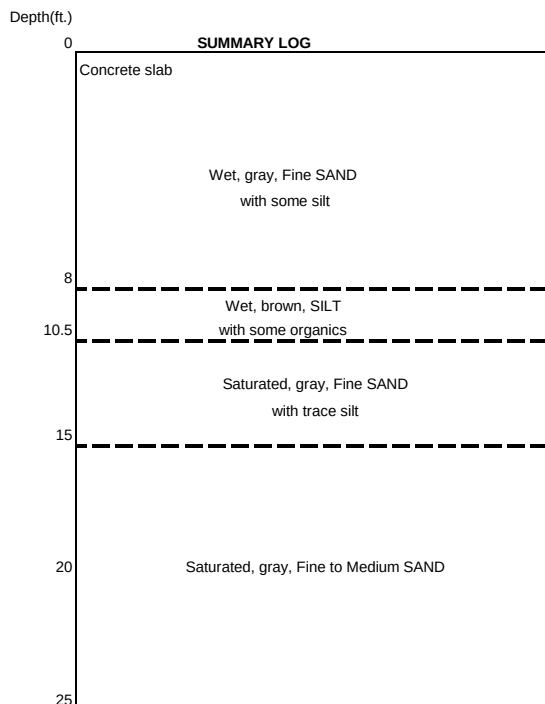
SUMMARY LOG

Depth (ft.)	Soil Description
0	Concrete slab
9	Wet, gray, Fine SAND with trace silt
10	Wet, brown, organic, SILT
15	Saturated, gray, Fine SAND
19	Saturated, gray, Fine to Medium SAND
25	

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P15

[illegible]

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 3-8' below ground surface
consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through
1/4" diameter polyethylene tubing with intake @ 7' bgs.
Sample taken: ICS-P15-W-111414 @ 1500

Groundwater parameters:

Temperature - 13.6C
pH - 6.6
Conductivity - 1847 uS/cm
Turbidity - 9.8 ntu

Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

P16

Depth(ft.)

Concrete slab

19

25

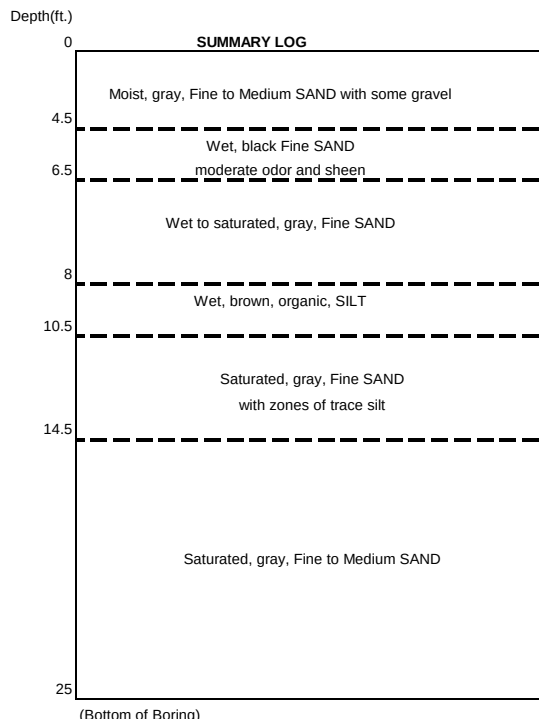
NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Turbidity - 575 ntu

Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P17

[illegible]

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: No groundwater sample was obtained.

Completed boring backfilled with granular bentonite

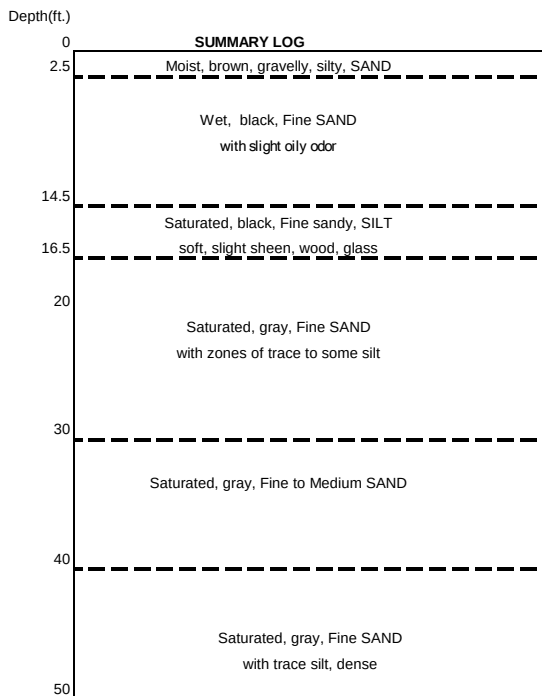
Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P18

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200176 E1270073 NAD83/96 Elevation (Ft.): Date Completed: 12/16/14 Weather: Cloudy 45F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	48		4" concrete slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
P18-SO-4	3.0-5.0	152	STO/NS			0815	2.5-5' Moist, gry-blk, F SAND
				5-10	52		5-10' As above, becoming wet, scattered wood, staining
P18-SO-7	6.0-8.0	44.0	SLO/NS			0825	slight oily odor
P18-SO-10	9.0-10.0	56.0	SLO/NS			0835	
				10-15	60		10-14' As above
P18-SO-13	12.0-14.0	15.8	SLO/NS			0845	14-14.5' Wet, bwn-blk, silty, SAND, w/wood
							14.5-15' Sat, blk F sandy, SILT, soft, glass, slight sheen
				15-20	30		15-16 Sat, blk, F sandy, SILT / silty, F SAND, w/wood
P18-SO-16	14.0-16.0	3.0	SLO/SS			0855	16-16.5' Wood core
							16.5-20' Sat, gry, F SAND
				20-25	60		20-22' As above
P18-SO-22	21.0-23.0	3.6	NO/NS			0905	22-25' Sat, gry, F SAND, w/zones of trace to some silt
				25-30	60		25-30' Sat, gry, F SAND, w/trace silt
P18-SO-32	31.0-33.0	2.4	NO/NS	30-35	50		30-35' Sat, gry, F-M SAND
						1100	
				35-40	50		35-40' As above grading finer
P18-SO-42	41.0-43.0	2.9	NO/NS	40-45	60	1115	40-45' Sat, gry, F SAND, w/trace silt, dense
P18-SO-50	49.0-50.0	2.6	NO/NS	45-50	60	1130	45-50' As above



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P18-W-A-121614 @ 1030

Groundwater parameters:

Temperature - 12.6C
pH - 7.0
Conductivity - 2690 uS/cm
Turbidity - 275 ntu

Temporary Screen set @ 45-50' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 49' bgs.
Sample taken: ICS-P18-W-B-121614 @ 1300

Groundwater parameters:

Temperature - 13.0C
pH - 6.9
Conductivity - 8,610 uS/cm
Turbidity - 51.9 ntu

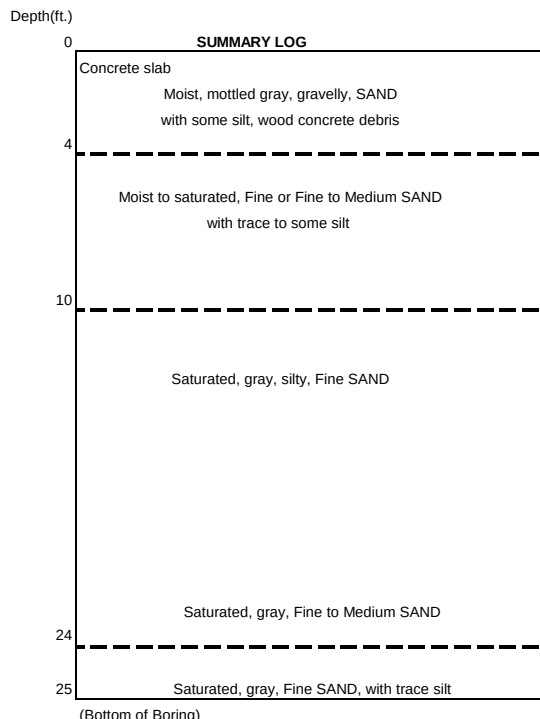
Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P19

[illegible]

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: No groundwater sample was obtained.

Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P20

SUMMARY LOG

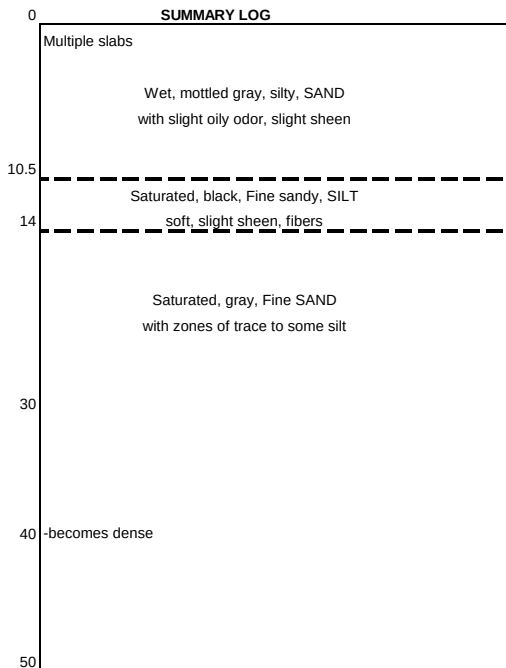
Depth (ft.)	Soil Description
0 - 6.5	Gravel
6.5 - 9.5	Wet, brown, Fine to Medium SAND
9.5 - 23.5	Saturated, brown, silty, Fine SAND
23.5 - 25	Saturated, brown to gray, Fine SAND

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Aaron Drill Type: Geoprobe 7730DT Size/Type Casing: 2"				Location: N200078 E1270110 NAD83/96 Elevation (Ft.): Date Completed: 12/08/14 Weather: Cloudy 50F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	40		4" concrete slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
							1.0-1.5' weathered concrete slab
P21-SO-4	3.0-5.0	6.8	MO/NS			1210	1.5-5' Wet, mot gry, silty, SAND, w/some gravel
				5-10	50		5-6' Wet, mot gry, gravelly, SAND, w/some silt
P21-SO-7	6.0-8.0	5.3	SLO/SS			1220	6-10' Wet, mot gry, silty, SAND, w/trace organics
P21-SO-10	9.0-11.0	1.2	SLO/SS			1230	slight odor, slight sheen
				10-15	50		10-10.5' As Above
P21-SO-13	12.0-14.0	1.1	SLO/SS			1240	10.5-14' Wet, black, F sandy, SILT, w/organics, fibers 11-12'
							14-15' Sat, gry, F SAND, w/some silt
				15-20	55		15-19' As Above
P21-SO-16	15.0-17.0	0.4	NO/NS			1250	19-20' Sat, gry, F SAND
				20-25	60		20-21' As Above
P21-SO-22	21.0-23.0	0.1	NO/NS			1300	21-25' Sat, gry, F SAND, w/some silt
				25-30	60		25-30' As Above
P21-SO-32	31.0-33.0	0.0	NO/NS	30-35	60	1500	30-35' Sat, gry, F SAND, w/trace silt
				35-40	40		35-40' Sat, gry, F SAND, w/interbeds of trace to some silt
P21-SO-42	41.0-43.0	0.0	NO/NS	40-45	40	1510	40-45' As Above, dense
P21-SO-50	49.0-50.0	0.0	NO/NS	45-50	50	1520	45-50' As above, dense

Depth(ft.)



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P21-W-A-120814 @ 1400

Groundwater parameters:

Temperature - 13.4C
pH - 6.9
Conductivity - 1163 uS/cm
Turbidity - 190 ntu

Temporary Screen set @ 45-50' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 49' bgs.
Sample taken: ICS-P21-W-B-120814 @ 1600

Groundwater parameters:

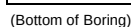
Temperature - 13.0C
pH - 6.8
Conductivity - 10,960 uS/cm
Turbidity - 119 ntu

Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

P22

Depth(ft.)

Notes: No groundwater sample obtained.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P23

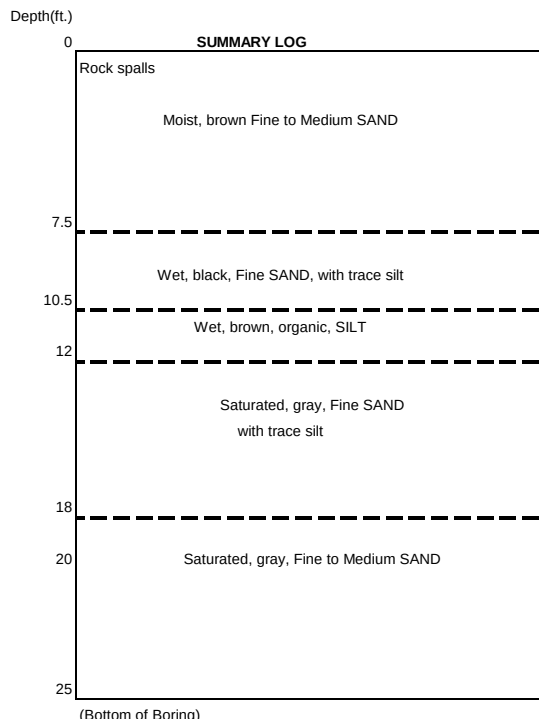
SUMMARY LOG

Depth (ft.)	Soil Description
0 - 2	Moist, grey to brown, Silty to Gravelly SAND
2 - 6.5	Wet, brown, Fine to Medium SAND
6.5 - 9.5	Wet, brown, silty, Fine SAND
9.5 - 25	Wet to saturated, gray, Fine SAND with zones of trace silt

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P24

[illegible]

(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

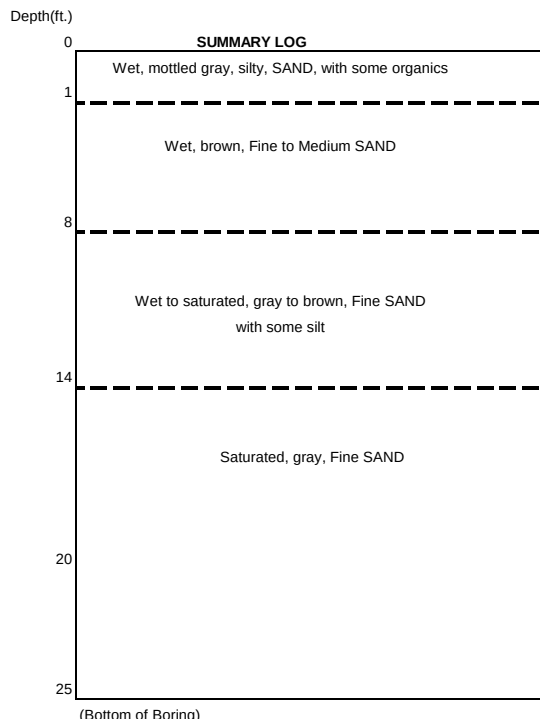
Notes: No groundwater sample obtained.

Completed boring backfilled with granular bentonite

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
 Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
 Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
 F = fine; M = medium
 Sat = Pores saturated with water

P25

[illegible]

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: No groundwater sample obtained.

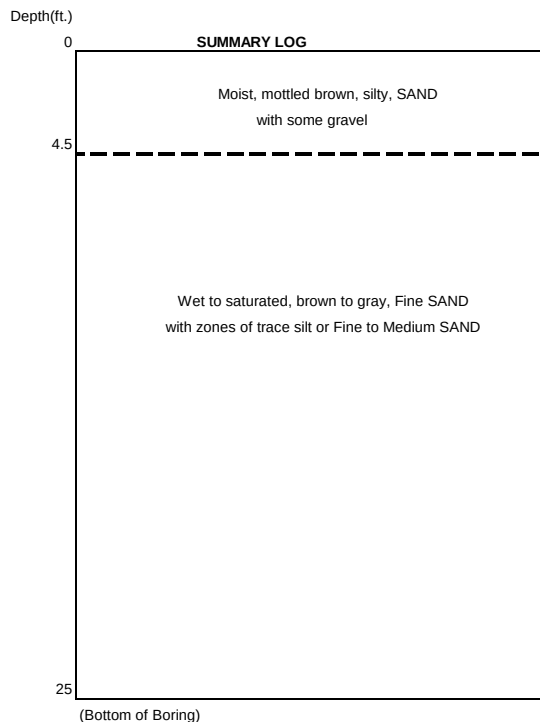
Completed boring backfilled with granular bentonite

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P26

[illegible]

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 10-15' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 14' bgs.
Sample taken: ICS-P26-W-111314 @ 1500

Groundwater parameters:

Temperature - 12.9C
pH - 7.0
Conductivity - 13,910 uS/cm
Turbidity - 255 ntu

Completed boring backfilled with granular bentonite and

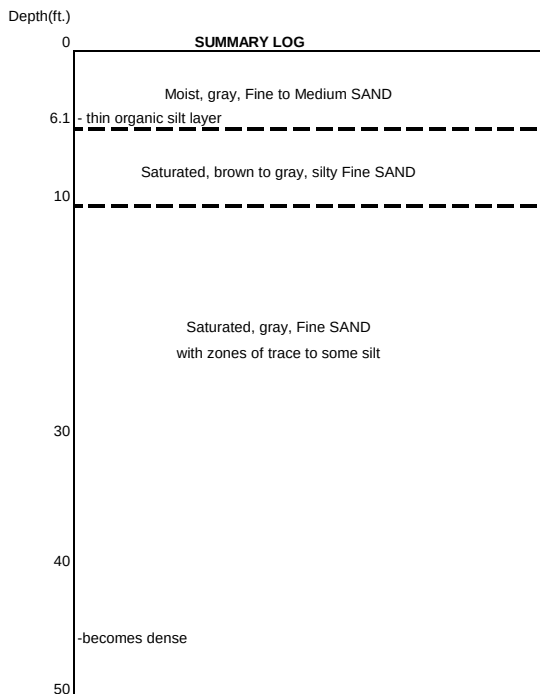
Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P27

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Aaron Drill Type: Geoprobe 7730DT Size/Type Casing: 2"				Location: N199886 E1270262 NAD83/96 Elevation (Ft.): Date Completed: 11/11/14 Weather: Clear 45F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	45		0-1' Wt, bwn, gravelly, SAND, w/some silt
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
P27-SO-3	1.0-3.0	0.2	NO/NS			0905	
				5-10	60		5-6' As above
P27-SO-7	6.0-8.0	0.1	NO/NS			0910	6-6.1' Wet, bwn, organic, SILT
P27-SO-10	9.0-11.0	0.1	NO/NS			0915	6.1-10' Sat, bwn-gry, silty, F SAND
				10-15	60		10-15' As Above grading sandy
P27-SO-13	12.0-14.0	0.1	NO/NS			0920	
				15-20	60		15-20' Sat, gry, F-M SAND
P27-SO-16	15.0-17.0	0.0	NO/NS			0925	
				20-25	60		20-25' Sat, gry, FSAND. w/some silt
P27-SO-22	21.0-23.0	0.0	NO/NS			1130	
				25-30	60		25-30' Sat, gry, F SAND
P27-SO-32	31.0-33.0	0.0	NO/NS	30-35	60	1135	30-35' As Above grading coarser
				35-40	60		35-40' Sat, gry, F-M SAND
P27-SO-42	41.0-43.0	0.0	NO/NS	40-45	60	1155	40-45' As above
				45-50	60		45-46' As above
							46-50' Sat, gry, F SAND, w/some silt, dense



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 15-20' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 19' bgs.
Sample taken: ICS-P27A-W-111114 @ 1030

Groundwater parameters:
Temperature - 12.0C
pH - 7.2
Conductivity - 10,060 uS/cm
Turbidity - 74.8 ntu

Temporary Screen set @ 45-50' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 49' bgs.
Sample taken: ICS-P27B-W-111114 @ 1330

Groundwater parameters:
Temperature - 10.9C
pH - 7.2
Conductivity - 12,050 uS/cm
Turbidity - 372 ntu

Completed boring backfilled with granular bentonite

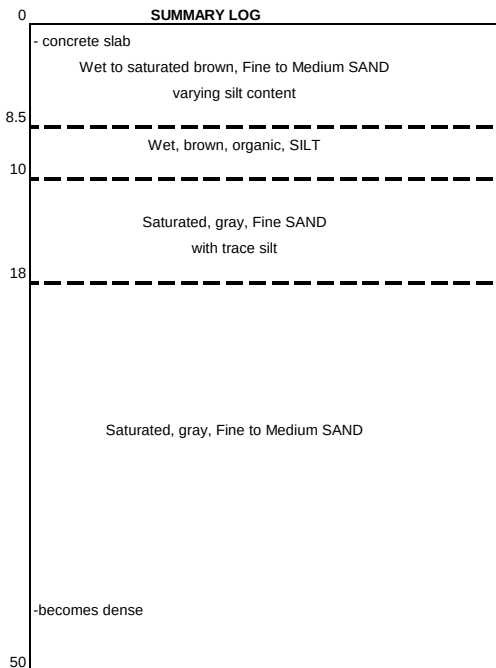
Abbreviations:
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P28

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200247 E1269824 NAD83/96 Elevation (Ft.): Date Completed: 12/15/14 Weather: Clear 45F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	50		4" concrete slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
							1.5-3' Wet, gry, F SAND, w/some silt
P28-SO-4	3.0-5.0	10.1	SLO/NS			1230	3-5' Wet-sat, mot gry, F-M SAND
				5-10	60		5-8.5' Sat, gry, F SAND
P28-SO-7	6.0-8.0	8.4	NO/NS			1240	8.5-10' Wet, bwn, organic, SILT
P28-SO-10	8.5-10.0	2.3	NO/NS			1250	
				10-15	40		10-15' Sat, gry, F SAND, w/trace silt
P28-SO-13	12.5-13.5	3.1	NO/NS			1300	
				15-20	50		15-18' As Above
P28-SO-16	15.0-17.0	3.3	NO/NS			1310	18-20' Sat, gry, F-M SAND, scattered wood
				20-25	50		20-25' As Above
P28-SO-22	21.0-23.0	2.5	NO/NS			1320	
				25-30	50		25-30' As Above
P28-SO-32	31.0-33.0	2.1	NO/NS	30-35	50	1430	30-35' As Above
				35-40	50		35-40' As Above, grading finer
P28-SO-42	41.0-43.0	0.5	NO/NS	40-45	50	1500	40-45' Sat, gry, F SAND, dense
P28-SO-50	49.0-50.0	0.4	NO/NS	45-50	40	1530	45-50' As Above

Depth(ft.)



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P28-W-121514 @ 1400

Groundwater parameters:

Temperature - 13.4C
pH - 6.8
Conductivity - 5,250 uS/cm
Turbidity - 229 ntu

Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

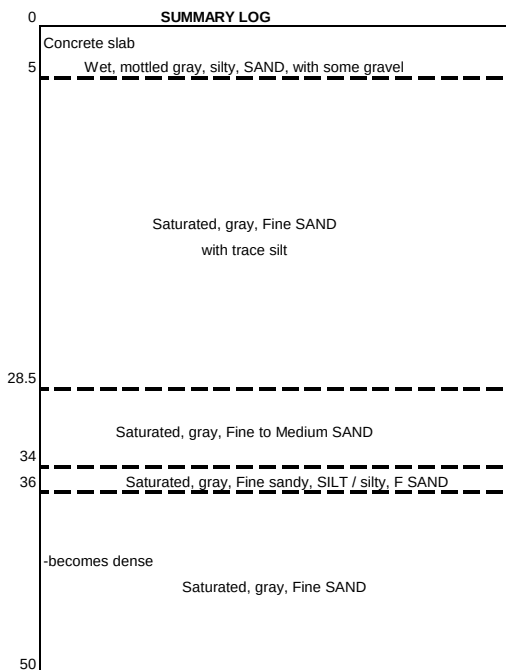
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P29

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200265 E1269944 NAD 83/96 Elevation (Ft.): Ground Surface: Concrete Date Completed: 12/10/14 Weather: Rain 60F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	40		6" concrete slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
P29-SO-4	3.0-4.0	16.5	MO/NS			0800	1-5' Wet, mot gry, silty, SAND, w/some gravel, wood
				5-10	60		5-9.5' Wet-sat, gry, F SAND, w/trace silt
P29-SO-7	6.0-8.0	49.3	MO/MS			0810	9.5-10' Wet, gry, F SAND
P29-SO-10	9.0-10.0	11.7	SLO/SS			0820	
				10-15	60		10-15' Wet, gry, F SAND, w/trace silt
P29-SO-13	12.0-14.0	11.2	SLO/SS			0830	odor and sheen to 14'
				15-20	60		15-20' sat, gry, F SAND, w/trace silt
P29-SO-16	15.0-17.0	15.5	SLO/SS			0840	
DUPL2						0845	
				20-25	60		20-25' As Above
P29-SO-22	21.0-23.0	5.2	NO/NS			0850	
				25-30	55		25-28.5' As Above
							28.5-30' Sat, gry, F-M SAND
P29-SO-32	31.0-33.0	5.3	NO/NS	30-35	55	0900	30-31' As above w/silt clasts
							31-34' Sat, gry, F SAND
							34-35' Sat, gry, silty, F SAND / F sandy, SILT
				35-40	60		35-36' As Above
							36-40' Sat, gry, F SAND
P29-SO-42	41.0-43.0	0.3	NO/NS	40-45	60	1045	40-45' Sat, gry, F SAND, w/silty sand interbeds, dense
P29-SO-50	49.0-50.0	0.6	NO/NS	45-50	60	1100	45-50' As Above

Depth(ft.)



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 29-34' below ground surface consisting of 1/2" dia. SCH 40 PVC screen. Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 33' bgs. Sample taken: ICS-P29-W-121014 @ 1000

Groundwater parameters:

Temperature - 14.0C
pH - 6.8
Conductivity - 3,070 uS/cm
Turbidity - 401 ntu

Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:

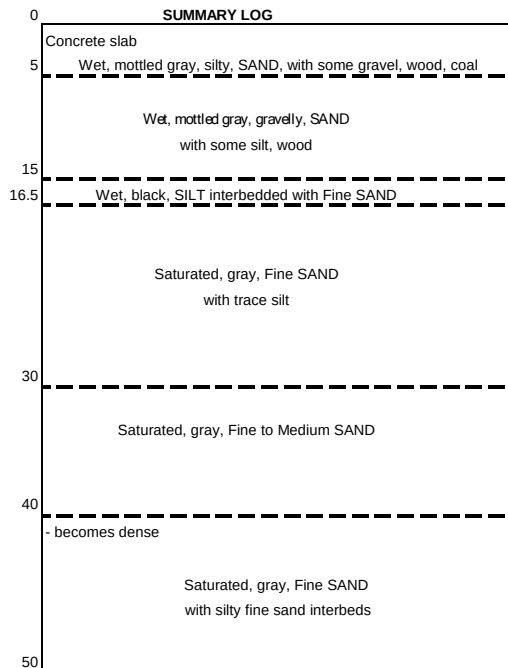
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P30

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200295 E1270067 NAD 83/96 Elevation (Ft.): Ground Surface: Concrete Date Completed: 12/09/14 Weather: Rain 55F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	40		4" slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
P30-SO-4	3.0-5.0	2.6	NO/NS			1150	
				5-10	60		5-7' Wet, blk, gravelly, SAND
P30-SO-7	6.0-7.0	18.5	SLO/NS			1200	7-10' Wet, mot gry, gravelly, SAND, w/some silt, wood
P30-SO-10	9.0-10.0	2.0	NO/NS			1210	
				10-15	30		10-15' As Above, loose/soft
P30-SO-13	12.5-13.5	15.5	SLO/NS			1220	
				15-20	60		15-15.5' Wet, blk, SILT
P30-SO-16	15.0-16.5	4.2	NO/NS			1230	15.5-16' Sat, gry-blk, F SAND
							16-16.5' Wet, blk, SILT
							16.5-20' Sat, gry, F SAND, w/trace silt, wood
				20-25	50		20-20.5' As Above
P30-SO-22	21.0-23.0	2.7	NO/NS			1240	20.5-21' Wood core
							21-25' Sat, gry, F SAND
				25-30	60		25-30' As Above
P30-SO-32	31.0-33.0	1.0	NO/NS	30-35	50	1430	30-35' Sat, gry, F-M SAND
				35-40	60		35-40' As Above
P30-SO-42	41.0-43.0	0.4	NO/NS	40-45	60	1445	40-45' Sat, gry, F SAND, w/silty zones, dense
P30-SO-50	49.0-50.0	0.4	NO/NS	45-50	50	1500	45-50' As Above, wood @ 48'

Depth(ft.)



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen. Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs. Sample taken: ICS-P30-W-120914 @ 1400

Groundwater parameters:

Temperature - 13.9C
pH - 7.4
Conductivity - 6,030 uS/cm
Turbidity - 182 ntu

Completed boring backfilled with granular bentonite and patched with concrete.

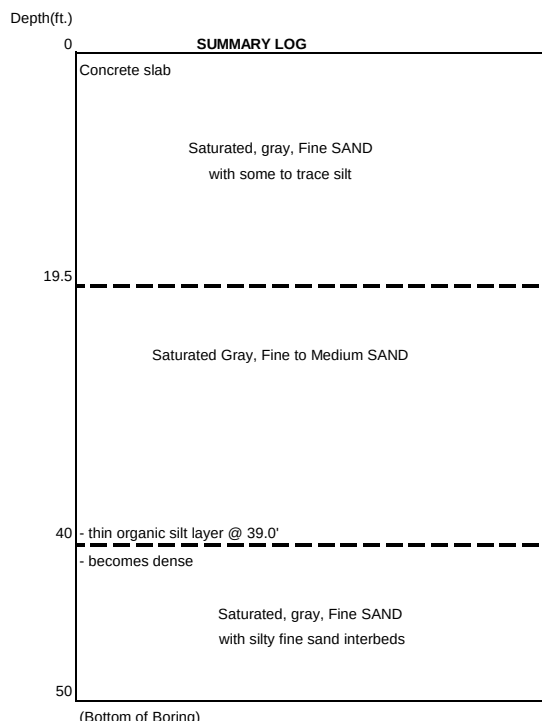
Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

P31

BORING - DESCRIPTION OF SAMPLES & DATA

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200244 E1270179 NAD 83/96 Elevation (Ft.): Date Completed: 12/09/14 Weather: Rain 55F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5	40	0750	4" slab
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
P31-SO-4	3.0-4.0	0.1	NO/NS			0800	1.5-5' Wet, bwn, F SAND, w/some silt, thin roots
				5-10	60		5-8" As Above
P31-SO-7	6.0-8.0	0.2	NO/NS			0810	8-10' Sat, gry, F SAND, w/silty sand interbeds
P31-SO-10	9.0-11.0	0.2	NO/NS			0820	
				10-15	60		10-15' As Above
P31-SO-13	12.0-14.0	0.3	NS/NS			0830	
				15-20	60		15-19.5' As Above
P31-SO-16	15.0-17.0	0.3	NO/NS			0840	19.5-20' Sat, gry, F-M SAND
				20-25	50		20-25' As Above
P31-SO-22	21.0-23.0	0.3	NO/NS			0850	
				25-30	50		25-30' As Above
				30-35	50	1020	30-35' As Above
				35-40	50		35-40' As above
							0.3' thick organic silt layer @ 39.0'
P31-SO-42	41.0-43.0	0.5	NO/NS	40-45	50	1030	40-45' Sat, gry, F SAND, w/silty F sand interbeds
				45-50	50	1040	45-50' As above, dense



NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P31-W-120914 @ 1000
Groundwater parameters:
Temperature - 13.4C
pH - 6.9
Conductivity - 4,010 uS/cm
Turbidity - 65 ntu

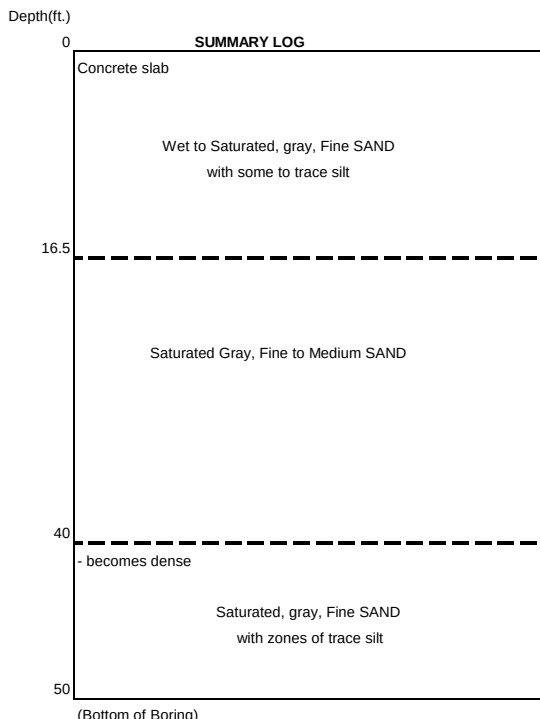
Completed boring backfilled with granular bentonite and patched with concrete.

Abbreviations:
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P32

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N200183 E1269973 NAD 83/96 Elevation (Ft.): Ground Surface: Concrete Date Completed: 12/15/14 Weather: Cloudy 45F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5			0-10' interval originally sampled/logged
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
				10-15	60		10-15' Wet-sat, gry, F SAND, w/trace silt
P32-SO-13	12.0-14.0	3.3	NO/NS			0800	
				15-20	60		15-16' As Above
P32-SO-16	16.0-17.5	5.6	NO/NS			0810	16-20' Sat, gry, F-M SAND
DUPL3	duplicate of above					0815	
				20-25	60		20-25' As Above
P32-SO-22	21.0-22.0	4.9	NO/NS			0820	
				25-30	55		25-30' As Above
P32-SO-32	31.0-33.0	5.5	NO/NS	30-35	55	0940	30-34' As Above
							34-35' Sat, gry, F SAND, w/zones of trace silt
				35-40	55		35-40' As Above, dense
P32-SO-42	41.0-43.0	8.3	NO/NS	40-45	55	1050	40-45' Sat, gry, F SAND
P32-SO-50	49.0-50.0	3.1	NO/NS	45-50	55	1100	45-50' Sat, gry, F SAND, w/zones of trace sit



NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 25-30' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P32-W-A-121514 @ 0930

Groundwater parameters:
Temperature - 12.2C
pH - 6.6
Conductivity - 2,560 uS/cm
Turbidity - 312 ntu

Temporary Screen set @ 35-40' below ground surface consisting of 1/2" dia. SCH 40 PVC screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 39' bgs.
Sample taken: ICS-P32-W-B-121514 @ 1030

Groundwater parameters:
Temperature - 12.6C
pH - 6.8
Conductivity - 4,590 uS/cm
Turbidity - 183 ntu

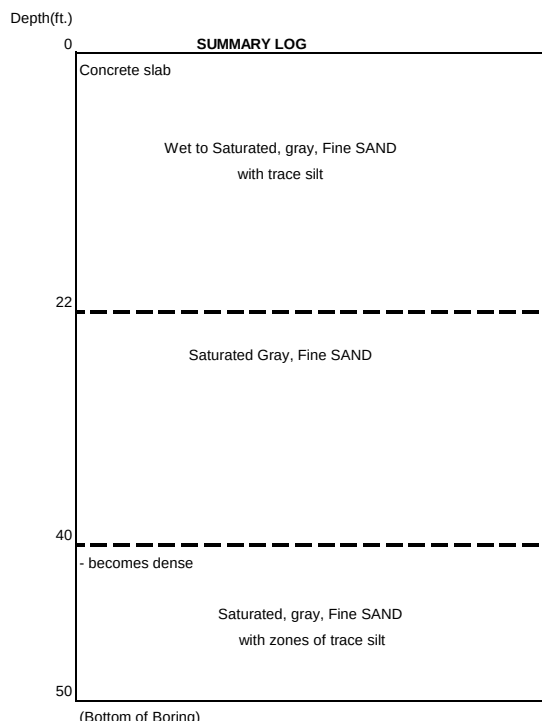
Completed boring backfilled with granular bentonite and patched with asphalt concrete.

Abbreviations:
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P33

Field Rep: DG Cooper Drilling Co.: Cascade Driller: Kasey Drill Type: Geoprobe 6600 Size/Type Casing: 2"				Location: N199983 E1270159 NAD 83/96 Elevation (Ft.): Ground Surface: Gravel Date Completed: 12/08/14 Weather: Cloudy 45F Hammer Type: Direct push Sampler Type: 5' long x 2" dia. Macro retained in an acrylic sleeve			
Sample Number	Sample Interval (ft. bgs.)	PID Headspace (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length inches	Time	Sample Description
				0-5			0-10' interval originally sampled/logged
							0.4-1.0' Damp, mot gry, gravelly, SAND, w/some silt
				10-15	50		10-15' Sat, gry, F SAND, w/trace silt
P33-SO-13	12.0-14.0	0.1	NO/NS			0810	
				15-20	45		15-20' As Above
P33-SO-16	15.0-17.0	0.6	NO/NS			0820	
				20-25	60		20-22' As Above
P33-SO-22	21.0-23.0	0.4	NO/NS			0830	22-25' Sat, gry, F SAND
				25-30	55		25-30' As Above
P33-SO-32	31.0-33.0	0.4	NO/NS	30-35	55	0950	30-35' As Above
				35-40	50		35-40' As Above
P33-SO-42	41.0-43.0	0.3	NO/NS	40-45	50	1100	40-45' Sat, gry, F SAND, w/trace silt, sand interbeds, dense
P33-SO-50	49.0-50.0	0.3	NO/NS	45-50	50	1110	45-50' As Above



NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Notes: Temporary Screen set @ 26-30' below ground surface consisting of SS hydropunch screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 29' bgs.
Sample taken: ICS-P33-W-A-120814 @ 0900
Groundwater parameters:
Temperature - 12.1C
pH - 6.7
Conductivity - 710 uS/cm
Turbidity - 586 ntu

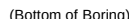
Temporary Screen set @ 36-40' below ground surface consisting of SS Hydropunch screen.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing with intake @ 39' bgs.
Sample taken: ICS-P33-W-B-120814 @ 1030*
Groundwater parameters:
Temperature - 12.6C
pH - 7.2
Conductivity - 2,150 uS/cm
Turbidity - 440 ntu
* only for samples chloride/sulfate - very low yield

Completed boring backfilled with granular bentonite

Abbreviations:
gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium
Sat = Pores saturated with water

P34

Notes: Two groundwater grab samples taken:



NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing.

Groundwater parameters:

Temperature - 15.5C

pH - 7.9

Conductivity - 524 uS/cm

Turbidity - 78 ntu

Fe++ - 3.8 mg/l

Sample taken: ICS-P34-W-10-060915 @ 1400

Temporary Screen set @ 20-24' below ground surface
consisting of SS hydropunch.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing.

Groundwater parameters:

Temperature - 17.3C

pH - 7.5

Conductivity - 3070 uS/cm

Turbidity - 33 ntu

Fe++ - 4.6 mg/l

Sample taken: ICS-P34-W-20-060915 @ 1200

Completed boring backfilled with granular bentonite.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled

Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy

Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong

F = fine; M = medium

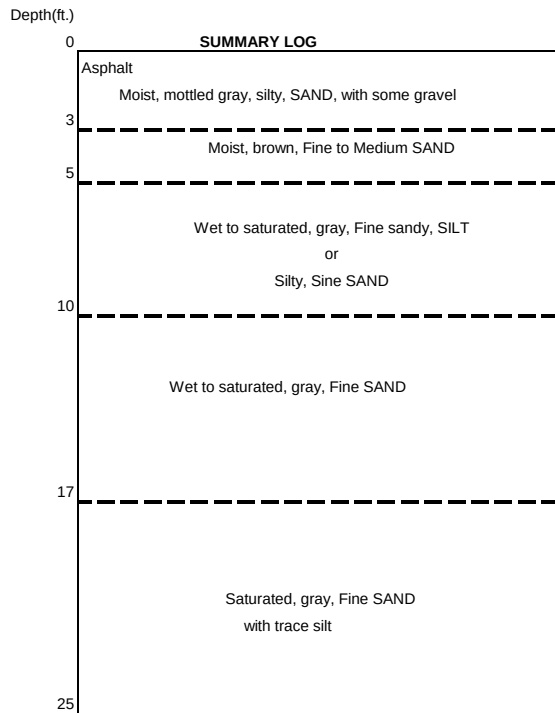
Sat = Pores saturated with water

BORING - DESCRIPTION OF SAMPLES & DATA

P35

[illegible]

Notes: Two groundwater grab samples taken:



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action and interpretation. Variations between what is shown and actual conditions should be anticipated.

Temporary Screen set @ 10-14' below ground surface consisting of SS hydropunch.
Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing.

Groundwater parameters:

Temperature - 19.8C

pH - 6.7

Conductivity - 3220 uS/cm

Turbidity - 67 ntu

Fe++ - 6.6 mg/l

Sample taken: ICS-P35-W-10-060915 @ 1000

Temporary Screen set @ 20-24' below ground surface consisting of SS hydropunch.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing.

Groundwater parameters:

Temperature - 16.9C

pH - 6.8

Conductivity - 1821 uS/cm

Turbidity - 459 ntu

Fe++ - 9.0 mg/l

Sample taken: ICS-P35-W-20-060815 @ 1530

Completed boring backfilled with granular bentonite and patched with asphalt.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled

Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy

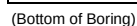
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong

F = fine; M = medium

Sat = Pores saturated with water

P36

Notes: Two groundwater grab samples taken:



Groundwater parameters:

Temperature - 21.0C

pH = 6.6

pH - 6.6

Conductivity - 3180 uS/cm

Turbidity - 115 ntu

Fe++ - 6.86 mg/l

Sample taken: ICS-P36-W-10-060815 @ 1200

Temporary Screen set @ 20-24' below ground surface
consisting of SS hydropunch.

Water sample collected using peristaltic pump through 1/4" diameter polyethylene tubing.

Groundwater parameters:

Temperature - 17.5C

pH = 6.5

Conductivity: 4080 $\mu\text{S}/\text{cm}$

Conductivity - 408

Turbidity - 127

Fe++ - 9.6 mg/l
Sample taken: ICS-P36-W-20-060815 @ 1100

Completed boring backfilled with granular bentonite and patched with asphalt.

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled

Sheen - NS= none. LS = Light. MS = Moderate. HS = Heavy

Odor - NO = None, SLO = Slight, MO = Moderate, STO = Strong

F = fine; M = medium.

Sat = Pores saturated with water

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**EMBAYMENT SEDIMENT CORE LOGS
UPLAND ICS/NWC SITE**

**REMEDIAL INVESTIGATION REPORT
ICS/NWC
SEATTLE, WASHINGTON**

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core A

Field Rep: D. Cooper	Location: N200360 E1269800 NAD83	Drive Length (ft.): 8.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 7.1 Recovery efficiency: 89%
Driller: Bill Jaworski	Time: 0908	Depth to Mudline (ft.): 8.3
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 10.5
Size/Type Casing: 4"	Date Processed: 11/26/2012	Bottom Elevation (MLLW): 1.7 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-0.8	1500	NS	1.0	0-0.8	Black, sandy, GRAVEL, w/trace silt, plastic fragment	0.9	Sandy, GRAVEL	1 = 0.4'
2	0.8-1.5	1510	LS	2.5	0.8-1.5 1.5-1.8	Black, silty, SAND, w/some silt Grey precipitate, very hard	1.6	Silty, SAND -Hard precipitate	2 = 1.3'
3	1.8-3.0	1520	LS	3.8	1.8-3.0	Black, silty, Fine SAND shiny, slimy texture, trace wood, sulfurous odor	3.3	Silty, Fine SAND	3 = 2.7'
4	3-4	1525	NS	1.3	3.0-4.0	Black to gray, Fine sandy, SILT grades gray with depth	4.5	Fine Sandy, SILT	4 = 3.9'
5	4-5	1530	NS	1.9	4.0-5.5	Grey, silty, Fine SAND	6.2	Silty, Fine SAND	5 = 5.1'
6	5.2-6	1540	NS	1.5	5.5-6.8	Gray, silty, Fine SAND	8	SILT	6 = 6.3'
7	6-6.8	1550	NS	1.8	6.8-7.1	Core catcher	9	Bottom of core 8.0	7 = 7.2'
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Summary log depths have been adjusted based on recovery efficiency, and material type. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 NS - no sheen
 LS - light sheen
 MS - moderate sheen
 HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core B

Field Rep: D. Cooper	Location: N200357 E1269857 NAD83	Drive Length (ft.): 7.7
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 7.1
Driller: Bill Jaworski	Time: 1027	Recovery efficiency: 92%
Drill Type: Vibracore	Weather: Rain 50F	Depth to Mudline (ft.): 8.5
Size/Type Casing: 4"	Date Processed: 11/27/2012	Tide (MLLW): 11.6
		Bottom Elevation (MLLW): 2.9
		From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)						INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Mean Sample Depth
1	0.5-1.5	1120	-	-	0-0.5	Brown, sandy, GRAVEL	0.5	1 = 1.1'
					0.5-1.5	Gray, Precipitate, very hard, with sand, gravel inclusions	1.8	
2	1.5-2.5	1125	NS	5.6	1.5-2.5	Black, sandy, GRAVEL, w/silty sand at base atop 1" thick precipitate layer		2 = 2.2'
3	2.5-3.5	1135	MS	14.2	2.5-4.5	Black, Fine sandy, SILT, grading to silty, F SAND shiny, slimy appearance, oily odor	2.9	3 = 3.3'
4	3.5-4.5	1145	MS	4.5				
5	4.5-5.5	1150	NS	2.6	4.5-6.5	Dark gray, SILT, w/trace F sand, thin organic layer @ 5.5'	5.2	5 = 5.5'
6	5.5-6.5	1155	NS	1.1				
					6.5-7.1	Core catcher	7.7	6 = 6.6'
							8	
							9	
							10	
							11	
							12	

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 NS - no sheen
 LS - light sheen
 MS - moderate sheen
 HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core C

Field Rep: D. Cooper	Location: N200352 E1269851 NAD83	Drive Length (ft.): 5.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 4.3
Driller: Bill Jaworski	Time: 0952	Recovery efficiency: 86%
Drill Type: Vibracore	Weather: Rain 50F	Depth to Mudline (ft.): 9.7
Size/Type Casing: 4"	Date Processed: 11/27/2012	Tide (MLLW): 11.3
		Bottom Elevation (MLLW): 1.9
		From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)

INTERPRETED SUMMARY LOG

(adjusted for recovery)

Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-0.8	1300	MS	46.2	0-0.8	Black, organic, silty, Fine SAND, fibrous organics, wood, throughout, oily odor	0.9	Silty, Fine SAND	1 = 0.5'
2	0.8-2.2	1305	LS	2.4	0.8-2.2	Black, Fine SAND, with some silt, shiny, loose	2.5	Fine SAND with some silt	2 = 2.3'
3	2.2-3.5	1310	NS	2.5	2.2-3.5	Black to dark gray, SILT, w/trace fine sand		SILT	3 = 3.3'
4	3.5-4.0	1315	NS	4.2	3.5-4.0	Dark gray, Fine to Medium SAND Cored 1/2" piece of wood - refusal	4.0		4 = 4.4'
					4.0-4.3	Core catcher	5.0	Fine to Medium SAND	
								Bottom of core 5.0'	
							6		
							7		
							8		
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 NS - no sheen
 LS - light sheen
 MS - moderate sheen
 HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core D

Field Rep: D. Cooper	Location: N200325 E1269895 NAD83	Drive Length (ft.): 8.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 6.0 Recovery efficiency: 75%
Driller: Bill Jaworski	Time: 1104	Depth to Mudline (ft.): 10.4
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 11.6
Size/Type Casing: 4"	Date Processed: 11/27/2012	Bottom Elevation (MLLW): 1.4 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1.1	1420	HS	368	0-1.1	1" of hard precipitate at surface	1.5	Organic, SAND with precipitate	1 = 0.7'
2	1.1-2.2	1425	HS	240	1.1-2.2	Black, organic, SAND, w/gravelly precipitate chunks wood, glass, debris, oily odor		Silty, SAND with scattered precipitate	2 = 2.1'
3	2.2-3.5	1430	LS	33.7	2.2-3.5	Mottled black gray, SILT, with trace fine sand	4.6	Mottled, SILT with trace fine sand	3 = 3.8'
4	3.5-4.5	1435	NS	4.2	3.5-5.5	Dark gray, SILT		SILT	4 = 5.3'
5	4.5-5.5	1440	NS	3.2	5.5-6.0	Core catcher	8	Bottom of core 8.0	5 = 6.7'
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core F

Field Rep: D. Cooper	Location: N200322 E1269928 NAD83	Drive Length (ft.): 12.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/21/2012	Recovery Length (ft.): 9.4 Recovery efficiency: 78%
Driller: Bill Jaworski	Time: 1240	Depth to Mudline (ft.): 9.5
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 11.0
Size/Type Casing: 4"	Date Processed: 11/27/2012	Bottom Elevation (MLLW): 0.6 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-0.8	1545	HS	42	0-0.8	Black, gravelly, SAND, with woody debris cemented ash-like fragments, debris, oily odor	1	Gravelly, SAND	1 = 0.5'
2	0.8-1.9	1550	HS	365	0.8-1.9	Black, Fine sandy, SILT, with scattered wood shiny, oily odor, barrel bung gaskets	2.4	Fine sandy, SILT	2 = 1.7'
3	1.9-3.0	1555	LS	5.4	1.9-4.1	Mottled black-gray (banded), SILT, soft, shiny, oily odor		Banded, SILT	3 = 3.1'
4	3-4	1600	NS	2.9	4.1-7.1	Mottled black-gray, SILT, mussle shells @ 5' grading fine sandy from 6.5-7' 1" wood branch @ 6'			4 = 4.5'
5	4-5	1605	NS	68			5.2		
6	5-6	1610	NS	2.8				SILT	5 = 5.8'
7	6-7	1615	NS	2.5	7.1-9.0	Gray, Fine SAND 1" wood branch @ 8.5'			6 = 7.0'
8	7.1-8	1620	NS	1.4					7 = 8.3'
9	8-9	1625	NS	3.2			9.1		
					9-9.4	Core catcher			8 = 9.7'
								Fine SAND	9 = 10.9'
							12		

Bottom of core 12.0

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core G

Field Rep: D. Cooper	Location: NN200350 E1269965 NAD83	Drive Length (ft.): 8.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/21/2012	Recovery Length (ft.): 6.8
Driller: Bill Jaworski	Time: 0828	Recovery efficiency: 85%
Drill Type: Vibracore	Weather: Rain 50F	Depth to Mudline (ft.): 5.1
Size/Type Casing: 4"	Date Processed: 11/28/2012	Tide (MLLW): 7.7
		Bottom Elevation (MLLW): 3.6
		From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1	955	-	-	0-1.0	Gray, sandy, GRAVEL, cemented	1.2	Sandy, GRAVEL	1 = 0.6'
2	1-2.1	1000	LS	1.4	1.0-2.1	Black, silty, SAND, with scattered wood, sulfurous odor	2.4	Silty, SAND	2 = 1.8'
3	2.1-3	1015	LS	1.2	2.1-2.8	Black, SILT, soft, shiny, slight oil odor		Black SILT	3 = 3.0'
DUP1		1016			2.8-3.5	Gray to black, Fine SAND, with scattered wood		-Fine sand	
4	3-4	1020	LS	1.2	3.5-4.2	Black, SILT, soft, shiny, oily odor			4 = 4.1'
5	4-4.8	1025	HS	36.5	4.2-4.8	Black, Fine sandy, SILT, soft, shiny, strong oily odor lamp black, fine woody debris	5.6		5 = 5.1'
6	5.1-6.5	1030	NS	1.0	4.8-6.5	Gray, SILT, with some fine sand wood, shells from 4.8-5.1 becomes black/reduced from 6-6.5 with scattered shells		Gray SILT	6 = 6.8'
					6.5-6.8	Core catcher	8		
								Bottom of core 8.0	
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 NS - no sheen
 LS - light sheen
 MS - moderate sheen
 HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core H

Field Rep: D. Cooper	Location: N200317 E1269980 NAD83	Drive Length (ft.): 12.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/21/2012	Recovery Length (ft.): 5.6 Recovery efficiency: 46%**
Driller: Bill Jaworski	Time: 0858	Depth to Mudline (ft.): 8.6
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 8.7
Size/Type Casing: 4"	Date Processed: 11/28/2012	Bottom Elevation (MLLW): 0.1 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-0.8	1140	LS	1.4	0-0.8	Black, sandy, GRAVEL, with coal	0.8	Sandy, GRAVEL	1 = 0.4'
2	0.8-2.5	1145	MS	4.3	0.8-2.5	Mottled gray, silty, SAND, with some gravel, brick, wood fibrous organics mixed in throughout, oily odor	2.5	Silty, SAND	2 = 1.7'
3	2.5-4.1	1150	HS	28.8	2.5-4.1	Black, interbedded SILT and Fine SAND, shiny oily odor, fine coal		Interbedded SILT with Fine SAND	3 = 3.3'
4	4.1-5.2	1155	NS	2.1	4.1-5.2	Dark gray, silty, Fine SAND, with wood fibers Cored 3" thick wood at base - shaved piling likely driven ahead to 12' without additional recovery	4.1		
					5.2-5.6	Core catcher	5.6	Fine SAND	4 = 4.7'
							6	Bottom of Core 5.6' see note **	
							7		
							8		
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

** This core encountered wood at 5' and was likely driven ahead rather than compacted/displaced

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core I

Field Rep: D. Cooper	Location: N200354 E1270036	Drive Length (ft.): 11.8
Drilling Co.: Marine Sampling Systems	Date Completed: 11/21/2012	Recovery Length (ft.): 6.8 Recovery efficiency: 58%
Driller: Bill Jaworski	Time: 0950	Depth to Mudline (ft.): 10.6
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 10.2
Size/Type Casing: 4"	Date Processed: 11/28/2012	Bottom Elevation (MLLW): -0.6 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1.1	1340	NS	0.9	0-1.1	Black, silty, Fine SAND, with organics, wood fragments leaf debris, shiny, no odor		Fine SAND	1 = 0.9'
2	1.1-1.9	1345	NS	2.5	1.1-1.9	Black, gravelly, SAND, with minor silt, organics	1.8		
3	1.9-3	1350	NS	1.9			3.2	Gravelly, SAND	2 = 2.6'
4	3-3.8	1355	NS	1.9	1.9-3.8	Mottled gray-black, SILT, scattered organics, shell fragments		SILT	3 = 4.2'
5	4-5	1400	NS	1.5					4 = 5.9'
6	5-6	1405	NS	1.0	3.8-6.2	Gray, Fine SAND, with black silt interbeds at 4.5', 5', 5.5' trace organics at 6'	6.5		
7					6.2-6.8	Core catcher			
8								Fine SAND	5 = 7.8'
9									
10									6 = 9.5'
11									
							11.8		
							Bottom of core 11.8		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core J

Field Rep: D. Cooper	Location: N200348 E1270100 NAD83	Drive Length (ft.): 12.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/21/2012	Recovery Length (ft.): 6.4 Recovery efficiency: 53%
Driller: Bill Jaworski	Time: 1100	Depth to Mudline (ft.): 11.4
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 11.3
Size/Type Casing: 4"	Date Processed: 11/28/2012	Bottom Elevation (MLLW): 0.2 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)

INTERPRETED SUMMARY LOG

(adjusted for recovery)

Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-0.8	1500	NS	1.3	0-0.8	Mottled brown, gravelly, SAND, with some silt scattered organics	1.5	Gravelly, SAND	1 = 0.8'
2	0.8-2.0	1505	LS	0.8	0.8-2.0	Black-gray, thinly banded, SILT, with trace fine sand		Banded SILT	2 = 2.6'
3	2-3.2	1510	MS	3.3	2.0-3.2	Black, SILT, shiny, oily odor gravel, wood at 2.6'	3.7		
4	3.2-4	1515	NS	1.5				Black SILT	3 = 4.9
5	4-5	1520	NS	1.5					
6	5-6	1525	NS	1.4	3.2-6.0	Black-gray, thin bands of color, Fine SAND, with some silt, silt interbeds Shells at 3.5', 5.8' Wood at 3.5', 4.5' Fine organics at 4.4-4.5'	6.0		4 = 6.8'
7									
8					6-6.4	Core catcher		Fine SAND	5 = 8.5'
9									
10									6 = 10.4'
11									
							12		

Bottom of core 12.0

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
 F - fine
 M - medium
 NS - no sheen
 LS - light sheen
 MS - moderate sheen
 HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core K

Field Rep: D. Cooper	Location: N200357 E1270196	Drive Length (ft.): 8.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 5.5 Recovery efficiency: 69%
Driller: Bill Jaworski	Time: 1327	Depth to Mudline (ft.): 10.6
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 9.2
Size/Type Casing: 4"	Date Processed: 11/30/2012	Bottom Elevation (MLLW): -2.9 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1	930	NS	1.8	0-1.1	Black, SILT, very soft, no odor		Black SILT or Fine Sandy, SILT	1 = 0.7'
2	1-2	935	NS	1.6	1.1-2.3	Black, Fine sandy, SILT, shiny, no odor			2 = 2.2'
DUP2		936							
3	2.3-3	940	NS	1.0	2.3-3.0	Black, gravelly, coarse SAND, no odor, <3" gravel	3.3		
4	3-4.6	945	NS	6.9	3.0-4.6	Mottled gray-black, SILT, with wood, oily odor	4.3	Gravelly, coarse SAND	3 = 3.8'
5	4.6-5.1	950	NS	1.1	4.6-5.1	Mottled, gray-black, silty, SAND, no odor		SILT	4 = 5.5'
					5.1-5.5	Core catcher	6.6		
							8	Silty, SAND	5 = 7.0'
							9		
							10		
							11		
							12	Bottom of core 8.0	

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core L

Field Rep: D. Cooper	Location: N200303 E1270196 NAD83	Drive Length (ft.): 8.0
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 5.8 Recovery efficiency: 72%
Driller: Bill Jaworski	Time: 1300	Depth to Mudline (ft.): 8.3
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 9.8
Size/Type Casing: 4"	Date Processed: 11/30/2012	Bottom Elevation (MLLW): 0.3 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1	1100	NS	2.6	e			Silty, Fine SAND	1 = 0.7'
2	1-1.8	1105	LS	5.4	0-1.8	Mottled, gray-black, silty, Fine SAND, with scattered wood 1/2" clam @ 0.3', oily odor	2.5		2 = 1.9'
3	2-3.1	1110	NS	2.3	1.8-3.1	Mottled gray, grading to black, Fine sandy, SILT, with organics, wood throughout, sulfurous odor, shell fragments		Fine Sandy, SILT	3 = 3.5'
4	3.1-4.2	1115	NS	2.4	3.1-4.2	Gray, silty, Fine SAND, with black silt interbed @ 3.3'	4.3		
5	4.2-5.4	1120	NS	1.9	4.2-5.4	Gray, Fine to Medium SAND		Fine SAND	4 = 5.0
					5.4-5.8	Core catcher	5.8		
								Fine to medium SAND	5 = 6.7'
							8		
								Bottom of core 8.0	
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

DESCRIPTION OF SEDIMENT SAMPLES AND TESTS - CORE NO.

Sediment Core M

Field Rep: D. Cooper	Location: N200337 E1270246 NAD83	Drive Length (ft.): 7.2
Drilling Co.: Marine Sampling Systems	Date Completed: 11/20/2012	Recovery Length (ft.): 3.9 Recovery efficiency: 54% **
Driller: Bill Jaworski	Time: 1401	Depth to Mudline (ft.): 12.1
Drill Type: Vibracore	Weather: Rain 50F	Tide (MLLW): 8.1
Size/Type Casing: 4"	Date Processed: 11/30/2012	Bottom Elevation (MLLW): -4.0 From 2018 aerial survey

DESCRIPTION OF CORE TUBE (based on recovered core tube length - feet)							INTERPRETED SUMMARY LOG (adjusted for recovery)		
Spl. No.	Sample Interval	Time	Sheen	PID (ppm)	Depth Interval	Sample Description	Depth (Ft.)	Description	Mean Sample Depth
1	0-1.1	1200	NS	1.6	0-1.1	Mottled, gray-black, SILT, with Fine Sand inclusions scattered organics, brown sand rind - heave		SILT	1 = 0.6'
2	1.1-2	1205	NS	1.7	1.1-3.3	Brown, Fine to Medium SAND, with some gravel shell fragments @ 2.8', glass fragment	2.0		2 = 1.6'
3	2-3.3	1210	NS	1.2	3.3-3.9	Core catcher		Fine to Medium SAND	3 = 2.7'
							7.1	Bottom of Core 7.1'	
							8	see note **	
							9		
							10		
							11		
							12		

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Depths have been adjusted based on recovery efficiency. Variations between what is shown and actual conditions should be anticipated.

** Poor recovery in lower sand due to loss/liquifaction - not compaction.

Abbreviations: PID - photoionization detector - MiniRAE 3000
F - fine
M - medium
NS - no sheen
LS - light sheen
MS - moderate sheen
HS - heavy sheen

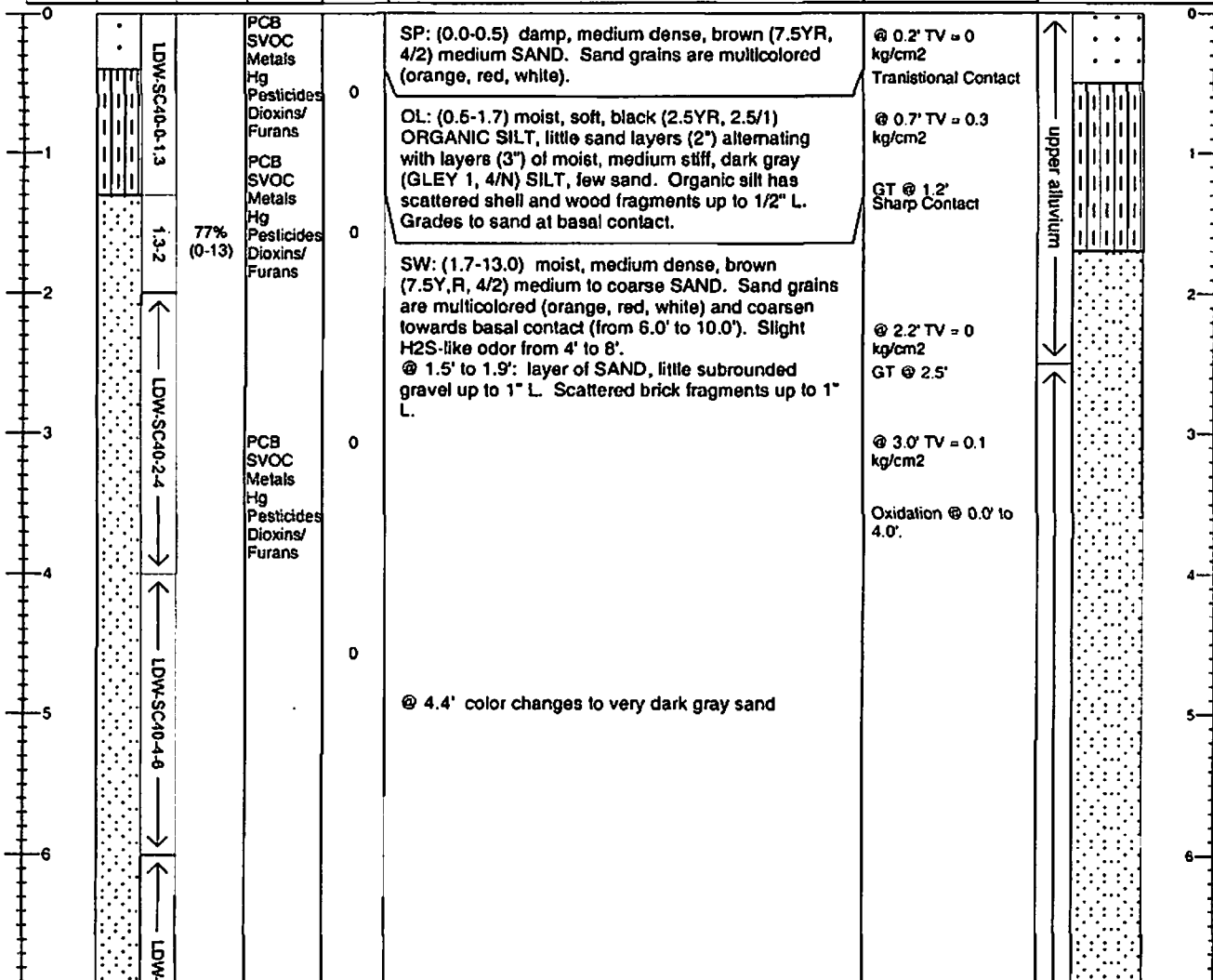


Sediment Core Log

LDW-SC-40 (R3)

Sheet 1 of 2

Project: LDW R/VFS					Water Body Type: Lower Duwamish Waterway		Tube Length (ft): 14.0		
Project #: PORS5-18220-511					Water Elevation (ft)/Tide: NA		Penetration Depth (ft): 13.0		
Client: LDWG					Water Depth (ft): 10.4		Sample Quality: Good		
Collection Date: 2/23/06					Mudline Elevation (ft): -1.0		Recovery in ft (%): 10.0 (77)		
Contractor: MSS					N./LAT: 200339 E./LONG: 1270298		Process Date: 2/24/06		
Vessel: R/V Nancy Anne					Horiz. Datum: NAD 83 N Vert. Datum: MLLW		Process Method: Cut tube		
Operator: Bill Jaworski					Method/Tube ID: Vibracore/3.5" round AI		Logged By: L.McKee, C.Brackett		
Recovered Depth (ft)	Recov.Interval & Sample	% Recovery (interval)	Chemical Analysis	PID Measurement	Sediment Description Classification Scheme: USCS Contacts are recovered depth (In-situ depth interval in feet with parentheses)			Comments for Recovered Depths	In-situ Depth (ft) & Graphic Log



The RETEC Group, Inc.
 1011 SW Klickitat Way, Suite 207
 Seattle, WA 98134-1162
 Phone: (206) 624-9349
 Fax: (206) 624-2839

Remarks: Drive Notes: no freefall, easy (13.0'), penetration goal reached. Three drive attempts made at station. Station re-occupied Sample Length/Penetration Length: 10.0/13.0 = 77 %
 with vibracore after MCS drives. Core catcher was empty (0.5' sediment loss).

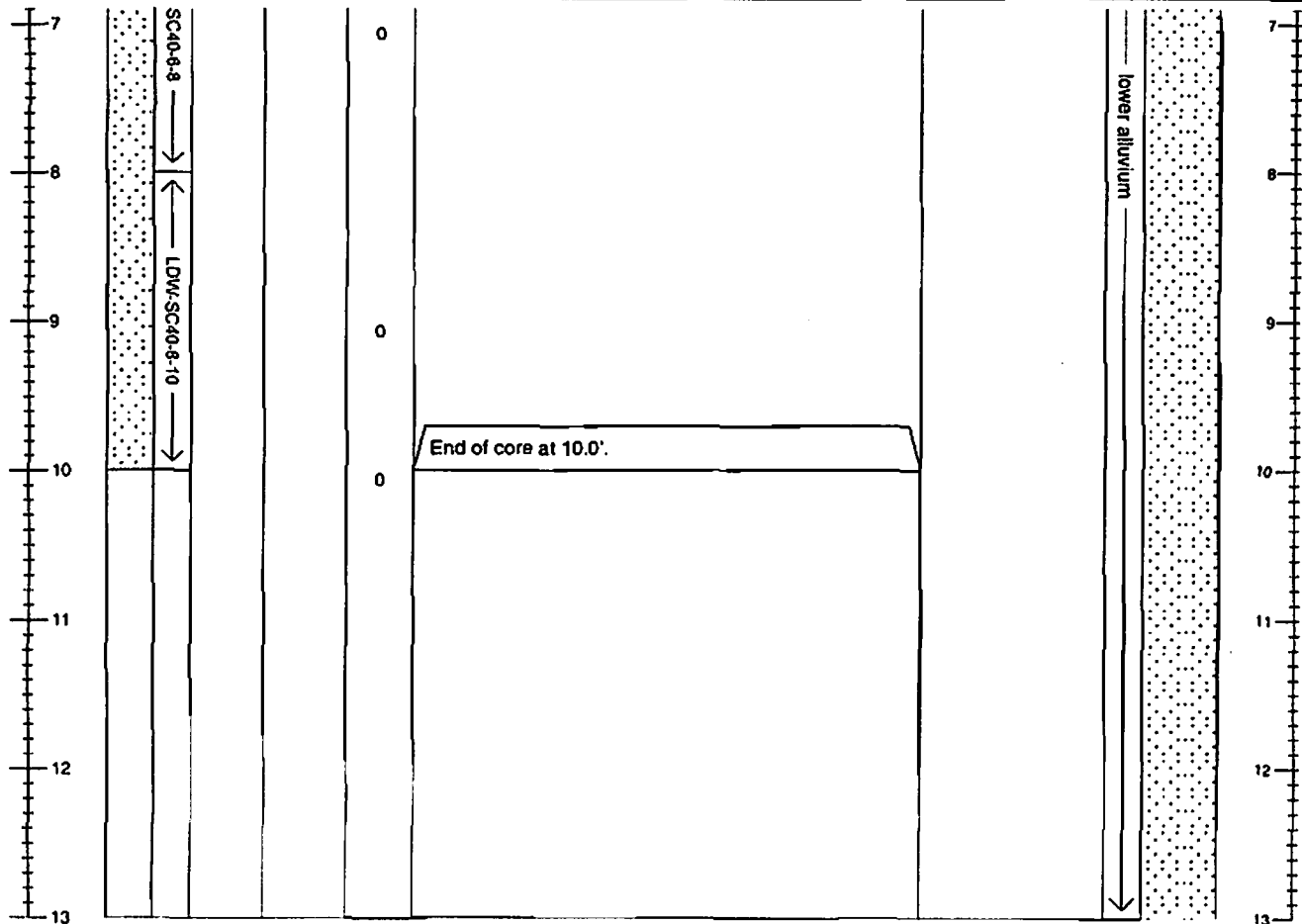
Note: Stratigraphic Interpretations are preliminary and subject to change during the Remedial Investigation.



Sediment Core Log LDW-SC-40 (R3)

Sheet 2 of 2

Project: LDW RVFS	Water Body Type: Lower Duwamish Waterway	Tube Length (ft): 14.0
Project #: PORS5-18220-511	Water Elevation (ft)/Tide: NA	Penetration Depth (ft): 13.0
Client: LDWG	Water Depth (ft): 10.4	Sample Quality: Good
Collection Date: 2/23/06	Mudline Elevation (ft): -1.0	Recovery in ft (%): 10.0 (77)
Contractor: MSS	N./LAT: 200339 E./LONG: 1270298	Process Date: 2/24/06
Vessel: R/V Nancy Anne	Horiz. Datum: NAD 83 N Vert. Datum: MLLW	Process Method: Cut tube
Operator: Bill Jaworski	Method/Tube ID: Vibracore/3.5" round Al	Logged By: L.McKee, C.Brackett
Recovered Depth (ft)	Sediment Description Classification Scheme: USCS Contacts are recovered depth (In-situ depth interval in feet with parentheses)	
Recovery Interval & Sample	Comments for Recovered Depths	In-situ Depth (ft) & Graphic Log
% Recovery (interval)		
Chemical Analysis		
PID Measurement		



The RETEC Group, Inc.
1011 SW Klickitat Way, Suite 207
Seattle, WA 98134-1162
Phone: (206) 624-9349
Fax: (206) 624-2839

Remarks: Drive Notes: no freefall, easy (13.0'), penetration goal

Calculated Recovery

reached. Three drive attempts made at station. Station re-occupied Sample Length/Penetration Length:
with vibracore after MCS drives. Core catcher was empty
(0.5' sediment loss).

10.0/13.0 = 77 %

Note: Stratigraphic interpretations are preliminary and subject to change during the Remedial Investigation.

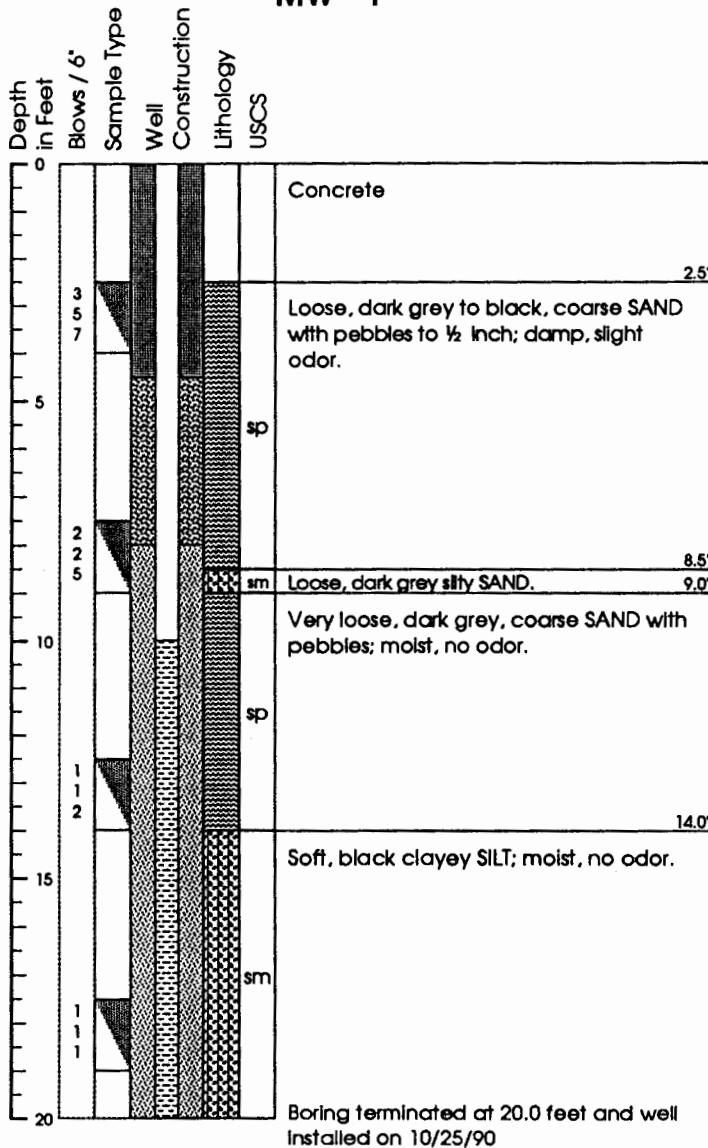
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**MONITORING WELL LOGS
UPLAND DOUGLAS PROPERTY SITE**

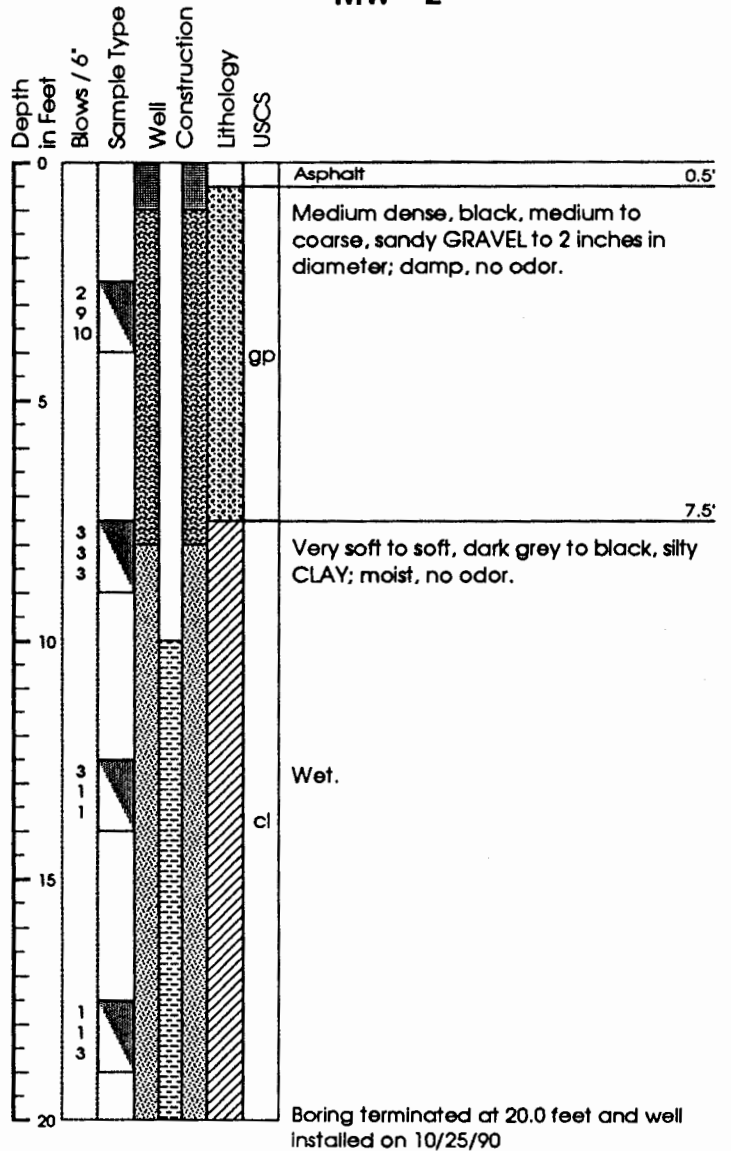
**REMEDIAL INVESTIGATION REPORT
ICS/NWC
SEATTLE, WASHINGTON**

Monitoring Well Construction and Geological Boring Log

DMC
MW - 1



DMC
MW - 2



Notes:

Client Name: Alaska Marine Lines
Project Name: 7100 2ND Ave.
Logged By: SW

Drilling Co.: GeoBoring & Development, Inc.
Drilling Method: Hollow-Stem Auger
Reference Elevation: MW - 1 99.84'
MW - 2 99.52'

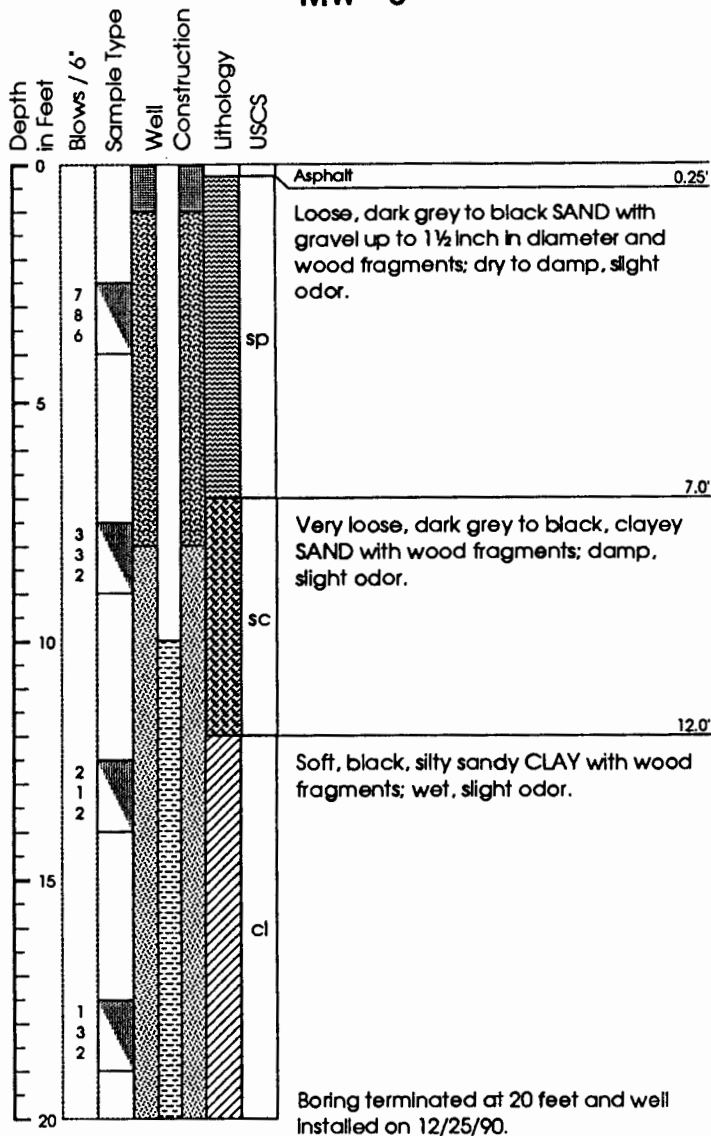
Well Description

Surface Casing: Flush Mounted
Surface Seal: Concrete
Well Casing: 4" Sched. 40, PVC
Well Screen: 0.01" slots, Sched 40, PVC

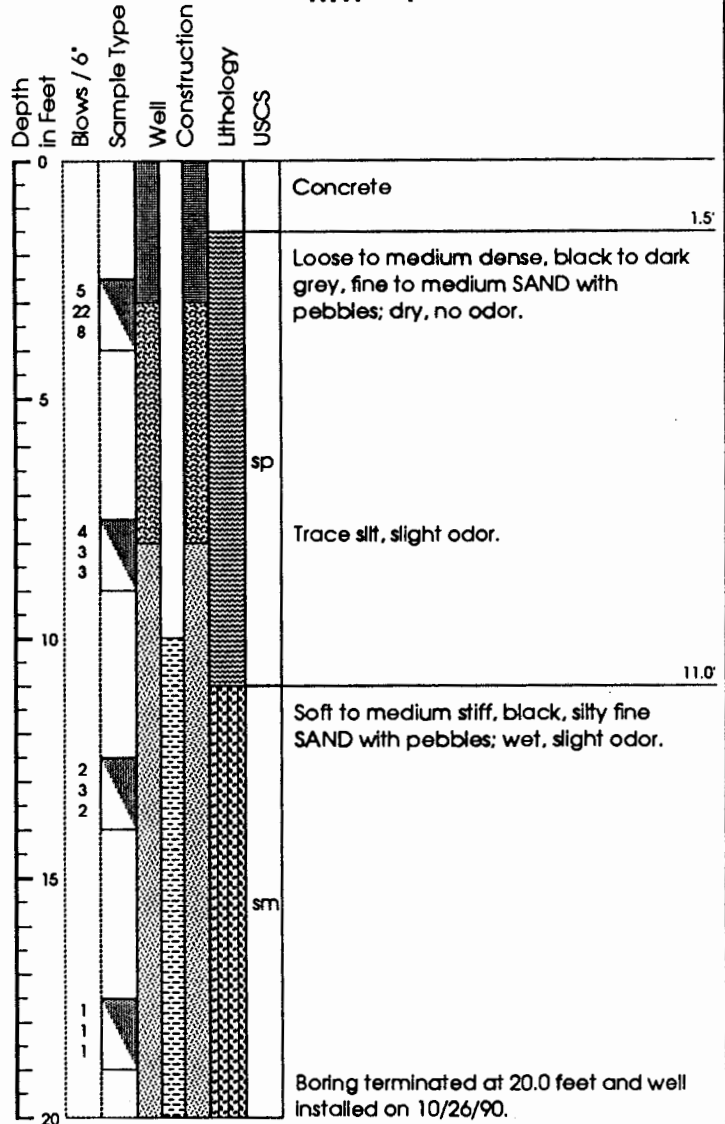
Filter Pack: 10 - 20 Silica Sand
Seal: Bentonite
Grout: Concrete

Monitoring Well Construction and Geological Boring Log

DMC
MW - 3



DMC
MW - 4



Notes:

Client Name: Alaska Marine Lines
Project Name: 7100 2ND AVE.
Logged By: MAC

Drilling Co.: GeoBoring & Development, Inc.
Drilling Method: Hollow-Stem Auger
Reference Elevation: MW - 3 99.71'
MW - 4 99.42'

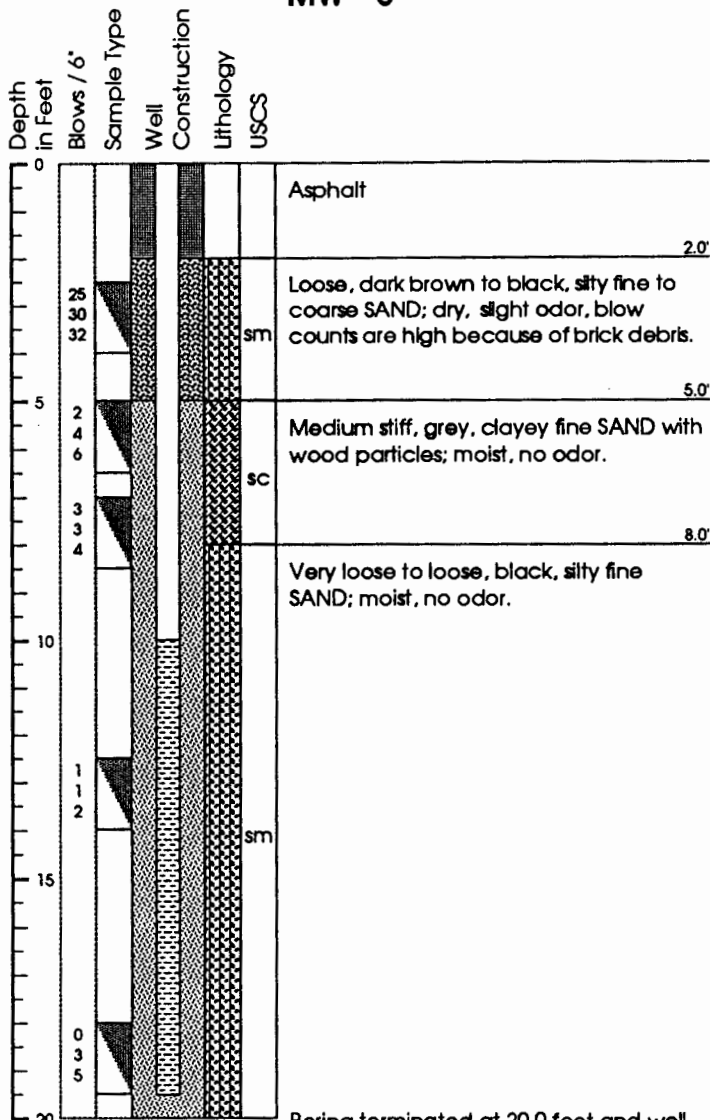
Well Description

Surface Casing: Flush Mounted
Surface Seal: Concrete
Well Casing: 4" Sched. 40, PVC
Well Screen: 0.01" slots, Sched 40, PVC

Filter Pack: 10 - 20 Silica Sand
Seal: Bentonite
Grout: Concrete

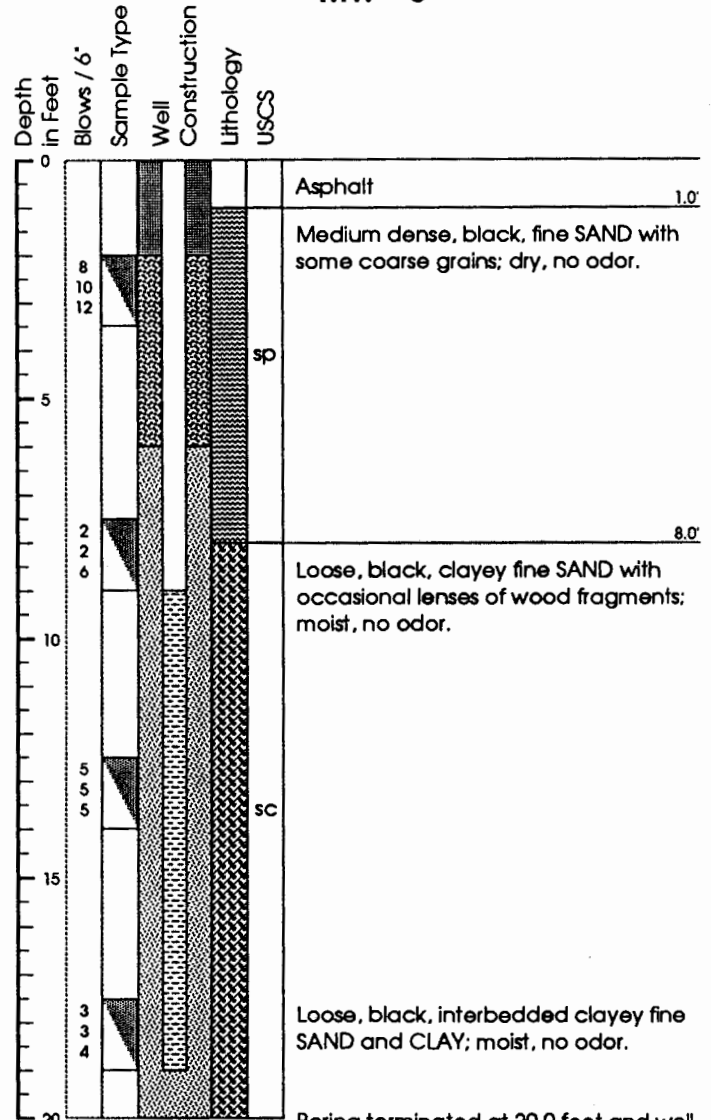
Monitoring Well Construction and Geological Boring Log

DMC
MW - 5



Boring terminated at 20.0 feet and well installed on 1/22/91.

DMC
MW - 6



Boring terminated at 20.0 feet and well installed on 1/23/91.

Notes:

Client Name: Alaska Marine Lines
Project Name: 7100 2 ND Ave.
Logged By: IMW

Drilling Co.: GeoBoring & Development, Inc.
Drilling Method: Hollow-Stem Auger
Reference Elevation: MW - 5 98.32'
MW - 6 98.43'

Well Description

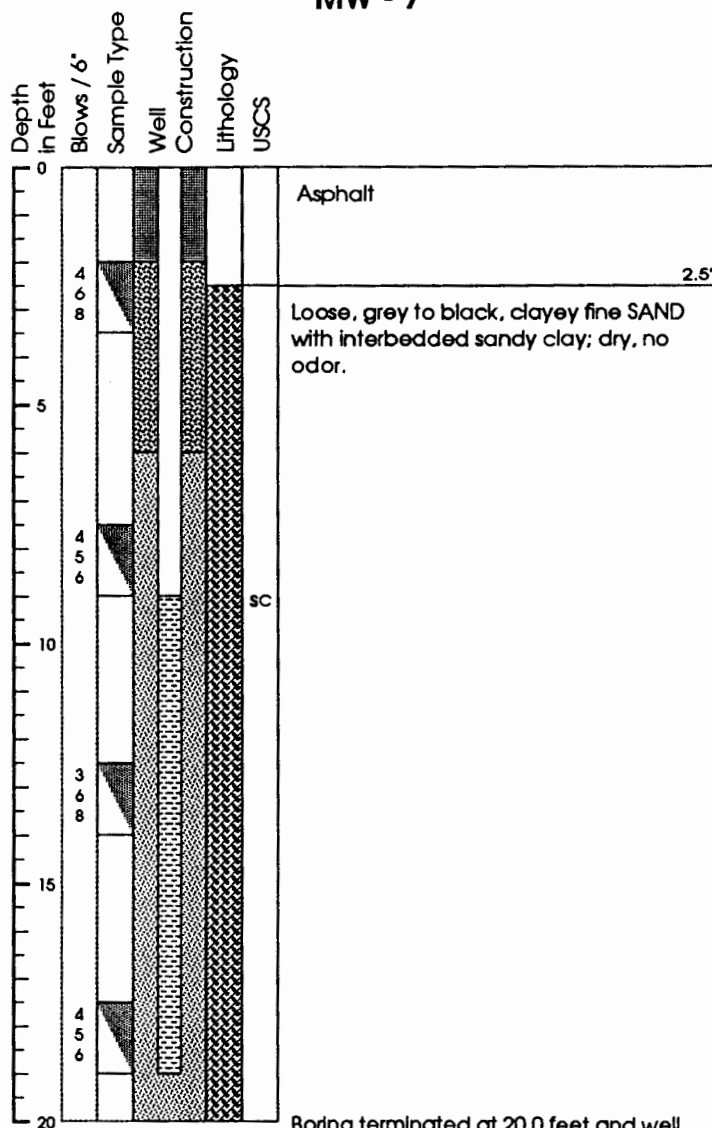
Surface Casing: Flush Mounted
Surface Seal: Concrete
Well Casing: 4" Sched. 40, PVC
Well Screen: 0.01" slots, Sched 40, PVC

Filter Pack: 10-20 Silica Sand
Seal: Bentonite
Grout: Concrete

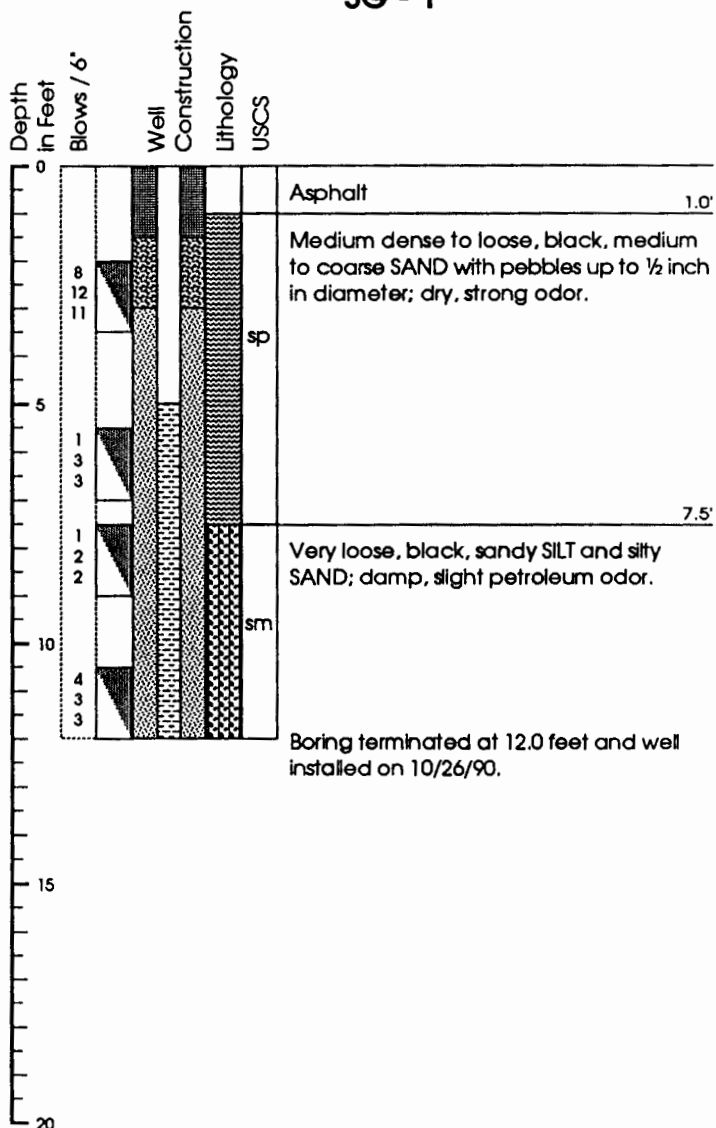
Monitoring Well Construction and Geological Boring Log

DMC
MW - 7

SG - 1



Boring terminated at 20.0 feet and well installed on 1/23/91.



Boring terminated at 12.0 feet and well installed on 10/26/90.

Notes:

Client Name: Alaska Marine Lines
Project Name: 7100 2nd Ave.
Logged By: IMW

Drilling Co.: GeoBoring & Development, Inc.
Drilling Method: Hollow-Stem Auger
Reference Elevation: MW - 7 99.48'

Well Description

Surface Casing: Flush Mounted
Surface Seal: Concrete
Well Casing: 4" Sched. 40, PVC
Well Screen: 0.01" slots, Sched 40, PVC

Filter Pack: 10 - 20 Silica Sand
Seal: Bentonite
Grout: Concrete



DMC Monitoring Well: MW-8

Project: DMC
Client: Dept of Ecology
Location: Seattle, WA
Logged By: TMK

Date Started: 6/18/2008
Date Completed: 6/18/2008
Driller: Cascade Drilling, INC
Drill Method: Post Hole Dig and HSA

Total Boring Depth: 36.5 ft
Hole Diameter: 8.25 in.
Well Depth: 20 ft
TOC Elevation: ft

Well Diameter: 2 in
Well Screen: 0.010 Slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	0.0	6 14 15			SP-SM		1	6 inches ASPHALT. Post hole dig to 5 feet below ground surface. (SP-SM) Brown fine to medium SAND with silt and occasional gravel (Fill). Loose, no odor, slight sheen.	
							2		
							3		
Moist	0.0	1 1 2			SM		4		
							5	(SM) Dark brown silty medium to coarse SAND with fine sand and gravel (Fill). Medium dense, no odor slight sheen.	
							6		
Moist	0.0	1 1 2			SM		7		
							8		
							9		
Moist	0.0	1 1 2			SM		10	(SM) Dark brown silty fine SAND (Fill). High silt content Loose, no odor, no sheen.	
							11		
							12		
Moist	0.0	1 1 2			SM		13		
							14		
							15	(SM) Black silty fine SAND (Fill). Very loose, no odor, no sheen.	
							16		
							17		
							18		
							19		
							20		



Monitoring Well: MW-8

Project: DMC
Client: Dept of Ecology
Location: Seattle, WA
Logged By: TMK

Date Started: 6/18/2008
Date Completed: 6/18/2008
Driller: Cascade Drilling, INC
Drill Method: Post Hole Dig and HSA

Total Boring Depth: 36.5 ft
Hole Diameter: 8.25 in.
Well Depth: 20 ft
TOC Elevation: ft

Well Diameter: 2 in
Well Screen: 0.010 Slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Wet	0.0	2 2 2	X		SM		21	(SM) Black silty fine to medium SAND with shells (Fill). Loose, no odor, no sheen.	
Wet	0.0	1 3 4	X		ML		25	(ML) Black SILT with trace fine sand and shells (Fill). Soft, no odor, no sheen.	
Wet	5.0	2 2 2	X	MW-08-30	ML		30	(ML) Black SILT with fine sand and occasional medium to coarse sand and shells (Fill). Very soft, no odor, moderate sheen.	
Wet	0.0	1 2 2	X		SM		33	(SM) Black silty fine to medium SAND (likely sluff from above), heaving sands. Very loose, slight odor, no sheen.	
							37	Bottom of borehole at 36.5 feet.	



Monitoring Well: ^{DMC}MW-9

Project: DMC
Client: Dept of Ecology
Location: Seattle, WA
Logged By: TMK

Date Started: 6/18/2008
Date Completed: 6/18/2008
Driller: Cascade Drilling, INC
Drill Method: Post Hole Dig and HSA

Total Boring Depth: 21.5 ft
Hole Diameter: 8.25 in.
Well Depth: 20 ft
TOC Elevation: ft

Well Diameter: 2 in
Well Screen: 0.010 Slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	0.0	2 3 3			SM		1 2 3 4 5 6 7 8	3 inches ASPHALT. Post hole dig to 4 feet below ground surface. (SM) Tan silty SAND with with gravel (suspect shore stabilization grouting) (Fill). Very dense, no odor, no sheen.	
Moist	0.0	6 9 10			GP-GM		9 10 11 12 13	(GP-GM) Brown sandy GRAVEL with silt and occasional cobbles and concrete (Fill). Medium dense, no odor, no sheen.	
Moist	0.0	1 3 3			ML		14 15 16 17 18 19 20 21	(ML) Dark brown SILT with organics and trace fine sand. (Fill?). Medium stiff, no odor, no sheen.	
Wet	2.1	2 3 4					22 23 24 25	Same as above. Bottom of borehole at 21.5 feet.	



Well Diameter: 2 in
Well Screen: 0.010 Slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

[illegible]



DMC Monitoring Well: MW-11

Project: DMC
Client: Dept of Ecology
Location: Seattle, WA
Logged By: TMK

Date Started: 6/19/2008
Date Completed: 6/19/2008
Driller: Cascade Drilling, INC
Drill Method: Post Hole Dig and HSA

Total Boring Depth: 21.5 ft
Hole Diameter: 8.25 in.
Well Depth: 20 ft
TOC Elevation: ft

Well Diameter: 2 in
Well Screen: 0.010 Slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	0.01	4 3 2			SM		1 2 3 4 5 6	3 inches ASPHALT. Post hole dig to 5 feet below ground surface. 8 inches CONCRETE. 2 inch root in boring at approximately 5 feet below ground surface. (SM) Brown silty fine to medium SAND with coarse sand and occasional gravel (Fill). Loose, no odor, slight sheen. (ML) Light brown fine sandy SILT with trace large gravel (Fill). Soft, no odor, slight sheen.	
Moist	0.03	4 4 4			ML		7 8 9 10	Same as above.	
					SP		11 12 13 14	(SP) Brown medium SAND with trace silt (Fill?). Loose, no odor, slight sheen.	
Wet	0.01/0.02	1 1 1			SM		15 16 17 18	Same as above. Grades to wet. (SM) Dark brown to black silty fine SAND (Fill?). Very loose, no odor, no sheen.	
Wet	0.04	1 1 1			SM		19 20 21	(SM) Black silty fine SAND with trace organics (Fill?). Very loose, no odor, no sheen.	
							22 23 24 25	Bottom of borehole at 21.5 feet.	



DMC Monitoring Well: MW-12

Project: DMC
Client: Dept of Ecology
Location: Seattle, WA
Logged By: TMK

Date Started: 6/19/2008
Date Completed: 6/19/2008
Driller: Cascade Drilling, INC
Drill Method: Post Hole Dig and HSA

Total Boring Depth: 36.5 ft
Hole Diameter: 8.25 in.
Well Depth: 20 ft
TOC Elevation: ft

Well Diameter: 2 in
Well Screen: 0.010 slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

MOISTURE CONTENT	ORGANIC VAPOR (ppm)	BLOWS/6"	SAMP. INTERVAL	ANALYTICAL SAMPLE	U.S.C.S. SYMBOL	GRAPHIC LOG	DEPTH (ft)	LITHOLOGY/DESCRIPTION	WELL DIAGRAM
Moist	3.7				GP		1	12 inches ASPHALT. Post hole dig to 4 feet below ground surface.	
Moist	2.5	50			GP		2	(GP) Gray-brown fine to coarse sandy GRAVEL with silt (Likely UST fill). Dense, no odor, slight sheen.	
					GP		3		
					GP		4	(GP) Same as above. Grades to very dense. Likely UST fill. Very little recovery.	
					GP		5		
					GP		6		
					GP		7		
					GP		8		
					GP		9		
Moist	3.6	5 4 5			GP		10	(GP) Same as above. Valid sample questionable, based on blow count comparison from above. Likely UST fill. Very little recovery. Possible beginning transition into different soil content.	
					GP		11		
					GP		12		
					GP		13		
Wet	28.6/2.1	2 2 1		MW-12-15	SM		14		
					SM		15	(SM) Brown silty fine to coarse SAND with occasional gravel (Fill). Loose, slight odor, slight sheen. Very little portion of sample to collect.	
					SM		16	Black silty fine SAND (Fill?). Very loose, no odor, no sheen.	
					SM		17		
					SM		18		
					SM		19		
					SM		20		



Well Diameter: 2 in
Well Screen: 0.010 slot ft
Filter Pack: 2/12 Sand
Well Casing: Schedule 40 PVC

[illegible]

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
		CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND
FINE GRAINED SOILS	SILTS AND CLAYS	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
		LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		LIQUID LIMIT LESS THAN 50		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
		LIQUID LIMIT GREATER THAN 50		CH	INORGANIC CLAYS OF HIGH PLASTICITY
		LIQUID LIMIT GREATER THAN 50		OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
	HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/Quarry Spalls
	TS	Topsoil/Forest Duff/Sod

Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Material Description Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

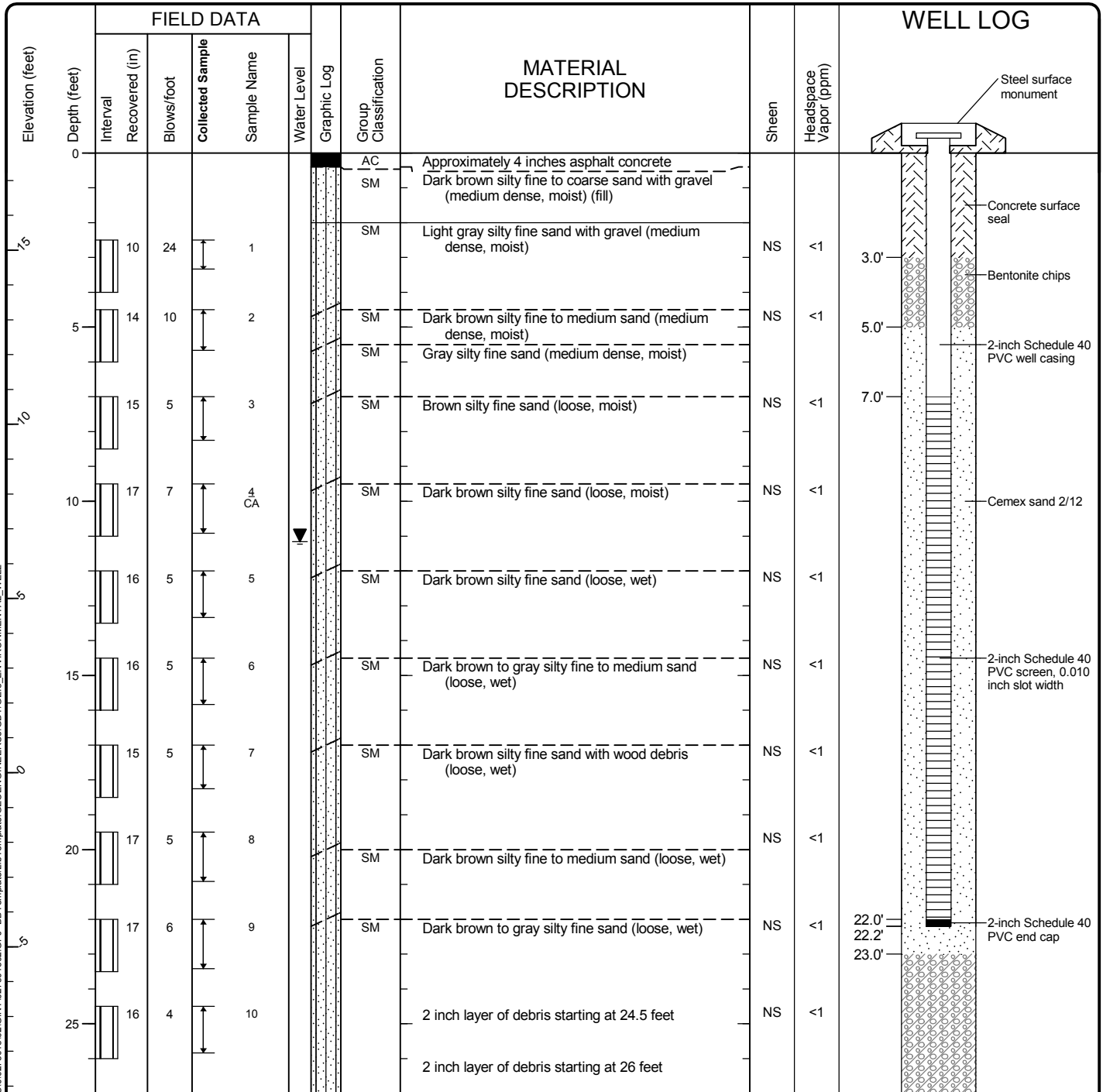
Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

Drilled	<u>Start</u> 7/11/2013	<u>End</u> 7/11/2013	Total Depth (ft)	41	Logged By Checked By	TML RST	Driller	Cascade Drilling	Drilling Method	Hollow Stem Auger
Hammer Data	Down Hole 300 (lbs) / 30 (in) Drop				Drilling Equipment	CME 75		DOE Well I.D.: BIC 627 A 2 (in) well was installed on 7/11/2013 to a depth of 22 (ft).		
Surface Elevation (ft) Vertical Datum		17.79		Top of Casing Elevation (ft)		17.37		<u>Groundwater</u>		
Easting (X) Northing (Y)		1269973.33 200473.26		Horizontal Datum		NAD83		<u>Date Measured</u>	<u>Depth to Water (ft)</u>	<u>Elevation (ft)</u>
								8/20/2013	11.16	6.21
Notes:										



Note: See Figure A-1 for explanation of symbols.

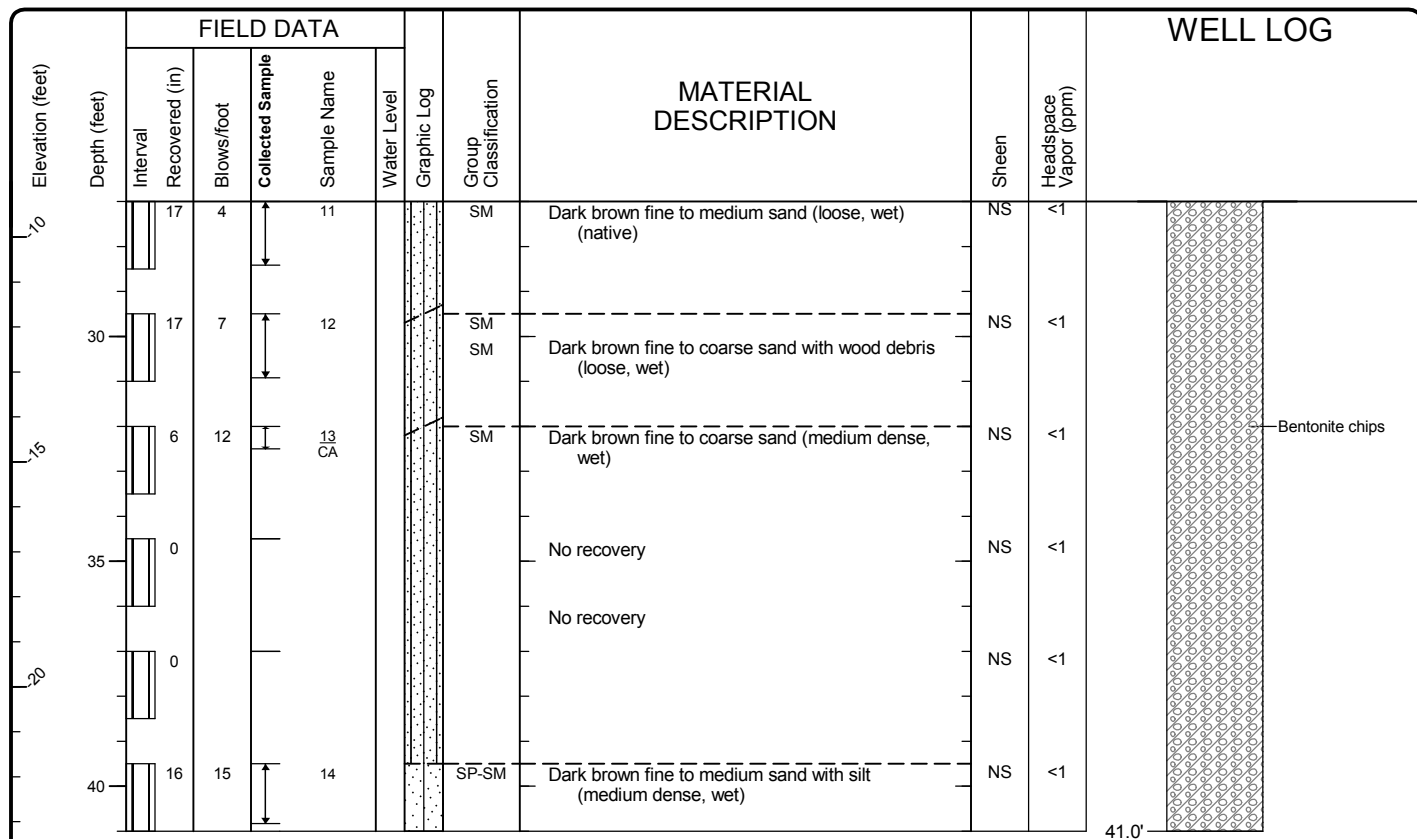
Log of Monitoring Well MW-2R (DMC-MW2R)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-13
 Sheet 1 of 2

Seattle: Date 8/23/13 Path: \\SEA\PROJECTS\027501502\GINT\027501502.GPJ DB Template: \\Template\BtTemplate\GEOENGINEERS8.GDT\GEI8_ENVIRONMENTAL_WELL



Note: See Figure A-1 for explanation of symbols.

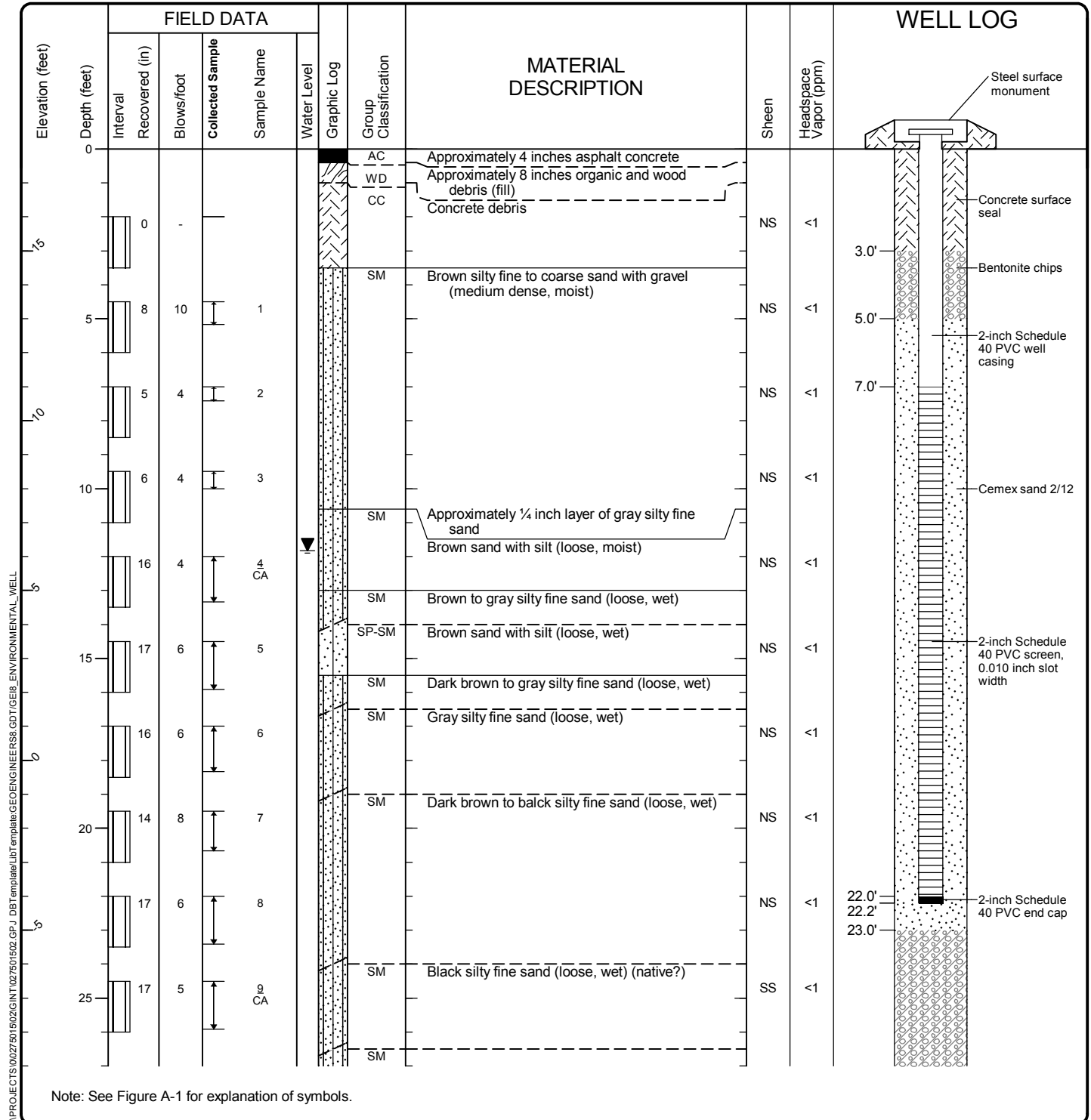
Log of Monitoring Well MW-2R (continued) (DMC-MW2R)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-13
 Sheet 2 of 2

Start Drilled 7/12/2013	End 7/12/2013	Total Depth (ft) 38.5	Logged By Checked By TML RST	Driller Cascade Drilling	Drilling Method Hollow Stem Auger
Hammer Data		Down Hole 300 (lbs) / 30 (in) Drop	Drilling Equipment CME 75		DOE Well I.D.: BIC 628 A 2 (in) well was installed on 7/12/2013 to a depth of 22 (ft).
Surface Elevation (ft) Vertical Datum 18		Top of Casing Elevation (ft) 17.60		Groundwater Date Measured 8/14/2013	
Easting (X) Northing (Y) 1270168.34 200441.16		Horizontal Datum NAD83		Depth to Water (ft) 11.83	Elevation (ft) 5.77
Notes:					



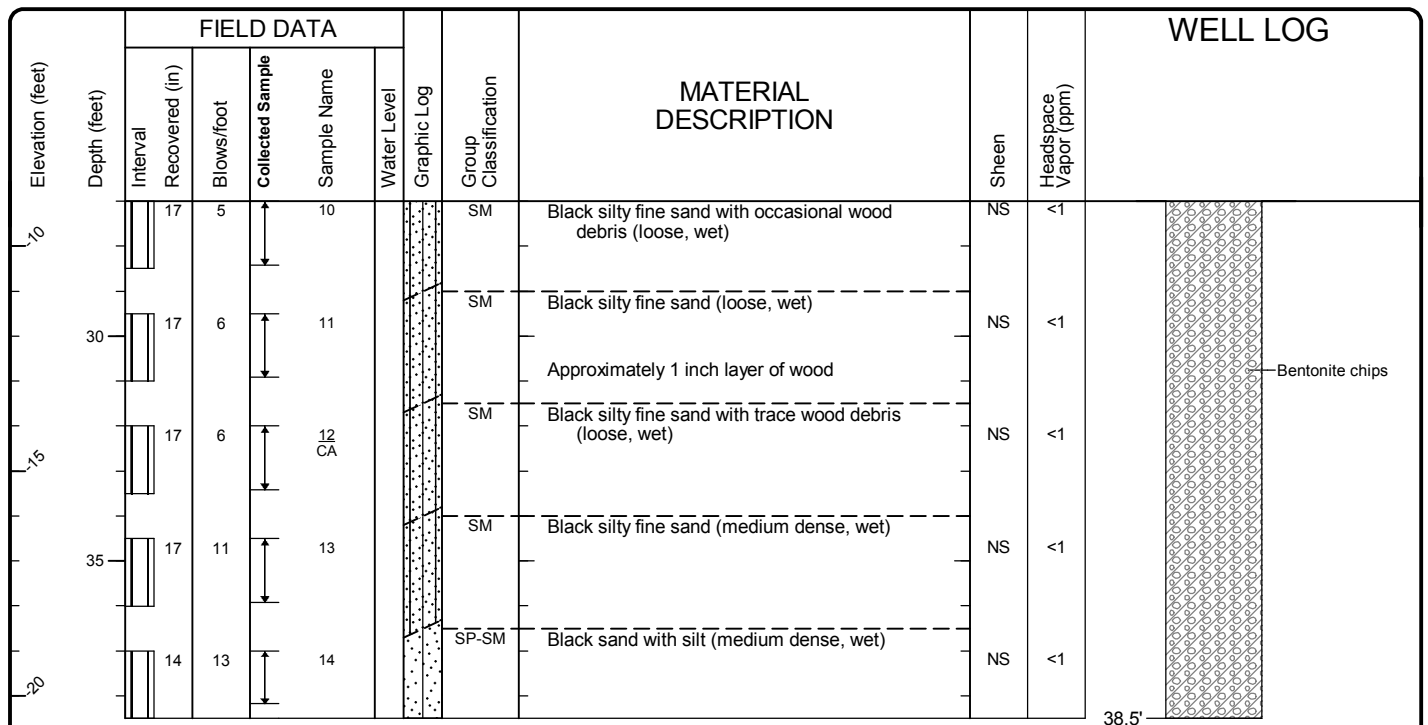
Log of Monitoring Well MW-13 (DMC-MW13)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-14
 Sheet 1 of 2

Seattle: Date 8/26/13 Path\\SEA\\PROJECTS\\0027501502\\GINT\\027501502.GPJ DBT\\Template\\LbT\\template\\GEOENGINEERS.GDT\\GEB_ENVIRONMENTAL_WELL



Note: See Figure A-1 for explanation of symbols.

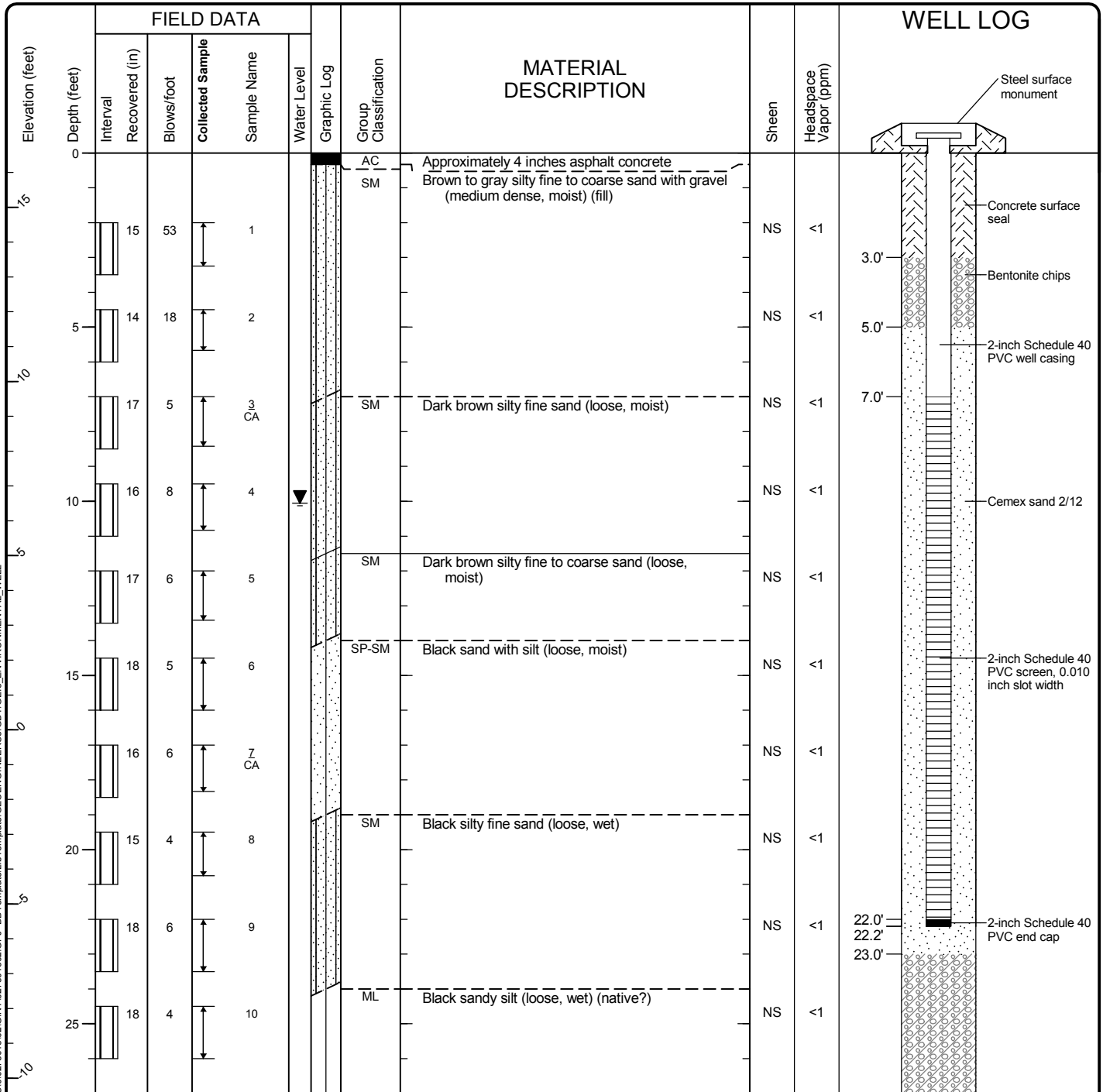
Log of Monitoring Well MW-13 (continued) (DMC-MW13)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-14
 Sheet 2 of 2

Drilled	<u>Start</u> 7/9/2013	<u>End</u> 7/9/2013	Total Depth (ft)	36	Logged By	TML RST	Driller	Cascade Drilling	Drilling Method	Hollow Stem Auger
Hammer Data	Down Hole 300 (lbs) / 30 (in) Drop				Drilling Equipment	CME 75		DOE Well I.D.: BIC 623 A 2 (in) well was installed on 7/9/2013 to a depth of 22 (ft).		
Surface Elevation (ft) Vertical Datum		16.56		Top of Casing Elevation (ft)		16.16		<u>Groundwater</u>		
Easting (X) Northing (Y)		1270057 200570.54		Horizontal Datum		NAD83		<u>Date Measured</u>	<u>Depth to Water (ft)</u>	<u>Elevation (ft)</u>
								8/19/2013	10.1	6.5
Notes:										



Note: See Figure A-1 for explanation of symbols.

Log of Monitoring Well MW-14

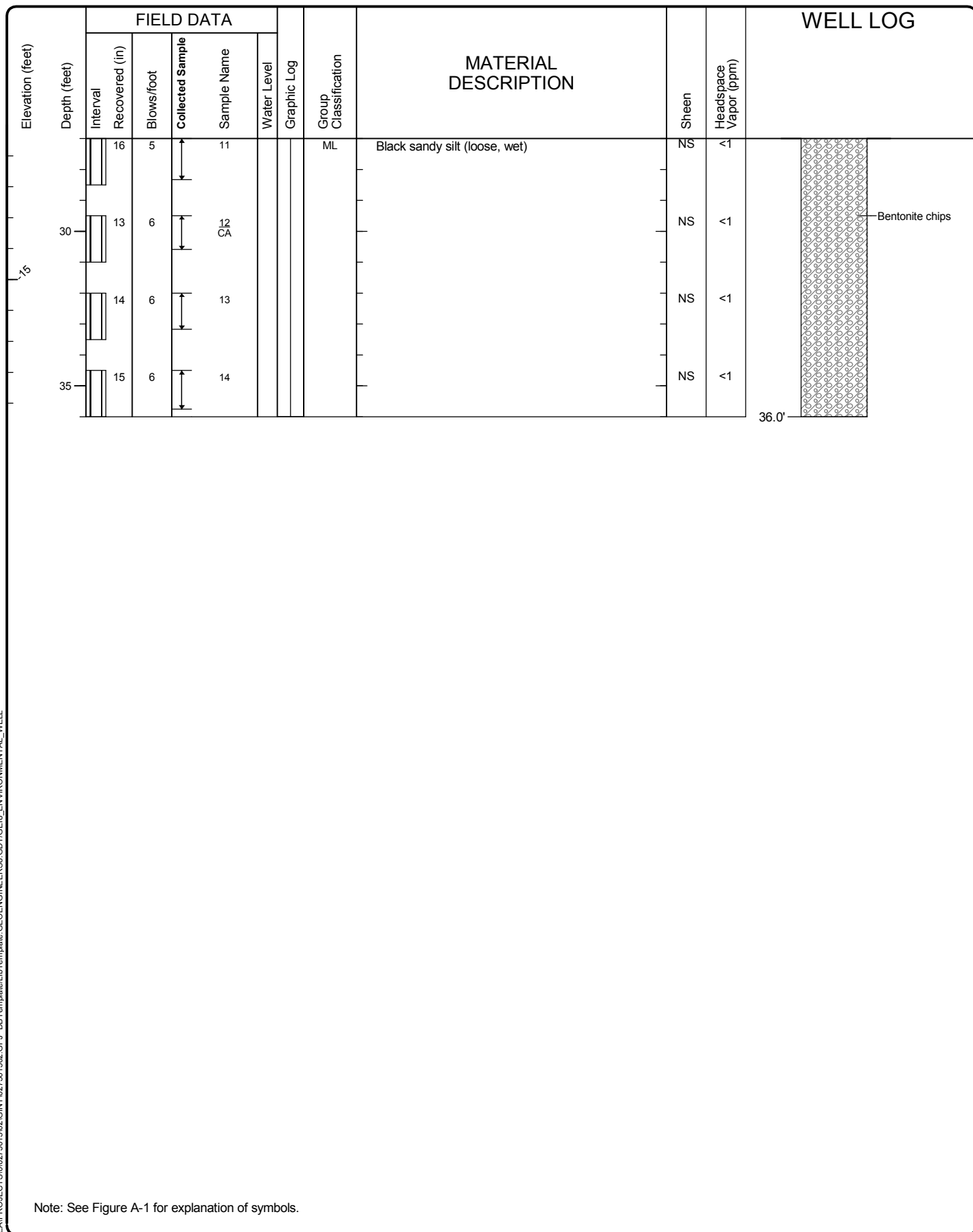
(DMC-MW14)



Project: 7100 1st Avenue S Site
Project Location: Seattle, Washington
Project Number: 0275-015-02

Figure A-15
Sheet 1 of 2

Seattle: Date 8/23/13 Path: \\SEA\PROJECTS\027501502\GINT\027501502.GPJ DB Template: Lib Template: GEOENGINEERS8.GDT\GEI8_ENVIRONMENTAL_WELL



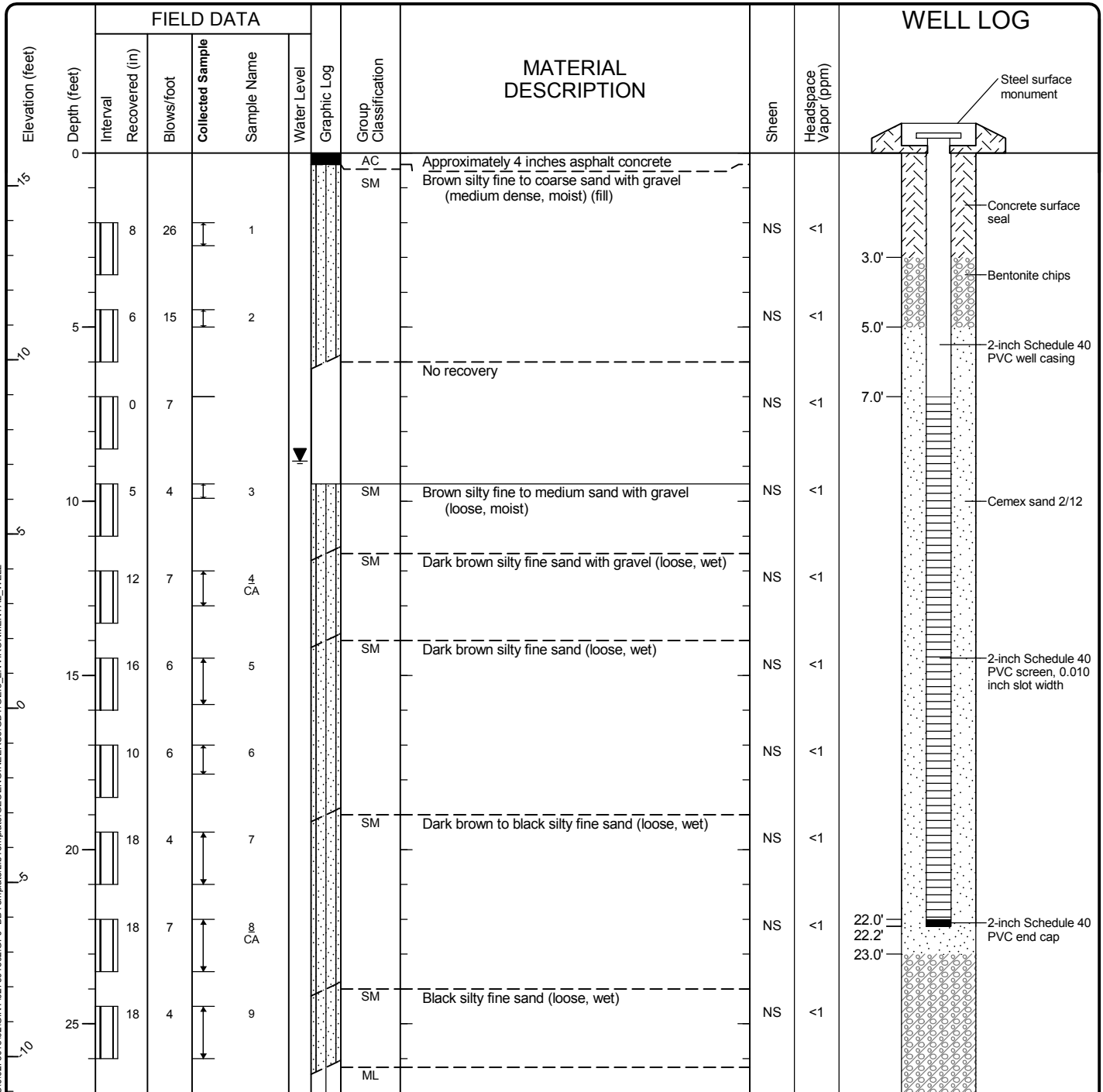
Log of Monitoring Well MW-14 (continued) DMC-MW14)



Project: 7100 1st Avenue S Site
Project Location: Seattle, Washington
Project Number: 0275-015-02

Figure A-15
Sheet 2 of 2

Drilled	Start 7/9/2013	End 7/9/2013	Total Depth (ft)	36	Logged By Checked By	TML RST	Driller	Cascade Drilling	Drilling Method	Hollow Stem Auger
Hammer Data	Down Hole 300 (lbs) / 30 (in) Drop				Drilling Equipment	CME 75		DOE Well I.D.: BIC 622 A 2 (in) well was installed on 7/9/2013 to a depth of 22 (ft).		
Surface Elevation (ft) Vertical Datum		15.94		Top of Casing Elevation (ft)		15.49		Groundwater		
Easting (X) Northing (Y)		1269984.93 200652.57		Horizontal Datum		NAD83		Date Measured	Depth to Water (ft)	Elevation (ft)
								8/15/2013	8.85	6.64
Notes:										



Note: See Figure A-1 for explanation of symbols.

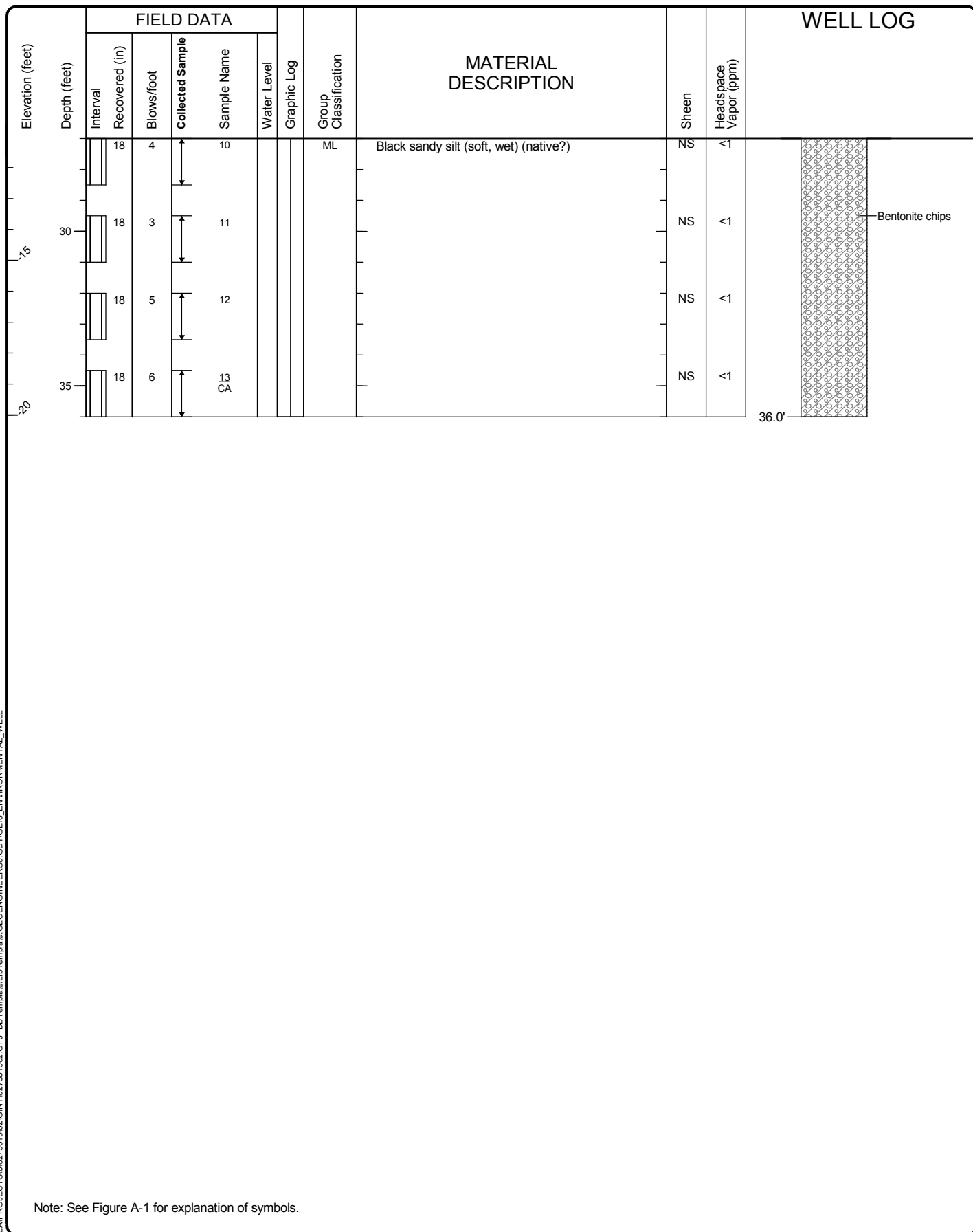
Log of Monitoring Well MW-15 (DMC-MW15)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-16
 Sheet 1 of 2

Seattle: Date: 8/23/13 Path: \\SEA\PROJECTS\027501502\GINT\027501502.GPJ DB Template: Lib Template: GEOENGINEERS8.GDT\GEI8_ENVIRONMENTAL_WELL



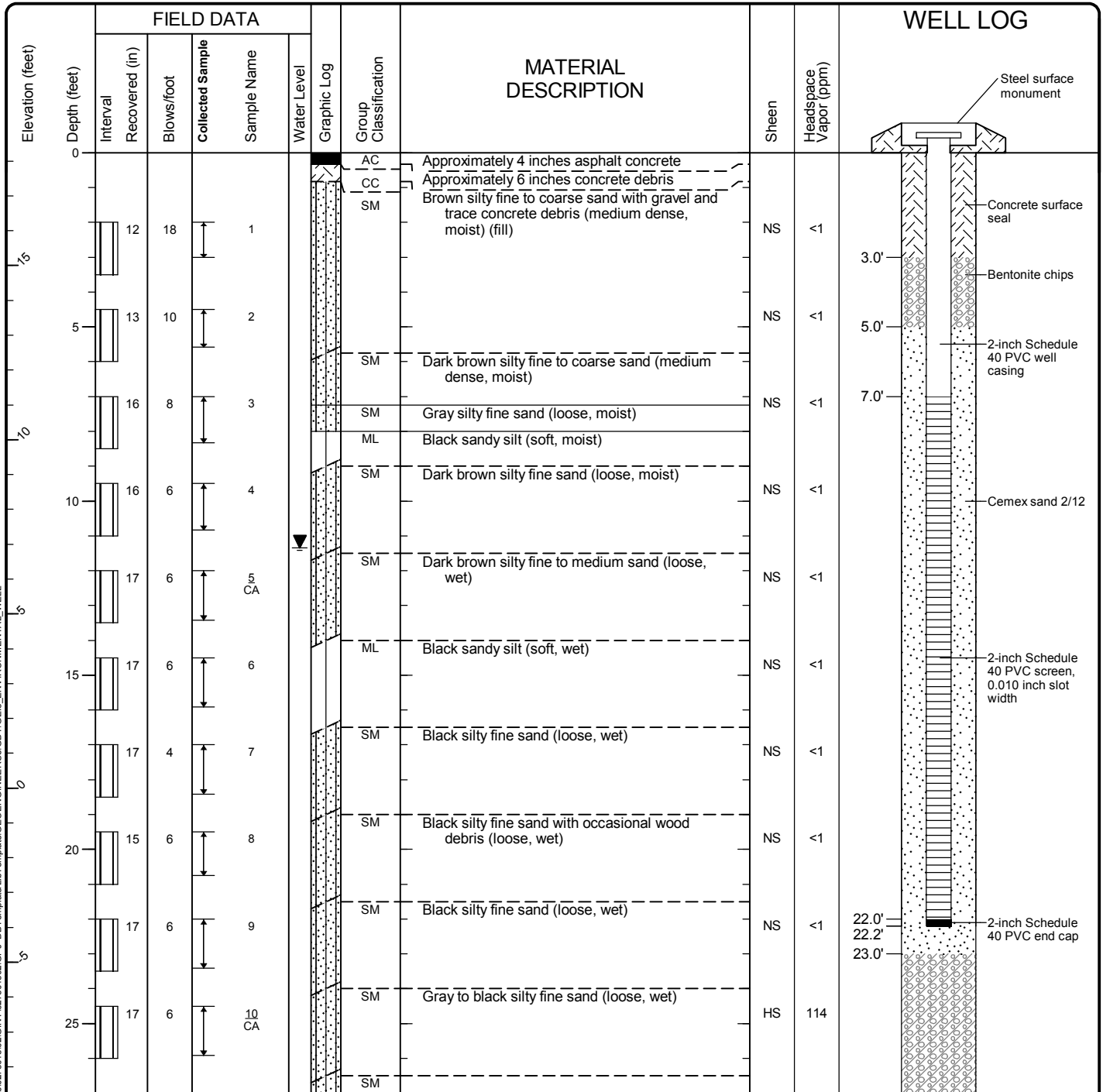
Log of Monitoring Well MW-15 (continued) DMC-MW15)



Project: 7100 1st Avenue S Site
Project Location: Seattle, Washington
Project Number: 0275-015-02

Figure A-16
Sheet 2 of 2

Start Drilled 7/10/2013	End 7/10/2013	Total Depth (ft) 36	Logged By Checked By TML RST	Driller Cascade Drilling	Drilling Method Hollow Stem Auger
Hammer Data		Down Hole 300 (lbs) / 30 (in) Drop	Drilling Equipment CME 75		DOE Well I.D.: BIC 625 A 2 (in) well was installed on 7/10/2013 to a depth of 22 (ft).
Surface Elevation (ft) Vertical Datum 18.24		Top of Casing Elevation (ft) 17.59		Groundwater Date Measured 8/14/2013	
Easting (X) Northing (Y) 1269911.75 200514.57		Horizontal Datum NAD83		Depth to Water (ft) 11.34	Elevation (ft) 6.25
Notes:					



Note: See Figure A-1 for explanation of symbols.

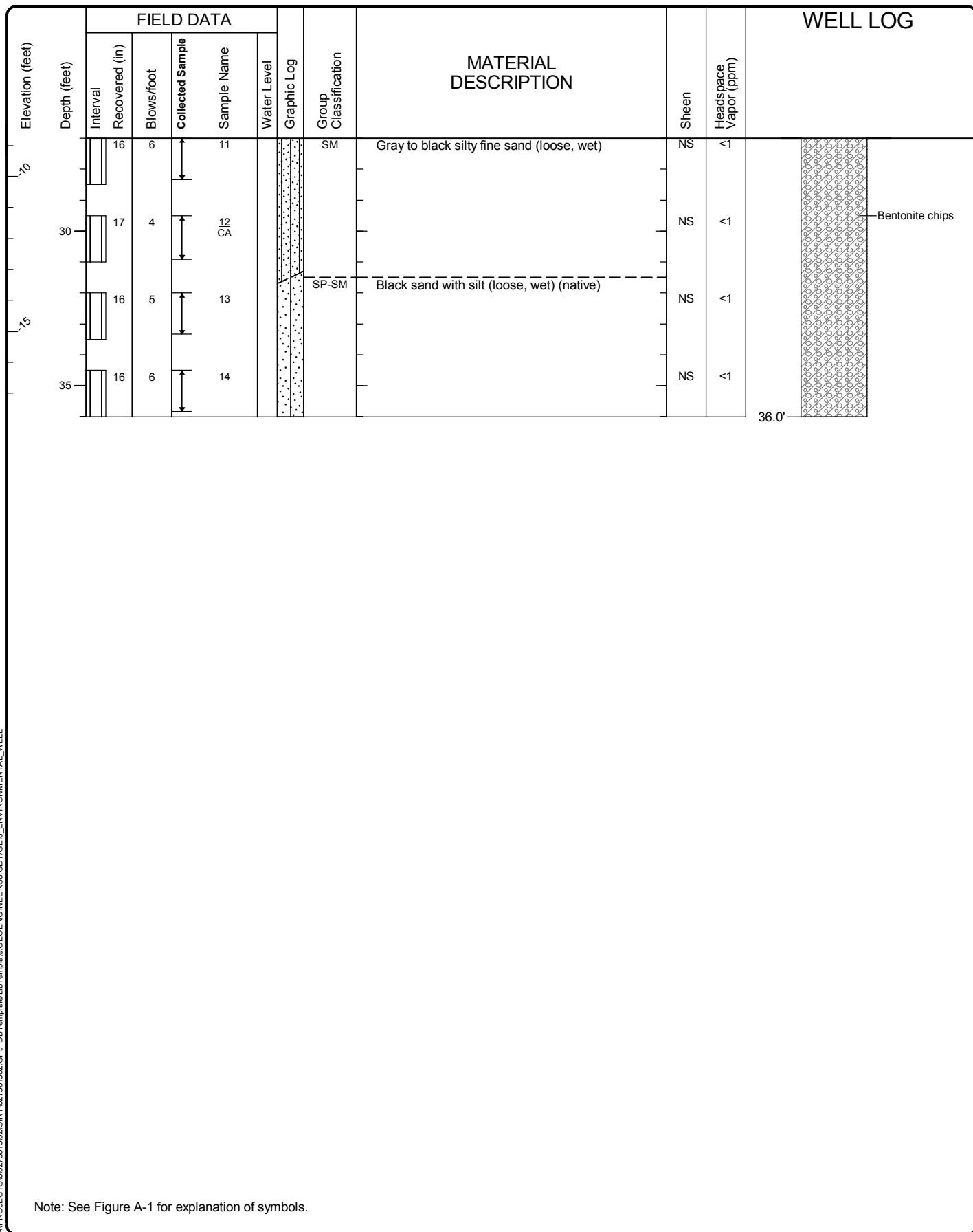
Log of Monitoring Well MW-16



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-17
 Sheet 1 of 2

Seattle, Date 8/26/13 Path\\SEA\\PROJECTS\\0027501502\\GINT\\027501502.GPJ DB\\Template\\LbT\\template\\GEOENGINEERS.GDT\\GEB_ENVIRONMENTAL_WELL



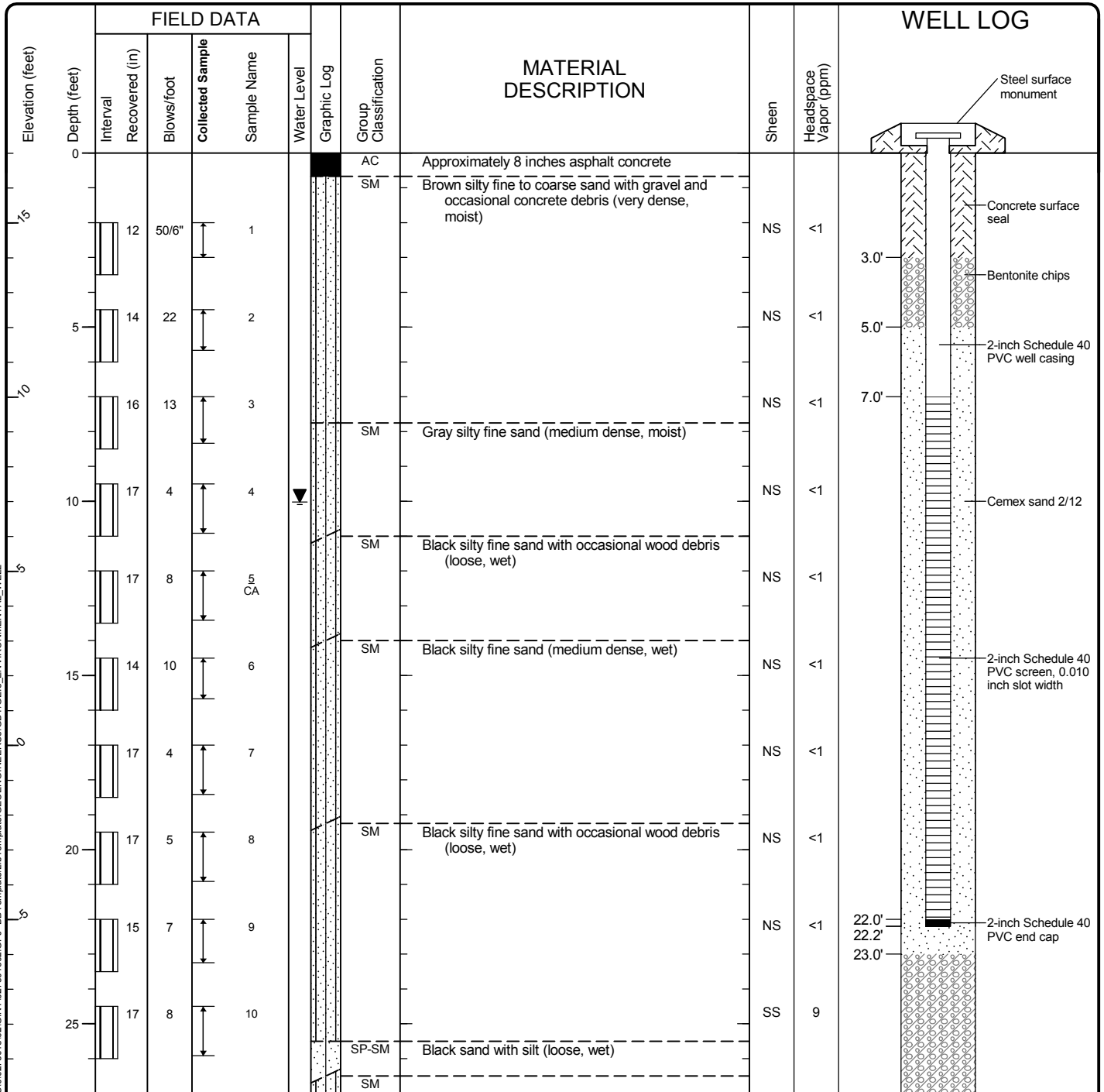
Log of Monitoring Well MW-16 (continued) (DMC-MW16)



Project: 7100 1st Avenue S Site
Project Location: Seattle, Washington
Project Number: 0275-015-02

Figure A-17
Sheet 2 of 2

Drilled	<u>Start</u> 7/12/2013	<u>End</u> 7/12/2013	Total Depth (ft)	38.5	Logged By Checked By	TML RST	Driller	Cascade Drilling	Drilling Method	Hollow Stem Auger
Hammer Data	Down Hole 300 (lbs) / 30 (in) Drop				Drilling Equipment	CME 75		DOE Well I.D.: BIC 638 A 2 (in) well was installed on 7/12/2013 to a depth of 22 (ft).		
Surface Elevation (ft) Vertical Datum		17.01		Top of Casing Elevation (ft)		16.51		<u>Groundwater</u>		
Easting (X) Northing (Y)		1269896.95 200611.47		Horizontal Datum		NAD83		<u>Date Measured</u>	<u>Depth to Water (ft)</u>	<u>Elevation (ft)</u>
								8/19/2013	10.0	7.0
Notes:										



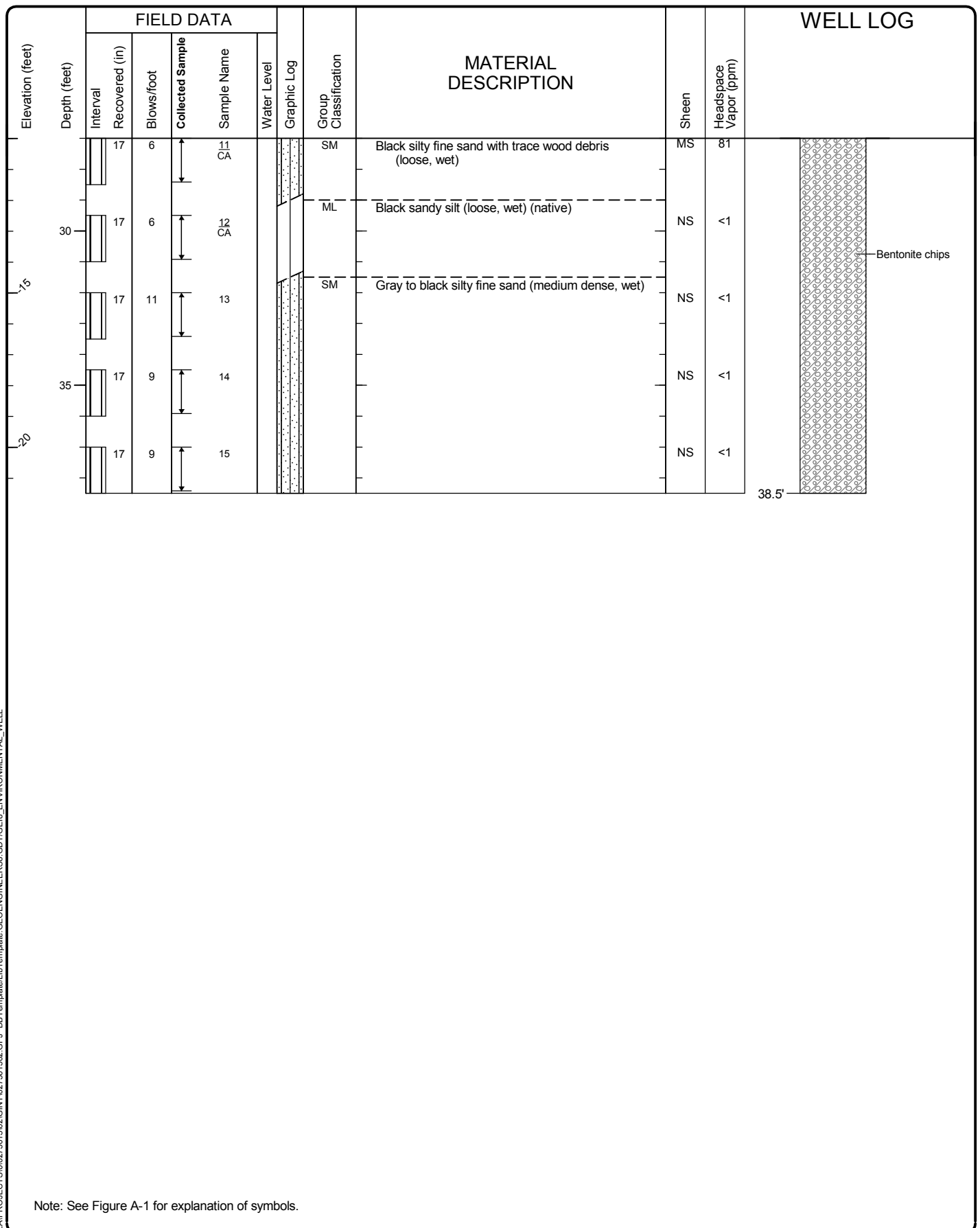
Note: See Figure A-1 for explanation of symbols.

Log of Monitoring Well MW-17 (DMC-MW17)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-18
 Sheet 1 of 2



Log of Monitoring Well MW-17 (continued)

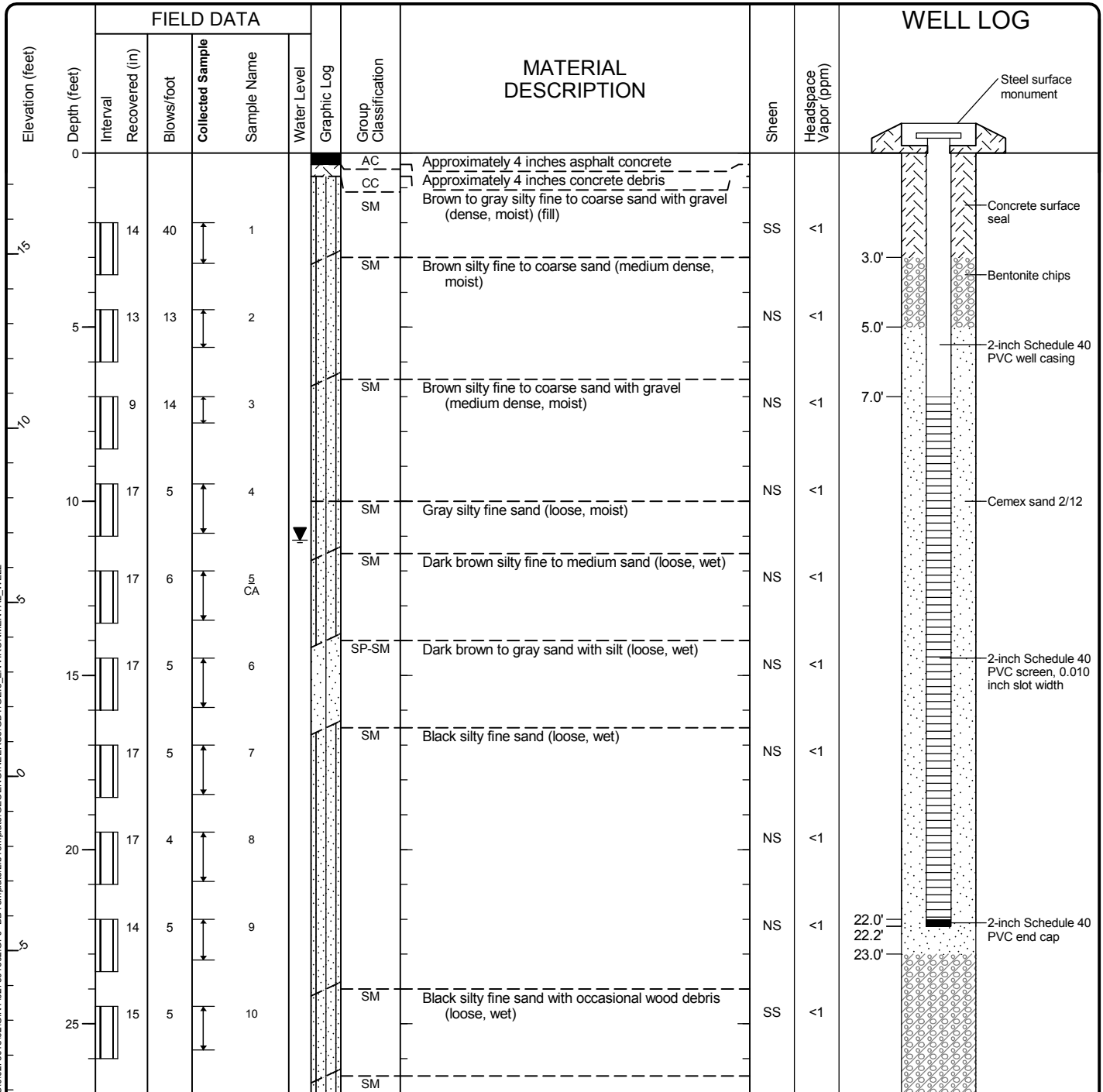
(DMC-MW17)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

Figure A-18
 Sheet 2 of 2

Start Drilled 7/11/2013	End 7/11/2013	Total Depth (ft) 38.5	Logged By Checked By TML RST	Driller Cascade Drilling	Drilling Method Hollow Stem Auger
Hammer Data	Down Hole 300 (lbs) / 30 (in) Drop	Drilling Equipment CME 75	DOE Well I.D.: BIC 626 A 2 (in) well was installed on 7/11/2013 to a depth of 22 (ft).		
Surface Elevation (ft) Vertical Datum	17.9	Top of Casing Elevation (ft) 17.60	Groundwater Date Measured 8/20/2013		
Easting (X) Northing (Y)	1270047.89 200466.66	Horizontal Datum NAD83	Depth to Water (ft) 11.12 Elevation (ft) 6.48		
Notes:					



Note: See Figure A-1 for explanation of symbols.

Log of Monitoring Well MW-18 (DMC-MW18)



Project: 7100 1st Avenue S Site
 Project Location: Seattle, Washington
 Project Number: 0275-015-02

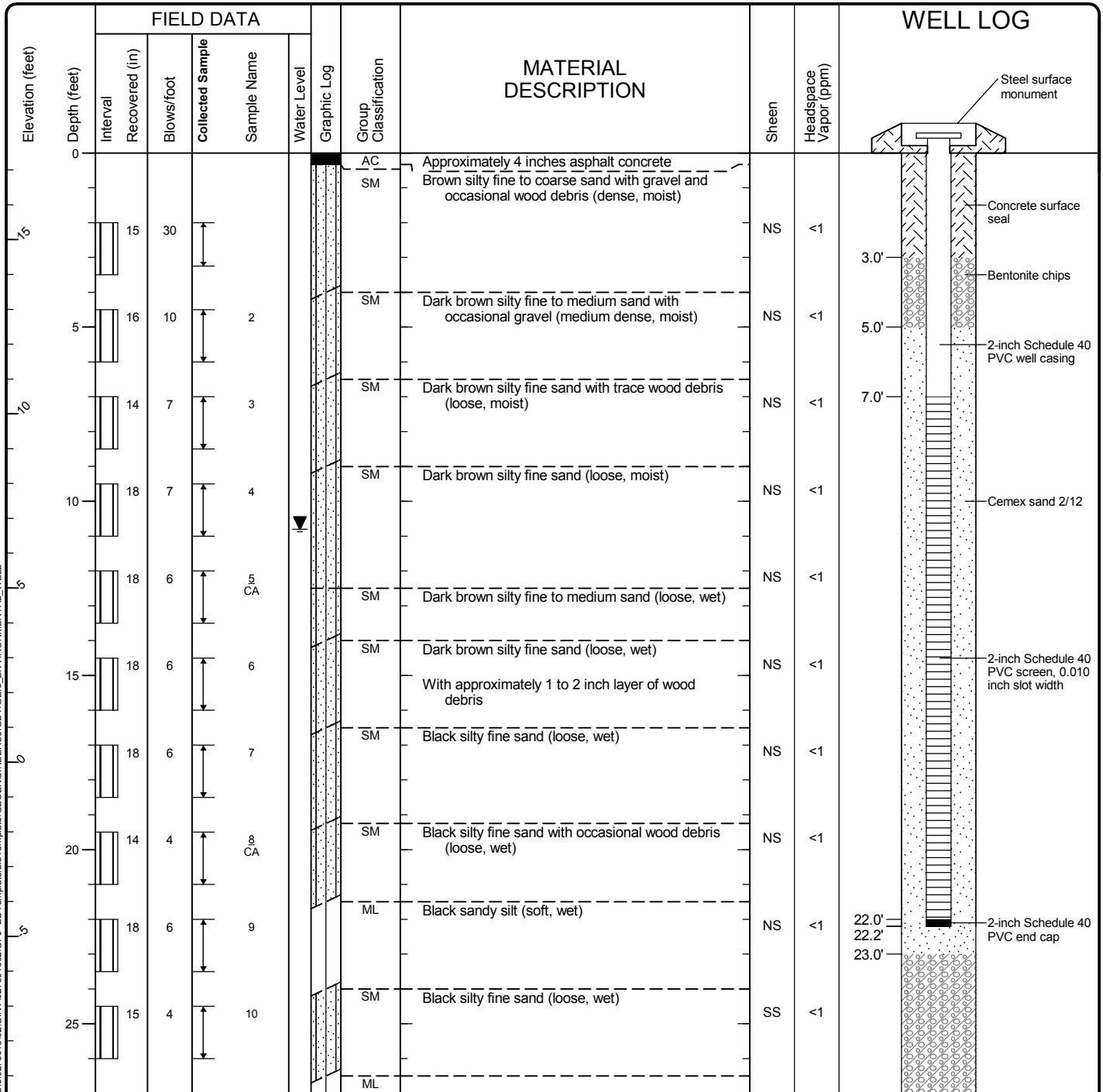
Figure A-19
 Sheet 1 of 2

Note: See Figure A-1 for explanation of symbols.

GEOENGINEERS

Figure A-19
Sheet 2 of 2

Start Drilled 7/10/2013	End 7/10/2013	Total Depth (ft) 36	Logged By Checked By TML RST	Driller Cascade Drilling	Drilling Method Hollow Stem Auger
Hammer Data Down Hole 300 (lbs) / 30 (in) Drop		Drilling Equipment CME 75		DOE Well I.D.: BIC 624 A 2 (in) well was installed on 7/10/2013 to a depth of 22 (ft).	
Surface Elevation (ft) Vertical Datum 17.49		Top of Casing Elevation (ft) 16.99		Groundwater Date Measured 8/20/2013	
Easting (X) 1269975.89 Northing (Y) 200513.64		Horizontal Datum NAD83		Depth to Water (ft) 10.80 Elevation (ft) 6.19	
Notes:					



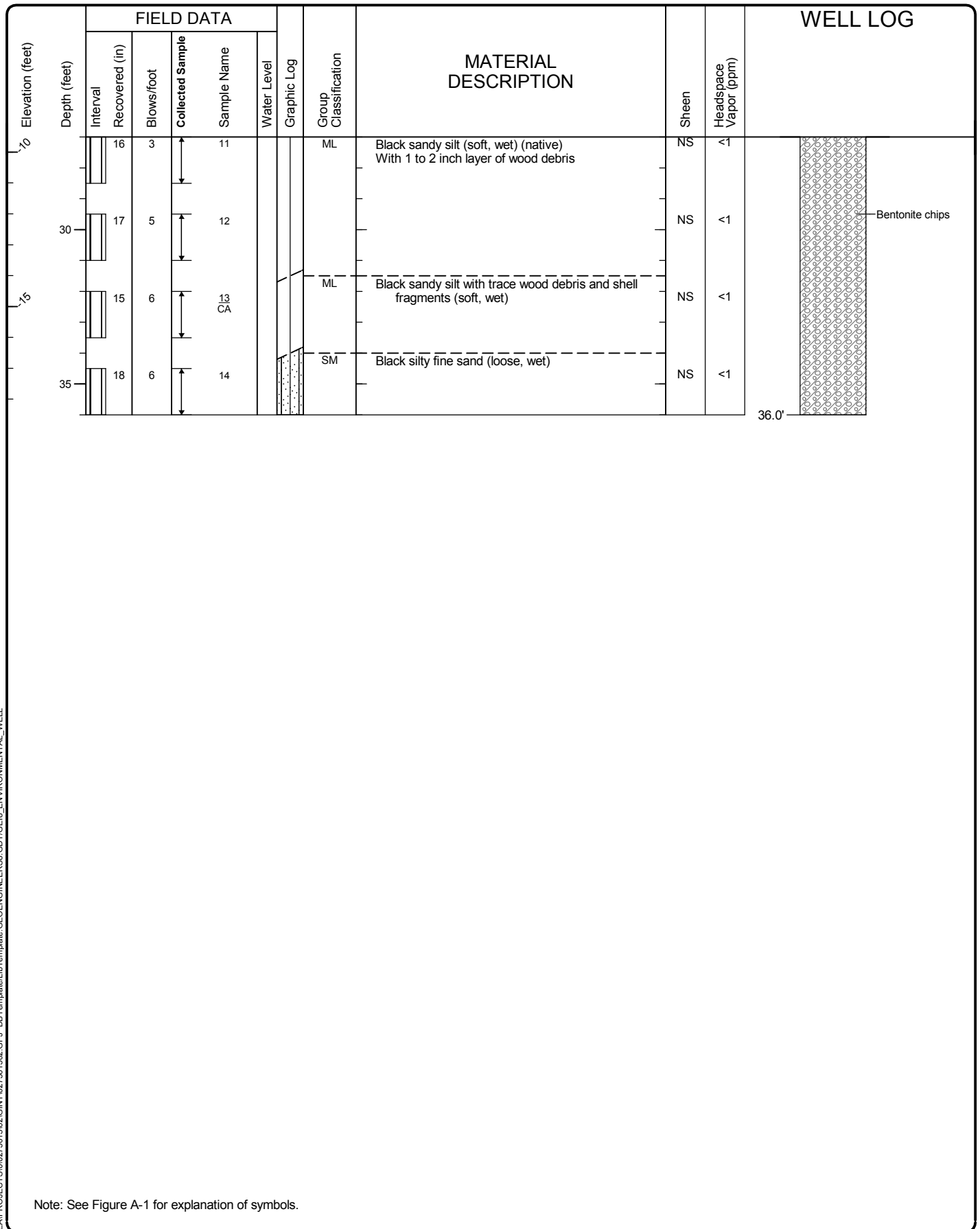
Note: See Figure A-1 for explanation of symbols.

Log of Monitoring Well MW-19 (DMC-MW19)



Project: 7100 1st Avenue S Site
Project Location: Seattle, Washington
Project Number: 0275-015-02

Figure A-20
Sheet 1 of 2



DMC-MW19)



Project:	7100 1st Avenue S Site
Project Location:	Seattle, Washington
Project Number:	0275-015-02

Figure A-20
Sheet 2 of 2

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

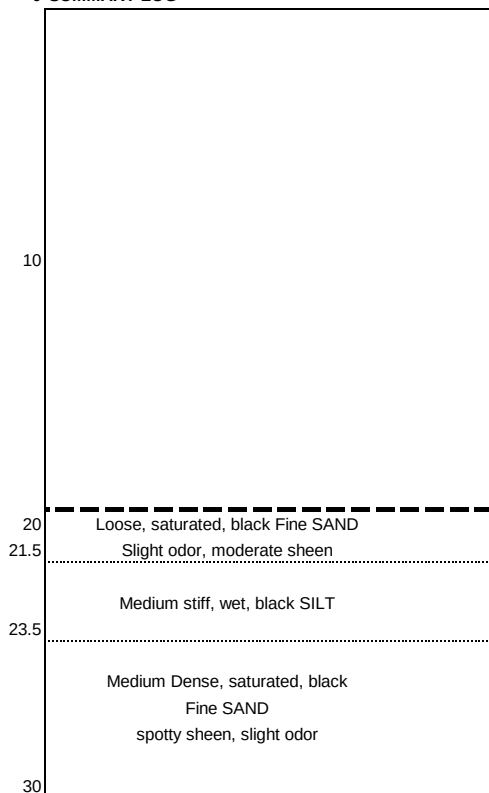
DMC-MWA

Field Rep: D. Cooper				Location: N200383.1 E1269954.5 NAD83				Ecology ID# BJA570	
Drilling Co.: Cascade				Ground surface elevation: 17.74 ft. NAVD88 (N. rim monument)					
Driller: James Goble				Date Completed: 02/12/15					
Drill Type: CME 55				Weather: Cloudy 50F					
Size/Type Casing: 10" HSA				Sampler: 3" dia. SPT					
Spl. No.	Type Sample Saved	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description	
MWA				0-20		-	0920	No Sampling from 0-20'. Lean concrete in cuttings	
		17.3	SLO/MS	20-21.5	18	4/4/3		Loose, sat, gry, F-M SAND slight sheen, oily odor	
		1.7	SLO/SS	21.5-23	18	3/3/3		M stiff, sat, blk, SILT	
		2.5	SLO/SS	23-24.5	18	6/5/5		As Above	
	Composite 24.5-26'	3.2	SLO/SS	24.5-26	18	4/7/8	1015	M dense, sat, blk, F-M SAND spotty sheen	
		1	SLO/SS	26-27.5	18	11/10/13		M dense, sat, blk, F SAND spotty sheen	
		3.3	SLO/SS	27.5-29	18	8/5/8		As Above	
		1.9	SLO/SS	29-30.5	18	7/6/6		As Above	

Bottom of boring @ 30.5'

Depth(ft.)

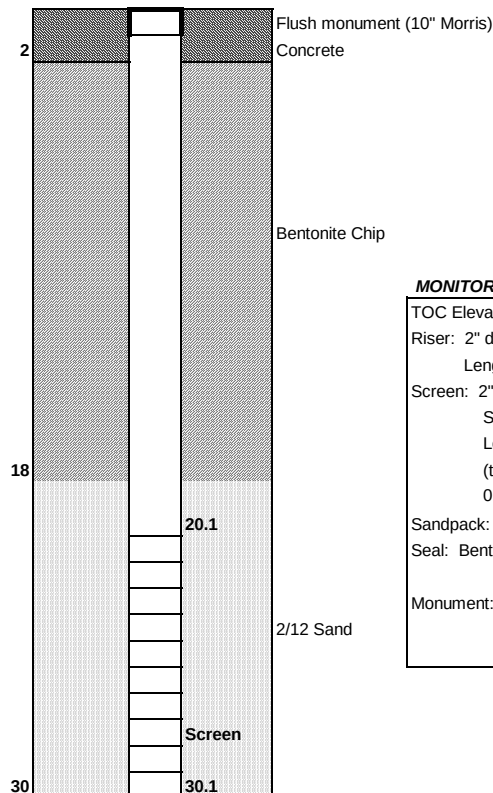
0 SUMMARY LOG



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

TOC Elevation: 17.10 ft. (NAVD88)
Riser: 2" dia. SCH 40 PVC
Length: 19.8'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.8/29.8
0.3' end cap
Sandpack: 2/12 colorado sand
Seal: Bentonite chip
(top/bot) 2/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium, sat = pores saturated with water

DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

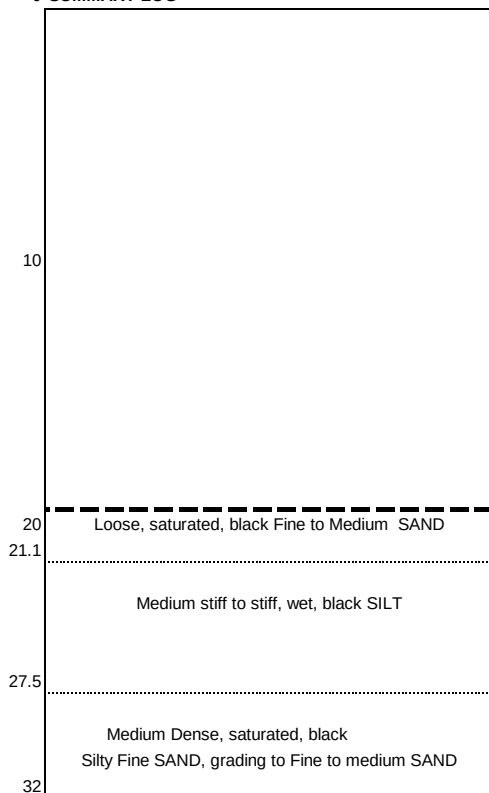
DMC-MWB

Field Rep: D. Cooper				Location: N200401.5 E1270065.7 NAD83				Ecology ID# BJA571	
Drilling Co.: Cascade				Ground surface elevation: 18.41 ft. NAVD88 (N. rim monument)					
Driller: James Goble				Date Completed: 02/12/15					
Drill Type: CME 55				Weather: Cloudy 50F					
Size/Type Casing: 10" HSA				Sampler: 3" dia. SPT					
Spl. No.	Type Sample Saved	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description	
MWB				0-20		-	1230	No Sampling from 0-20'. Lean concrete in cuttings	
		0.2	NO/NS	20-21.5	18	5/7/5		M dense, sat, gry, F-M SAND 0.3' SILT interbed	
		1.0	NO/NS	21.5-23	18	4/3/3		M stiff, wet, blk, F sandy, SILT	
		46.5	SLO/NS	23-24.5	18	4/5/5		Stiff, wet, blk, SILT	
	Composite 24.5-26'	6.7	NO/NS	24.5-26	18	5/4/5	1310	As Above	
		1.8	NO/NS	26-27.5	18	5/4/4		As Above	
		1.9	NO/NS	27.5-29	18	2/3/3		Loose, sat, blk, silty, F SAND	
		1.4	NO/NS	29-30.5	18	5/5/11		M dense, sat, blk, silty, F-M SAND	
		2.1	NO/NS	30.5-32	18	4/7/7		M dense, sat. blk, F-M SAND	

Bottom of boring @ 32.0'

Depth(ft.)

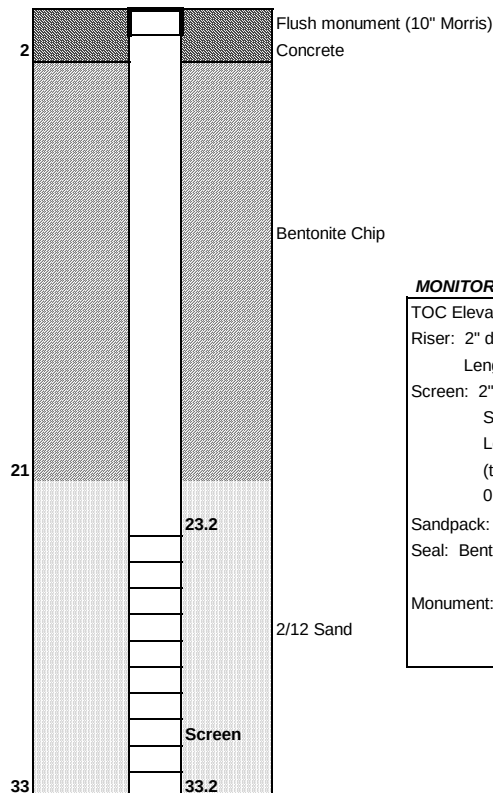
0 SUMMARY LOG



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

TOC Elevation: 18.00 ft, NAVD)
Riser: 2" dia.SCH 40 PVC
Length: 23.2'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 23.2/33.2
0.3' end cap
Sandpack: 2/12 colorado sand
Seal: Bentonite chip
(top/bot) 2/21
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium, sat = pores saturated with water

DMC-MWC

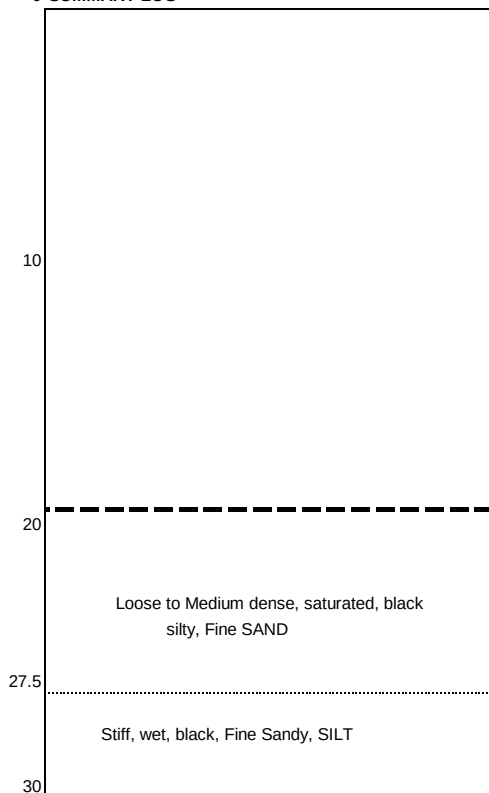
DESCRIPTION OF SAMPLES, TESTS, AND INSTALLATION - MONITORING WELL NO.

Field Rep: D. Cooper				Location: N200397.7 E1270178.7 NAD83		Ecology ID# BJA572		
Drilling Co.: Cascade				Ground surface elevation: 17.75 ft. NAVD88 (N. rim monument)				
Driller: James Goble				Date Completed: 2/13/2015				
Drill Type: CME 55				Weather: Clear 50F				
Size/Type Casing: 10" HSA				Sampler: 3" dia. SPT				
Spl. No.	Type Sample Saved	PID (ppm)	Odor/ Sheen	Spl Depth (Ft.) From - To	Spl length (inches)	Blows/ 6 inches	Time	Sample Description
MWC				0-20		-	0815	No Sampling from 0-20'. Lean concrete in cuttings
		0.3	NO/NS	20-21.5	18	3/4/5		Loose, sat, blk, silty, F SAND
		4.8	NO/NS	21.5-23	18	4/6/8		M dense, sat, blk, silty, F SAND 0.5' SILT interbed
		0.3	NO/NS	23-24.5	18	8/8/8		M dense, sat, blk, silty, F SAND
	Composite 24.5-26'	0.2	NO/NS	24.5-26	18	9/7/7	0900	M dense, sat, blk, silty, F SAND, w/organics, silt clasts
		0.1	NO/NS	26-27.5	18	6/4/4		M dense, sat, blk, silty, F SAND
		0.3	NO/NS	27.5-29	18	5/6/7		Stiff, wet, blk, F sandy, SILT
		0.4	NO/NS	29-30.5	18	5/7/7		Stiff, wet, blk, F sandy, SILT

Bottom of boring @ 32.0'

Depth(ft.)

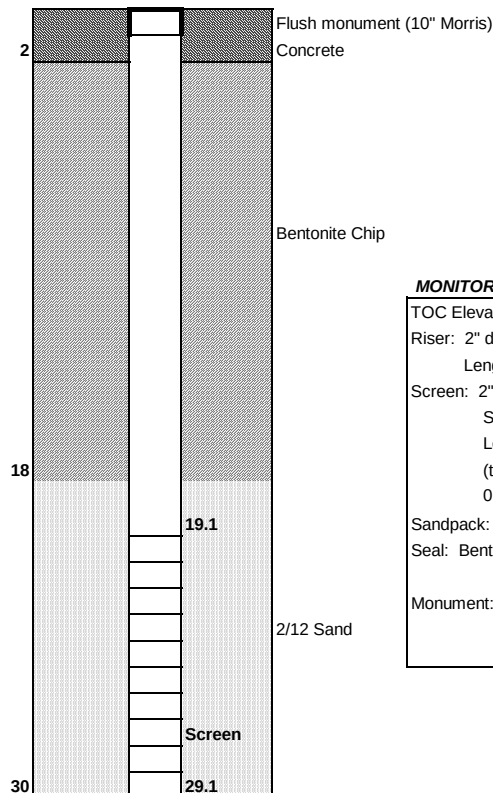
0 SUMMARY LOG



(Bottom of Boring)

NOTE: The summary log is an interpretation based on samples, drill action, and interpolation. Variations between what is shown and actual conditions should be anticipated.

MONITORING WELL DIAGRAM



MONITORING WELL INFORMATION

TOC Elevation: 17.48 ft. NAVD88
Riser: 2" dia. SCH 40 PVC
Length: 19.1'
Screen: 2" dia. SCH 40 PVC
Slot size: 0.010"
Length: 10'
(top/bot) 19.1/29.1
0.3' end cap
Sandpack: 2/12 Colorado sand
Seal: Bentonite chip
(top/bot) 2/18
Monument: 10" dia. Flush Mount (Morris)
-0.3' to top of PVC/TOC

Abbreviations:

gry = gray; bwn = brown; blk = black; mot = mottled
Sheen - NS= none, LS = Light, MS = Moderate, HS = Heavy
Odor - NO= None, SLO = Slight, MO = Moderate, STO = Strong
F = fine; M = medium, sat = pores saturated with water

**APPENDIX E
GRAIN SIZE ANALYSES AND
HYDRAULIC CONDUCTIVITY DATA**

**REMEDIAL INVESTION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025**

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Analytical Resources, Incorporated
Analytical Chemists and Consultants

December 22, 2015

Matt Dalton
Dalton, Olmsted, & Fuglevand
6034 North Star Road
Ferndale, WA 98248

RE: ICS/Former NW Cooperage, SUM-008
ARI Job No.: ARP2

Dear Mr. Dalton:

Please find enclosed the Chain-of-Custody records (COCs), sample receipt documentation, and the final analytical results for samples from the project referenced above. Nine soil samples were removed from frozen archive on November 27, 2015 and logged under ARI job ARP2. For details regarding sample receipt, please refer to the enclosed Cooler Receipt Forms.

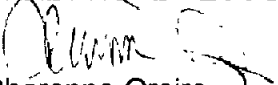
The samples were subcontracted to Materials Testing and Consulting (MTC) for Grain Size analysis. All subcontracted data have been included in this report.

Analytical details regarding requested analyses are discussed in the enclosed MTC Case Narrative.

An electronic copy of this report and all associated raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.


Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile ARP2

Enclosures

Subject: RE: ICS/NWC RI - Grain Size Analyses
From: "Matt Dalton" <mdalton@dofnw.com>
Date: 11/20/2015 12:06 PM
To: "'Cheronne Oreiro'" <cheronneo@arilabs.com>

Lets go with ASTM.

M

From: Cheronne Oreiro [mailto:cheronneo@arilabs.com]
Sent: Thursday, November 19, 2015 10:08 AM
To: Matt Dalton <mdalton@dofnw.com>
Cc: 'Cooper Dave' <dcooper@dofnw.com>
Subject: Re: ICS/NWC RI - Grain Size Analyses

Okay, I'll have them pulled from the freezer ASAP.
Would you like them analyzed by the ASTM method or PSEP?
-Cheronne

ARI will be closed Nov 26th (Thanksgiving).
I will be out of the office Nov 27th thru Nov 30th.

On 11/18/2015 6:48 AM, Matt Dalton wrote:

Cheronne:

Appreciate your comment – but would like to have these samples run anyway.

Matt

From: Cheronne Oreiro [mailto:cheronneo@arilabs.com]
Sent: Tuesday, November 17, 2015 3:20 PM
To: Matt Dalton <mdalton@dofnw.com>
Cc: 'Cooper Dave' <dcooper@dofnw.com>
Subject: Re: ICS/NWC RI - Grain Size Analyses

Hi Matt,

I do have these samples in *frozen* archive. Per the grain size method, archive samples should not be frozen because freezing could break down particles and skew results.
-Cheronne

ARI will be closed Nov 26th (Thanksgiving).
I will be out of the office Nov 27th thru Nov 30th.

Cheronne Oreiro
Project Manager
Analytical Resources, Inc.
4611 S. 134th Place, Suite 100

Tukwila, WA 98168-3240
cheronneo@arilabs.com
(206)-695-6214

How was your customer experience?
Please take our 5 minute online [customer survey](#).

This correspondence contains confidential information from Analytical Resources, Inc. (ARI) The information contained herein is intended solely for the use of the individual(s) named above. If you are not the intended recipient, any copying, distribution, disclosure, or use of the text and/or attached document(s) is strictly prohibited.

If you have received this correspondence in error, please notify sender immediately. Thank you.
On 11/17/2015 2:22 PM, Matt Dalton wrote:

Cheronne:

I am looking for archived soil samples to run grain size analyses. My first cut samples are listed on the attached table.

I would appreciate if you would check on the status of these archive samples and let me know if they would work.

Thanks

Matt

Matt Dalton
Dalton, Olmsted & Fuglevand, Inc.
6034 N. Star Rd.
Ferndale, WA 98248
Office: 360-380-0862
Cell: 206-498-6616

TABLE X - Tentative Samples for Grain Size Analysis

ICS/NWC RI
Seattle, WA

Sample	Depth (ft)	Type	ARI Del. Group	Previously Analyzed
P28-SO-13	12.5-13.5	Fine Sand	ZP37	No
P28-SO-22	21-23	Fine to medium Sand		Yes (PCB)
P28-SO-42	41-43	Fine Sand		No
P31-SO-13	12-14	Fine Sand	Z001	No
P31-SO-22	21-23	Fine to medium Sand		No
P31-SO-42	41-43	Fine Sand		No
P32-SO-13	12-14	Fine Sand	ZP37	No
P32-SO-22	21-22	Fine to medium Sand		No
P32-SO-42	41-43	Fine Sand		No

(Tentative Spls-Sheet1)

Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)



Date: 12/16/14
Page: 1 of 2
No. of Coolers: 5
Cobblers: 64-54
Temps: 64-54

ARI Assigned Number: 2837
Turn-around Requested: Normal
ARI Client Company: Dalton Olmsted & Fuglevand
Phone: 206-660-3466
Client Contact: Matt Dalton / Dave Cooper
Client Project Name: ICS / Former NW Coorage
Client Project #: SUM-008

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested						Notes/Comments	
					Metals - Sb, As, Be, Cd, Cr, Cu, Hg, Pb, Ni, Ag, Zn	VOCs / TPH-G	SVOCs - Full list incl PAHs	PCBs	TPH-DX	Pesticides		
ICS-P28-SO-4-121514	12/15/2014	1230	SOIL	7	X	X	X	X	X	X		
ICS-P28-SO-7-121514	12/15/2014	1240	SOIL	7							X	
ICS-P28-SO-10-121514	12/15/2014	1250	SOIL	7	X	X	X	X	X	X		
ICS-P28-SO-13-121514	12/15/2014	1300	SOIL	7							X	
ICS-P28-SO-16-121514	12/15/2014	1310	SOIL	7	X	X	X	X	X	X		
ICS-P28-SO-22-121514	12/15/2014	1320	SOIL	7							X	
ICS-P28-SO-32-121514	12/15/2014	1430	SOIL	7	X	X	X	X	X	X		
ICS-P28-SO-42-121514	12/15/2014	1500	SOIL	7							X	
ICS-P28-SO-50-121514	12/15/2014	1530	SOIL	7							X	
ICS-P32-SO-13-121514	12/15/2014	0800	SOIL	7							X	
Comments/Special Instructions					Received by (Signature)	Relinquished by (Signature)						
					Printed Name	Printed Name						
					DG Cooper	DG Cooper						
					Company	Company						
					DOF	DOF						
					Date & Time	Date & Time						
					12/16/14	12/16/14 720						

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

ARI-2000001

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: 7037	Turn-around Requested:	Normal
ARI Client Company Dalton Olmsted & Fuglevand Client Contact: Matt Dalton / Dave Cooper		
Phone: 206-660-3466		

Analysis Requested		Notes/Comments
Metals - Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Ag, Zn, Hg	VOCs / TPH-G	
	SVOCs - Full list incl. PAHs	
	PCBs	
	TPH-DX	
	Pesticides	
	ARCHIVE	

[illegible]

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)
		
	Printed Name DG Cooper	Printed Name [illegible]
	Company DOF	Company [illegible]
	Date & Time 12/16/14 0720	Date & Time 12/16

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: DOF

COC No(s): _____ (NA)

Assigned ARI Job No: 2P37

Project Name CS/Former NW Cooperage

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES ☒ NO ☐

Were custody papers included with the cooler? YES ☒ NO ☐

Were custody papers properly filled out (ink, signed, etc) YES ☒ NO ☐

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time: _____

2.3 4.3 5.4 0.4 5.4

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: JM Date: 12/16/14 Time: 720

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES ☐ NO ☒

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA ☐ YES ☒ NO ☐

Were all bottles sealed in individual plastic bags? YES ☐ NO ☒

Did all bottles arrive in good condition (unbroken)? YES ☒ NO ☐

Were all bottle labels complete and legible? YES ☒ NO ☐

Did the number of containers listed on COC match with the number of containers received? YES ☒ NO ☐

Did all bottle labels and tags agree with custody papers? YES ☒ NO ☐

Were all bottles used correct for the requested analyses? YES ☒ NO ☐

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA ☒ YES ☐ NO ☐

Were all VOC vials free of air bubbles? NA ☒ YES ☐ NO ☐

Was sufficient amount of sample sent in each bottle? YES ☒ NO ☐

Date VOC Trip Blank was made at ARI NA ☒

Was Sample Split by ARI: NA YES ☐ Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 12/16/14 Time: 1330

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____

Small Air Bubbles ~2mm 	Peabubbles 2-4 mm 	LARGE Air Bubbles > 4 mm
Small → "sm" (< 2 mm)		
Peabubbles → "pb" (2 to < 4 mm)		
Large → "lg" (4 to < 6 mm)		
Headspace → "hs" (> 6 mm)		

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 2001	Turn-around Requested:	Date: 12/9/14
ARI Client Company: Dalton Olmsted & Fuglelland	Phone: 206-660-3466	Page: 1 of 2
Client Contact: Matt Dalton / Dave Cooper	No. of Coolers: 4 Cooler Temp: 31-5.9	
Client Project Name: ICS / Former NW Cooperaage	Analysis Requested	
Client Project #: SUM-008	VOCs / TPH-G SVOCs - Full list PCBs TPH-DX Pesticides Dioxin ARCHIVE	

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested						Notes/Comments
					Meals - Sb, As, Pb, Ni, Ag, Zn, Hg	VOCs / TPH-G	SVOCs - Full list	PCBs	TPH-DX	Pesticides	
ICS-P30-SO-4-120914	12/9/2014	1150	SOIL	7	X	X	X	X	X	X	
ICS-P30-SO-7-120914	12/9/2014	1200	SOIL	7							X
ICS-P30-SO-10-120914	12/9/2014	1210	SOIL	7	X	X	X	X	X	X	
ICS-P30-SO-13-120914	12/9/2014	1220	SOIL	7							X
ICS-P30-SO-16-120914	12/9/2014	1230	SOIL	7	X	X	X	X	X	X	
ICS-P30-SO-22-120914	12/9/2014	1240	SOIL	7							X
ICS-P30-SO-32-120914	12/9/2014	1430	SOIL	7	X	X	X	X	X	X	
ICS-P30-SO-42-120914	12/9/2014	1445	SOIL	7							X
ICS-P30-SO-50-120914	12/9/2014	1500	SOIL	7							X
ICS-P31-SO-4-120914	12/9/2014	0800	SOIL	7	X	X	X	X	X	X	
Comments/Special Instructions	Relinquished by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i>									
	Printed Name: DG Cooper	Printed Name: Jennifer Millard									
	Company: DOF	Company: ARI									
	Date & Time: 12/10/14 0725	Date & Time: 12/10/14 725									

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSD/PA/SEP/SMS protocol will be stored frozen for up to one year and then discarded.

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)



Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 2001	Turn-around Requested:	Date: 12/10/14
ARI Client Company: Dalton Olmsted & Fuglevand	Phone: 206-660-3466	Page: 2 of 2
Client Contact: Matt Dalton / Dave Cooper	No. of Coolers: 4 Cooler Temps: 3.1-5.9	
Client Project Name: ICS / Former NW Cooperage	Analysis Requested	
Client Project #: SJUM-008	VOCs / TPH-G SVOCs - Full list PCBs TPH-DX Pesticides ARCHIVE	

Sample ID	Date	Time	Matrix	No Containers	Metals - Pb, Ni, Ag, Zn, Hg	SVOCs - Full list	PCBs	TPH-DX	Pesticides	ARCHIVE	Notes/Comments
ICS-P31-SO-7-120914	12/9/2014	0810	SOIL	7						X	
ICS-P31-SO-10-120914	12/9/2014	0820	SOIL	7	X	X	X	X	X		
ICS-P31-SO-13-120914	12/9/2014	0830	SOIL	7						X	
ICS-P31-SO-16-120914	12/9/2014	0840	SOIL	7	X	X	X	X	X		
ICS-P31-SO-22-120914	12/9/2014	0850	SOIL	7						X	
ICS-P31-SO-32-120914	12/9/2014	1020	SOIL	7	X	X	X	X	X		
ICS-P31-SO-42-120914	12/9/2014	1030	SOIL	7						X	
ICS-P31-SO-50-120914	12/9/2014	1050	SOIL	7						X	
Trip Blanks	12/9/2014	-	SOIL	2							
Comments/Special Instructions	Relinquished by (Signature) <i>[Signature]</i>	Received by (Signature) <i>[Signature]</i>									
	Printed Name: DG Cooper	Printed Name: Jennifer Milsep									
	Company: DOF	Company: ARI									
	Date & Time: 12/10/14 0725	Date & Time: 12/10/14 725									

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)



Subject: ICS-NWC - REV COC
From: "Matt Dalton" <mdalton@dofnw.com>
Date: 12/10/2014 7:27 AM
To: "Cheronne Oreiro" <cheronneo@arilabs.com>

Cheronne:

See attached revised COC. I think Dave will be getting you these samples this morning.

Matt

— Attachments: _____

2014_12_10_07_23_51.pdf	556 KB
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Contin of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 7061	Turn-around Requested: Normal
ARI Client Company: Dalton Olmsted & Fulevand	Phone: 206-660-3466
Client Contact: Matt Dalton / Dave Cooper	
Client Project Name: ICS / Former NIW Cooperage	
Client Project #: SUM-008	
Samples: DG Cooper	

Date: 12/9/14
Page: 1 of 2
No. of Coolers: 1
Cooler Temp(s):

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Analytical Chemists and Consultants
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Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)



Client Project Name: ICS / Former NW Coorage										Analysis Requested										Notes/Comments
Client Project #: SUM-008										Samples: DG Cooper										
Sample ID	Date	Time	Matrix	No. Containers	Metals - Sb, As, Be, Cd, Cr, Cu, Hg, Pb, Ni, Ag, Zn	VOCs / TPH-G	SVOCs - Full list Incl. PAHs	PCBs	TPH-DX	Pesticides	Dioxin	ARCHIVE								
ICS-P30-SO-4-120914	12/9/2014	1150	SOIL	7	X	X	X	X	X	X			Archive #60							
ICS-P30-SO-7-120914	12/9/2014	1200	SOIL	7	X	X	X	X	X	X		X								
ICS-P30-SO-10-120914	12/9/2014	1210	SOIL	7	X	X	X	X	X	X			Archive #60							
ICS-P30-SO-13-120914	12/9/2014	1220	SOIL	7	X	X	X	X	X	X		X								
ICS-P30-SO-16-120914	12/9/2014	1230	SOIL	7	X	X	X	X	X	X										
ICS-P30-SO-22-120914	12/9/2014	1240	SOIL	7								X								
ICS-P30-SO-32-120914	12/9/2014	1430	SOIL	7	X	X	X	X	X	X										
ICS-P30-SO-42-120914	12/9/2014	1445	SOIL	7								X								
ICS-P30-SO-50-120914	12/9/2014	1500	SOIL	7								X								
ICS-P31-SO-4-120914	12/9/2014	0800	SOIL	7	X	X	X	X	X	X										
Comments/Special Instructions					Requested by: (Signature)					Received by: (Signature)										
					Printed Name:					Printed Name:										
DG Cooper					Company:					Company:										
DOF					Date & Time:					Date & Time:										

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by work order or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 7001	Turn-around Requested: Normal
ARI Client Company: Dalton Olmsted & Fuglevand	Phone: 206-660-3466
Client Contact: Matt Dalton / Dave Cooper	
Client Project Name: ICS / Former NW Cooperae	
Client Project #: SUM-008	
Samplers: DG Cooper	

Date: 12/10/14
Page: 2 of 2
No. of Coolers: 2
Cooler Temp(s):

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)



Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested						Notes/Comments
					Metals - Pb, Cu, Cd, Cr, Ni, Ag, Zn, Hg	VOCs / TPH-G	SVOCs - Full list	PCBs	TPH-DX	Pesticides	
ICS-P31-SO-7-120914	12/9/2014	0810	SOIL	7							ARCHIVE
ICS-P31-SO-10-120914	12/9/2014	0820	SOIL	7	X	X	X	X	X	X	
ICS-P31-SO-13-120914	12/9/2014	0830	SOIL	7							
ICS-P31-SO-16-120914	12/9/2014	0840	SOIL	7	X	X	X	X	X	X	
ICS-P31-SO-22-120914	12/9/2014	0850	SOIL	7							
ICS-P31-SO-32-120914	12/9/2014	1020	SOIL	7	X	X	X	X	X	X	
ICS-P31-SO-42-120914	12/9/2014	1030	SOIL	7							
ICS-P31-SO-50-120914	12/9/2014	1050	SOIL	7							
Trip Blanks	12/9/2014	-	SOIL	2							
Comments/Special Instructions					Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)				Relinquished by: (Signature)
					Printed Name: DG Cooper	Printed Name: DG Cooper	Printed Name: DG Cooper				Printed Name: DG Cooper
					Company: DOF	Company: DOF	Company: DOF				Company: DOF
					Date & Time:	Date & Time:	Date & Time:				Date & Time:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by work order or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Segment samples submitted under PSDA/PSSEP/SMS protocol will be stored frozen for up to one year and then discarded.



Cooler Receipt Form

ARI Client: DOF

COC No(s): _____

Assigned ARI Job No: 7001

Project Name: ICS/Former NW Cooperage

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Tracking No: _____

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES ☐ NO ☒

Were custody papers included with the cooler? YES ☒ NO ☐

Were custody papers properly filled out (ink, signed, etc.) YES ☒ NO ☐

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time: _____

3.7 3.1 5.3 5.9

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 9087752

Cooler Accepted by: JM Date: 12/10/14 Time: 725

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES ☐ NO ☒

What kind of packing material was used? ... Bubble Wrap ☒ Wet Ice ☐ Gel Packs ☐ Baggies ☐ Foam Block ☐ Paper ☐ Other: _____

Was sufficient ice used (if appropriate)? NA ☐ YES ☒ NO ☐

Were all bottles sealed in individual plastic bags? YES ☒ NO ☐

Did all bottles arrive in good condition (unbroken)? YES ☒ NO ☐

Were all bottle labels complete and legible? YES ☒ NO ☐

Did the number of containers listed on COC match with the number of containers received? YES ☒ NO ☐

Did all bottle labels and tags agree with custody papers? YES ☒ NO ☐

Were all bottles used correct for the requested analyses? YES ☒ NO ☐

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA ☒ YES ☐ NO ☐

Were all VOC vials free of air bubbles? NA ☒ YES ☐ NO ☐

Was sufficient amount of sample sent in each bottle? YES ☒ NO ☐

Date VOC Trip Blank was made at ARI: NA ☒

Was Sample Split by ARI ☒ YES ☐ Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 12/10/14 Time: 1102

** Notify Project Manager of discrepancies or concerns **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:
Trip blank was 1 MEDH vial & 1 SOBI vial.
Not a TB per PM. Do not analyze per PM.
 By: JM Date: 12/10/14

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm

Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report



ARI Job No: ARP2
Client: Dalton, Olmsted & Fuglevand, Inc
Project Event: ICS/Former NW Cooperage
Project Name: N/A

Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1. ICS-P28-SO-13-121514	ARP2A	15-23070	Soil	12/15/14 13:00	12/16/14 07:20
2. ICS-P28-SO-22-121514	ARP2B	15-23071	Soil	12/15/14 13:20	12/16/14 07:20
3. ICS-P28-SO-42-121514	ARP2C	15-23072	Soil	12/15/14 15:00	12/16/14 07:20
4. ICS-P32-SO-13-121514	ARP2D	15-23073	Soil	12/15/14 08:00	12/16/14 07:20
5. ICS-P32-SO-22-121514	ARP2E	15-23074	Soil	12/15/14 08:20	12/16/14 07:20
6. ICS-P32-SO-42-121514	ARP2F	15-23075	Soil	12/15/14 10:50	12/16/14 07:20
7. ICS-P31-SO-13-120914	ARP2G	15-23076	Soil	12/09/14 08:30	12/16/14 07:20
8. ICS-P31-SO-22-120914	ARP2H	15-23077	Soil	12/09/14 08:50	12/16/14 07:20
9. ICS-P31-SO-42-120914	ARP2I	15-23078	Soil	12/09/14 10:30	12/16/14 07:20

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Date Received: December 2, 2015
Sampled By: Others
Date Tested: December 22, 2015
Tested By: A Urban, A Kinkade

1. Nine samples were submitted for grain size distribution according to ASTM D422. The samples were prepared according to ASTM D421.
2. One sample from this job was chosen for triplicate analysis.
3. An assumed specific gravity of 2.65 was used in the hydrometer calculations.
4. A standard milkshake mixer type device was used to disperse the fine fraction sample for one minute.
5. The data is provided in summary tables and plots.
6. There were no noted anomalies in this project.

All results apply only to actual locations and materials tested. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

Reviewed by:

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070909

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Project: ICS/Former NW Cooperative

Project #: ARP2

Date Received: December 2, 2015

Date Tested: December 22, 2015

Client: Analytical Resources, Inc

Sampled by: Others

Tested by: A Urban, A Kinkade

Percent Finer (Passing) Than the Indicated Size

Sieve Size (microns)	3"	2"	1 1/2"	1"	3/4"	1/2"	3/8"	#4 (4750)	#10 (2000)	#20 (850)	#40 (425)	#60 (250)	#100 (150)	#200 (75)	32	22	13	9	7	3.2	1.3
ICS-P32-SO-13-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.1	94.1	66.4	30.1	22.2	15.7	14.4	10.5	6.5	3.9
ICS-P28-SO-13-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	99.0	98.9	98.6	98.0	93.0	65.2	28.4	21.4	16.0	14.7	9.3	6.7	4.0
ICS-P28-SO-13-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.2	94.6	67.0	32.9	22.4	15.8	14.5	9.2	5.3	3.9
ICS-P28-SO-22-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	95.7	66.2	44.4	14.0	4.6	3.7	2.8	2.8	1.8	0.9	0.8
ICS-P28-SO-22-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	79.4	30.0	10.5	5.1	2.7	2.7	1.8	1.8	0.9	0.9	0.9
ICS-P28-SO-42-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.5	81.9	59.6	28.1	10.0	4.9	3.9	2.9	2.9	1.9	1.0	1.0
ICS-P32-SO-22-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2	71.6	28.7	10.9	4.8	2.6	1.8	1.8	0.9	0.9	0.9	0.9
ICS-P32-SO-42-121514	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	97.9	81.6	44.1	14.4	9.1	7.8	5.2	5.2	2.6	2.6
ICS-P31-SO-13-120914	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	98.8	90.5	50.0	20.3	13.1	8.7	8.7	5.8	2.9	2.9
ICS-P31-SO-22-120914	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	84.4	70.7	38.8	9.2	3.2	3.2	2.1	2.1	1.1	0.0	0.0
ICS-P31-SO-42-120914	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.7	99.4	96.9	74.8	43.4	19.4	8.5	8.5	6.1	4.8	4.8	2.4	2.4

Testing performed according to ASTM D421/D422

Organics were not removed prior to analysis. The grain size distribution reported is the "apparent grain size distribution".

Reviewed by:

E. A. Kinkade

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Project: ICS/Former NW Coorage

Client: Analytical Resources, Inc.

Project #: ARP2

Date Received: December 2, 2015

Date Tested: December 22, 2015

Sampled by: Others

Tested by: A Urban, A Kinkale

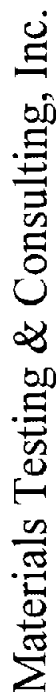
Percent Retained in Each Size Fraction

Description	% Coarse Gravel				% Gravel		% Coarse Sand 4/750-2000	% Medium Sand		% Fine Sand			% Very Coarse Silt	% Coarse Silt	% Medium Silt	% Fine Silt	% Very Fine Silt	% Clay		
	3-2"	2-1 1/2"	1 1/2"-1"	1-3/4"	3/4-1/2"	1/2-3/8"		3/8"-4/750"	2000-850"	850-425"	425-250"	250-150"						150-75"	32-22"	22-13"
Particle Size (microns)																				
ICSP32-SO-13-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	5.0	27.8	36.3	7.8	6.5	1.3	3.9	3.9	2.6	3.9
ICSP32-SO-13-121514	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.1	0.2	0.7	5.0	27.8	35.8	8.0	5.3	5.3	2.7	2.7	4.0
ICSP32-SO-13-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	4.7	27.5	34.2	10.5	6.6	1.3	3.9	1.3	3.9
ICSP28-SO-13-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	13.8	19.5	21.8	30.4	9.4	0.9	0.9	0.0	0.9	0.9	0.0	0.9
ICSP28-SO-22-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	20.1	49.4	19.5	5.4	2.4	0.0	0.9	0.0	0.9	0.0	0.0	0.9
ICSP28-SO-42-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	7.6	32.3	31.5	18.1	5.1	1.0	1.0	0.0	1.0	1.0	0.0	1.0
ICSP32-SO-22-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	26.7	42.9	17.8	6.1	2.2	0.9	0.0	0.9	0.0	0.0	0.0	0.9
ICSP32-SO-42-121514	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.9	16.3	37.5	29.7	5.2	1.3	2.6	0.0	2.6	0.0	2.6
ICSP31-SO-13-120814	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	8.3	40.5	29.7	7.3	4.4	0.0	2.9	2.9	0.0	2.9
ICSP31-SO-22-120814	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	14.3	13.7	31.9	29.6	6.0	0.0	1.1	0.0	1.1	1.1	0.0	0.0
ICSP31-SO-42-120814	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	2.5	22.1	31.4	24.0	10.9	0.0	2.4	1.2	0.0	2.4	0.0	2.4

Testing performed according to ASTM D421/D422
Organics were not removed prior to analysis The grain size distribution reported is the "apparent grain size distribution"

Reviewed by: E. J. J. J.

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Project: ICS/Former NW Coorage

Project # ARP2

Date Received. December 2, 2015

Date Tested: December 22, 2015

Client Analytical Resources, Inc.

Sampled by Others

Tested by A Urban, A Kinkade

[illegible]

This Triplicate applies to the Batch Containing the Following Samples

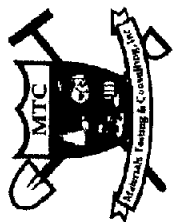
Sample ID	Date Sampled	Date Set up	Date Started	Date Complete	Data Qualifiers
ICS-P32-SO-13-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P28-SO-13-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P28-SO-22-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P28-SO-42-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P32-SO-22-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P32-SO-42-121514	12/15/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P31-SO-13-120814	12/6/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P31-SO-22-120814	12/6/2015	12/30/2015	12/10/2015	12/22/2015	
ICS-P31-SO-42-120814	12/6/2015	12/30/2015	12/10/2015	12/22/2015	

Testing performed according to ASTM D421/D422

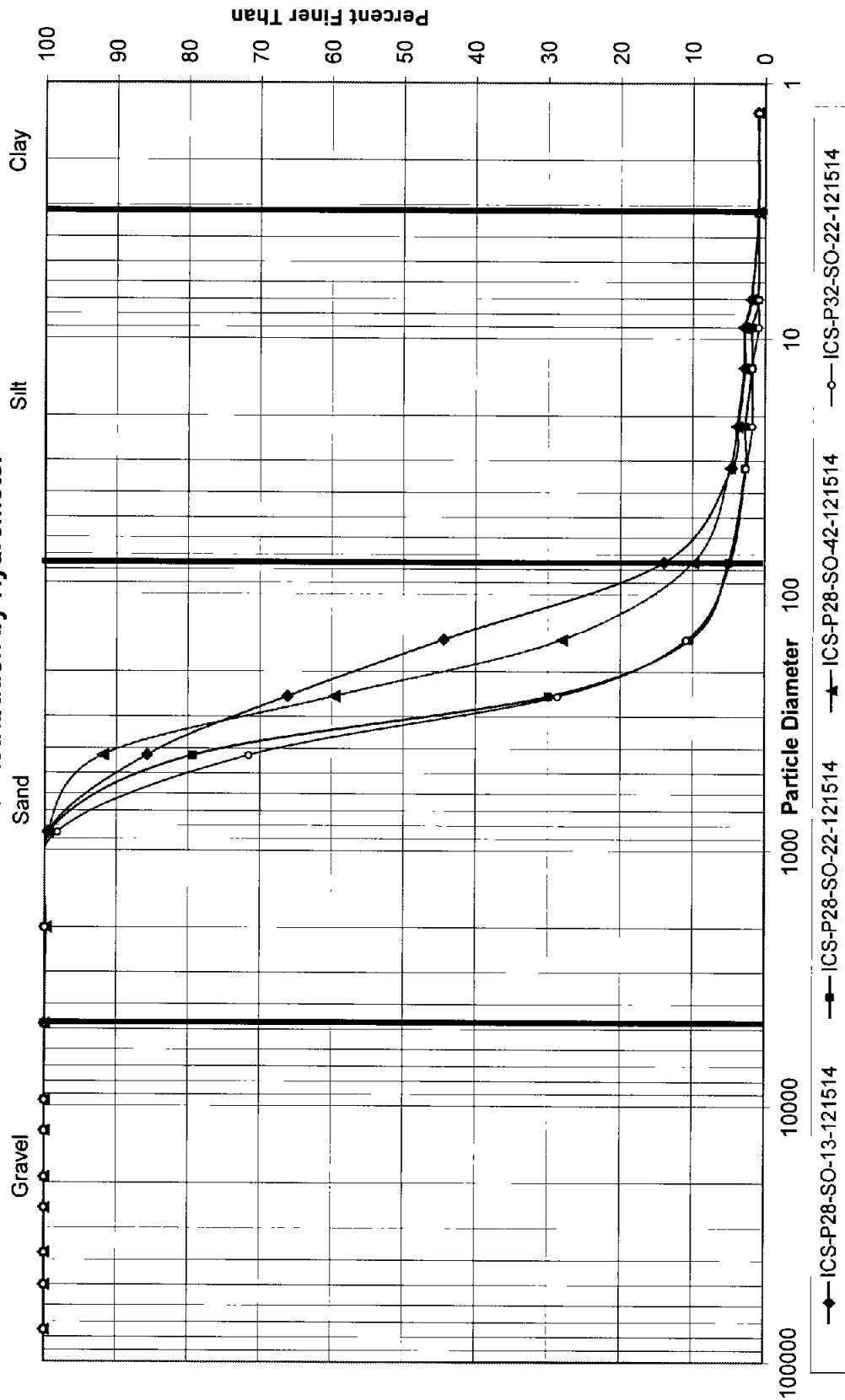
Organics were not removed prior to analysis. The grain size distribution reported is the "apparent grain size distribution."

Reviewed by

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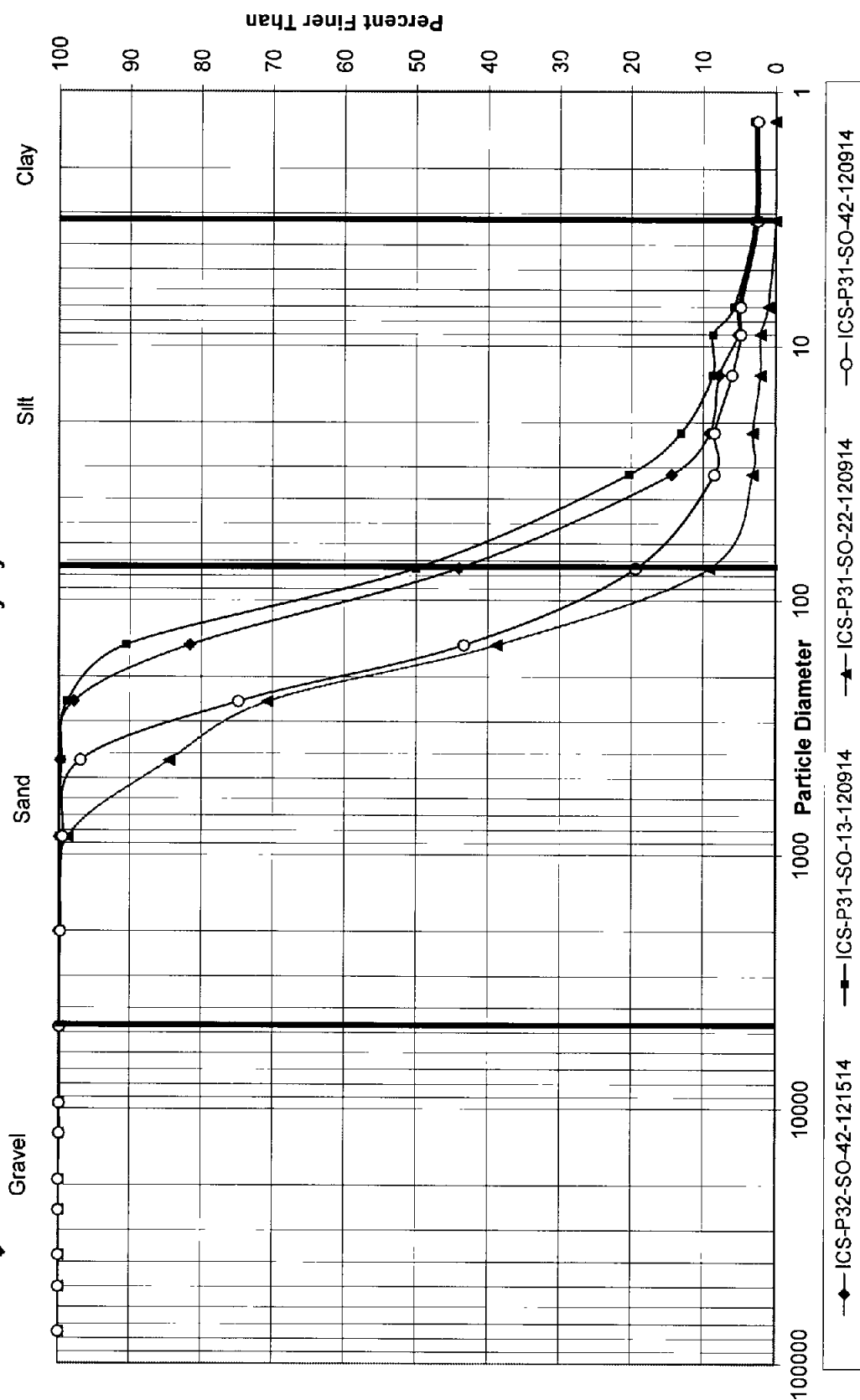


Grain Size Distribution by Hydrometer





Grain Size Distribution by Hydrometer



Materials Testing and Consulting, Inc.

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15101-152 MTC Sample ID: 152814 Setup Date: 12/3/15 Technician: au
 Sample Description: Brown & Grey sand @ Sandy silt
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Tare Number	2894-1
Tare Weight (g)	9.58
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	152.24
Hydro Test Sample Weight (g) (not including beaker weight)	77.57
Tare + Oven-Dried #10 Washed (g)	9.57
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	46.58

Hygroscopic Moisture Content	
Tare Number	2894-1
Tare Weight (g)	1.54
Wet Soil + Tare (g)	57.56
Dry Soil + Tare (g)	56.85

Hydro Beaker: CL Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: au
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Hydrometer Analysis				
12/10/2015	Hydrometer #: <u>276054</u>		Technician: <u>au</u>	
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
6:45:00	START			
6:46:00	1	39	6	19°
6:47:00	2	29	6	19°
6:50:00	5	23	6	19°
7:00:00	15	18	6	19°
7:15:00	30	17	6	19.5°
7:45:00	60	14	6	19.5°
10:55:00	250	11	6	20.0°
6:45:00	1440	9	6	19.5°
6:45:00				

Sieve Date: 12/14/15 Sieve Set #: 3 Technician: au

Sieve Size	Cumulative Weight (g)
Empty Tare	9.59
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	9.59
#16	9.66
#20	9.66
#40	10.28
#50	10.28
#60	10.28
#100	14.10
#200	35.36
Pan	40.81

jar broke 12/3/15 @ sample was consumed 12/3/15

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 1500452 MTC Sample ID: 15-2894-2 Setup Date: 12/3/15 Technician: Am
 Sample Description: Brown Sand & Silt
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Tare Number	<u>2894-2</u>
Tare Weight (g)	<u>10.54</u>
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	<u>172.40</u>
Hydro Test Sample Weight (g) (not including beaker weight)	<u>75.39</u>
Tare + Oven-Dried #10 Washed (g)	<u>1512.16</u> [Ⓢ]
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	<u>42.52</u>

Hygroscopic Moisture Content	
Tare Number	<u>2894-2</u>
Tare Weight (g)	<u>1.52</u>
Wet Soil + Tare (g)	<u>61.57</u>
Dry Soil + Tare (g)	<u>60.167</u>

Hydro Beaker: BE Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: Am
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Hydrometer Analysis

12/10/2015		Hydrometer #: <u>2716094</u> Technician: <u>Am</u>		
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
6:52:00	START			
6:53:00	1	<u>37</u>	<u>6</u>	<u>19°</u>
6:54:00	2	<u>28</u>	<u>6</u>	<u>19°</u>
6:57:00	5	<u>22</u>	<u>6</u>	<u>19°</u>
7:07:00	15	<u>18</u>	<u>6</u>	<u>19°</u>
7:22:00	30	<u>17</u>	<u>6</u>	<u>19.5°</u>
7:52:00	60	<u>13</u>	<u>6</u>	<u>19.5°</u>
11:02:00	250	<u>11</u>	<u>6</u>	<u>20°</u>
6:52:00	1440	<u>9</u>	<u>6</u>	<u>19.5</u>
6:52:00				

Sieve Analysis

Sieve Date: 12/4/15 Sieve Set #: 4 Technician: Am

Sieve Size	Cumulative Weight (g)
Empty Tare	<u>10.54</u>
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	<u>12.10</u>
#4	<u>12.10</u>
#10	<u>12.15</u>
#16	
#20	<u>12.24</u>
#40	<u>12.42</u>
#50	
#60	<u>12.91</u>
#100	<u>16.69</u>
#200	<u>37.49</u>
Pan	<u>42.72</u>

Jar Broke 12/3/15 [Ⓢ]

Sample was consumed

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 1500CH52 MTC Sample ID: 15-28943 Setup Date: 12/3/15 Technician: au
 Sample Description: Brown Sand + silt
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☐ Whole Sample ☐

Tare Number	2894-3
Tare Weight (g)	10.80
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	161.56
Hydro Test Sample Weight (g) (not including beaker weight)	77.22
Tare + Oven-Dried #10 Washed (g)	10.82
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	39.27

Hygroscopic Moisture Content	
Tare Number	2894-3
Tare Weight (g)	1.54
Wet Soil + Tare (g)	54.28
Dry Soil + Tare (g)	53.52

Hydro Beaker: F Calgon Batch #: 229 Calgon Date: 12/4/15 Technician: au
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☒ Whole Sample ☐

Hydrometer Analysis

12/10/2015	Hydrometer #: <u>276054</u> Technician: <u>AW</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
6:59:00	START			
7:00:00	1	38	6	19°
7:01:00	2	31	6	19°
7:04:00	5	23	6	19°
7:14:00	15	18	6	19.5°
7:29:00	30	17	6	19.5°
7:59:00	60	13	6	19.5°
11:09:00	250	10.8 ^m	6	20.0
6:59:00	1440	9	6	19.5
6:59:00				

Sieve Analysis

Sieve Date: 12/14/15 Sieve Set #: 3 Technician: au

Sieve Size	Cumulative Weight (g)
Empty Tare	10.83
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	10.83
#16	
#20	10.86
#40	10.99
#50	
#60	11.41
#100	14.96
#200	35.91
Pan	39.39

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15001-52 MTC Sample ID: TS2891 Setup Date: 12/3/15 Technician: aw
 Sample Description: dark brown silt sand
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☒ Whole Sample ☐

Tare Number	2891
Tare Weight (g)	10.13
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	277.17
Hydro Test Sample Weight (g) (not including beaker weight)	109.14
Tare + Oven-Dried #10 Washed (g)	10.18
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	106.34

Hygroscopic Moisture Content	
Tare Number	2891
Tare Weight (g)	1.53
Wet Soil + Tare (g)	60.66
Dry Soil + Tare (g)	60.17

Hydro Beaker: S Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: aw
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☒ Whole Sample ☐

Hydrometer Analysis

12/10/2015	Hydrometer #: <u>276054</u> Technician: <u>AW</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:06:00	START			
7:07:00	1	13	6	19°
7:08:00	2	11	6	19°
7:11:00	5	10	6	19.5°
7:21:00	15	9	6	19.5°
7:36:00	30	9	6	19.5°
8:06:00	60	8	6	19.5°
11:16:00	250	7	6	20.0
7:06:00	1440	7	6	19.5
7:06:00				

Sieve Analysis

Sieve Date: 12/4/15 Sieve Set #: 4 Technician: aw

Sieve Size	Cumulative Weight (g)
Empty Tare	10.10
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	10.17
#16	
#20	10.45
#40	25.91
#60	46.75
#100	70.36
#200	103.22
Pan	106.24

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15100-152 MTC Sample ID: 15-2892 Setup Date: 12/3/15 Technician: an
 Sample Description: DARK brown sand
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Tare Number	2892
Tare Weight (g)	10.57
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	280.24
Hydro Test Sample Weight (g) (not including beaker weight)	110.36
Tare + Oven-Dried #10 Washed (g)	10.53
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	115.27

Hygroscopic Moisture Content	
Tare Number	2892
Tare Weight (g)	1.53
Wet Soil + Tare (g)	68.06
Dry Soil + Tare (g)	67.69

Hydro Beaker: BC Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: an
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Hydrometer Analysis

12/10/2015	Hydrometer #: <u>276054</u> Technician: <u>AN</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:13:00	START			
7:14:00	1	11	6	19.5°
7:15:00	2	9	6	19.5°
7:18:00	5	9	6	19.5°
7:28:00	15	8	6	19.5°
7:43:00	30	8	6	19.5°
8:13:00	60	7	6	19.5°
11:23:00	250	7	6	20.0
7:13:00	1440	7	6	19.5
7:13:00				

Sieve Analysis

Sieve Date: 12/14/15 Sieve Set #: 3 Technician: an

Sieve Size	Cumulative Weight (g)
Empty Tare	10.54
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	
#16	
#20	11.08
#40	33.17
#60	
#60	87.38
#100	108.40
#200	114.69
Pan	114.91

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15T00145 MTC Sample ID: 15-2893 Setup Date: 12/3/15 Technician: an
 Sample Description: Dark brown sand
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Tare Number	2893
Tare Weight (g)	10.43
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	253.15
Hydro Test Sample Weight (g) (not including beaker weight)	103.83
Tare + Oven-Dried #10 Washed (g)	11.05
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	104.95

Hygroscopic Moisture Content	
Tare Number	2893
Tare Weight (g)	1.53
Wet Soil + Tare (g)	62.31
Dry Soil + Tare (g)	61.678

Hydro Beaker: C5 Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: an
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Hydrometer Analysis

12/10/2015	Hydrometer # <u>276054</u> Technician: <u>an</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:20:00	START			
7:21:00	1	12	6	19.5°
7:22:00	2	11	6	19.5°
7:25:00	5	10	6	19.5°
7:35:00	15	9	6	19.5°
7:50:00	30	9	6	19.5°
8:20:00	60	8	6	19.5°
11:30:00	250	7	6	20.0
7:20:00	1440	7	6	19.5
7:20:00				

Sieve Analysis

Sieve Date: 12/4/15 Sieve Set #: 4 Technician: an

Sieve Size	Cumulative Weight (g)
Empty Tare	10.43
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	10.50
#10	10.90
#16	
#20	11.28
#40	19.02
#50	
#60	52.32
#100	84.85
#200	103.51
Pan	104.95

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15TDU-152 MTC Sample ID: 15-2895 Setup Date: 12/3/15 Technician: am
 Sample Description: Dark brown sand
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Tare Number	2895
Tare Weight (g)	10.09
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	203.72
Hydro Test Sample Weight (g) (not including beaker weight)	114.34
Tare + Oven-Dried #10 Washed (g)	10.14
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	119.05

Hygroscopic Moisture Content	
Tare Number	2895
Tare Weight (g)	1.54
Wet Soil + Tare (g)	75.93
Dry Soil + Tare (g)	75.69

Hydro Beaker: DL Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: am
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Hydrometer Analysis

12/10/2015

Hydrometer #: 274654Technician: am

Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:27:00	START			
7:28:00	1	10	6	19.5°
7:29:00	2	9	6	19.5°
7:32:00	5	8	6	19.5°
7:42:00	15	8	6	19.5°
7:57:00	30	7	6	19.5°
8:27:00	60	7	6	19.5°
11:37:00	250	7	6	20.0°
7:27:00	1440	7	6	19.5°
7:27:00				

Sieve Date: 12/14/15 **Sieve Analysis**
 Sieve Set #: 3 Technician: am

Sieve Size	Cumulative Weight (g)
Empty Tare	10.09
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	10.12
#16	
#20	12.12
#40	42.52
#50	
#60	91.39
#100	111.64
#200	116.61
Pan	118.75

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 13100452 MTC Sample ID: TS-2896 Setup Date: 12/3/15 Technician: aw
 Sample Description: boundary Sand
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Tare Number	2896
Tare Weight (g)	9.94
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	239.21
Hydro Test Sample Weight (g) (not including beaker weight)	77.52
Tare + Oven-Dried #10 Washed (g)	9.94
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	58.88

Hygroscopic Moisture Content	
Tare Number	2896
Tare Weight (g)	1.55
Wet Soil + Tare (g)	46.50
Dry Soil + Tare (g)	45.04
	46.04

Hydro Beaker: DL Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: aw
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile ☒ Whole Sample []

Hydrometer Analysis				
12/10/2015	Hydrometer #: <u>276054</u> Technician: <u>aw</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:34:00	START			
7:35:00	1	23	6	19.5°
7:36:00	2	12 17	6	19.5°
7:39:00	5	13	6	19.5°
7:49:00	15	12	6	19.5°
8:04:00	30	10	6	19.5°
8:34:00	60	10	6	19.5°
11:44:00	250	8	6	20.0
7:34:00	1440	8	6	19.5
7:34:00				

Sieve Date: 12/4/15 Sieve Set #: 4 Technician: aw

Sieve Size	Cumulative Weight (g)
Empty Tare	9.27
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	9.92
#16	
#20	9.99
#40	10.09
#50	
#60	11.54
#100	24.04
#200	52.81
Pan	59.11

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15T00452 MTC Sample ID: 115-2897 Setup Date: 12/3/15 Technician: an
 Sample Description: light brown silt sand
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Tare Number	2897
Tare Weight (g)	10.47
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	244.03
Hydro Test Sample Weight (g) (not including beaker weight)	73.17
Tare + Oven-Dried #10 Washed (g)	10.45
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	50.04

Hygroscopic Moisture Content	
Tare Number	2897
Tare Weight (g)	1.54
Wet Soil + Tare (g)	32.83
Dry Soil + Tare (g)	31.04

Hydro Beaker: BQ Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: an
 Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Hydrometer Analysis

12/10/2015	Hydrometer #: <u>276054</u> Technician: <u>an</u>			
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:41:00	START			
7:42:00	1	26	6	19.5°
7:43:00	2	20	6	19.5°
7:46:00	5	15	6	19.5°
7:56:00	15	12	6	19.5°
8:11:00	30	12	6	19.5°
8:41:00	60	10	6	19.5°
11:51:00	250	8	6	20.0°
7:41:00	1440	8	6	19.5°
7:41:00				

Sieve Date: 12/14/15 Sieve Set #: 3 Technician: an

Sieve Size	Cumulative Weight (g)
Empty Tare	10.44
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	
#16	
#20	10.45
#40	10.68
#50	
#60	11.26
#100	17.01
#200	44.92
Pan	50.41

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No.: 15100452 MTC Sample ID: TIS-2098 Setup Date: 12/3/15 Technician: AmSample Description: Brown Sand

Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample [X]

Tare Number	2898
Tare Weight (g)	10.68
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	314.08
Hydro Test Sample Weight (g) (not including beaker weight)	96.78
Tare + Oven-Dried #10 Washed (g)	10.68
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	98.71

Hygroscopic Moisture Content	
Tare Number	2898
Tare Weight (g)	1.51
Wet Soil + Tare (g)	45.96
Dry Soil + Tare (g)	44.895

Hydro Beaker: DT Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: Am

Method of Size Reduction: Sample Splitter [] Quartering [] Stockpile [X] Whole Sample []

Hydrometer Analysis

12/10/2015		Hydrometer #:	Calgon	Technician:
		27.054		Am
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:48:00	START			
7:49:00	1	11	6	19.5°
7:50:00	2	9	6	19.5°
7:53:00	5	9	6	19.5°
8:03:00	15	8	6	19.5°
8:18:00	30	8	6	19.5°
8:48:00	60	7	6	20.0°
11:58:00	250	6	6	20.0°
7:48:00	1440			
7:48:00				

Sieve Date: 12/14/15 Sieve Set #: 4 Technician: Am

Sieve Analysis

Sieve Size	Cumulative Weight (g)
Empty Tare	(w) 98.71 + 10.69
2"	
1 1/2"	
1"	
3/4"	
1/2"	
3/8"	
#4	
#10	
#16	
#20	11.92
#40	25.41
#50	
#60	38.37
#100	68.54
#200	96.58
Pan	98.21

Sieve/Hydrometer Particle Size Analysis - Modified ASTM D421/422

MTC Job No. 1510152 MTC Sample ID: TS-2899 Setup Date: 12/3/15 Technician: am
 Sample Description: Brown Sand
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☒ Whole Sample ☐

Tare Number	2899
Tare Weight (g)	10.22
Tare + Air-Dried Sample Weight (g) (before #10 preparation)	253.76
Hydro Test Sample Weight (g) (not including beaker weight)	85.29
Tare + Oven-Dried #10 Washed (g)	10.94
Tare + Oven-Dried #200 Washed (g) (including plus #10 material)	78.40

Hygroscopic Moisture Content	
Tare Number	2899
Tare Weight (g)	1.53
Wet Soil + Tare (g)	45.31
Dry Soil + Tare (g)	43.89

Hydro Beaker: AN Calgon Batch #: 319 Calgon Date: 12/4/15 Technician: am
 Method of Size Reduction: Sample Splitter ☐ Quartering ☐ Stockpile ☒ Whole Sample ☐

Hydrometer Analysis				
12/10/2015	Hydrometer #:	276054	Technician:	am
Time	Δ Time	Test Cylinder	Calgon Blank	Temp (°C)
7:55:00	START			
7:56:00	1	21 137	6	19.5°
7:57:00	2	13	6	19.5°
8:00:00	5	13	6	19.5°
8:10:00	15	11	6	19.5°
8:25:00	30	10	6	19.5°
8:55:00	60	10	6	20.0°
12:05:00	250	8	6	20.0°
7:55:00	1440	8	6	19.5°
7:55:00				

Sieve Date: 12/14/15 Sieve Analysis
 Sieve Set #: 3 Technician: am

Sieve Size	Cumulative Weight (g)
Empty Tare	10.18
2"	
1 1/2"	
1"	
3/4"	
1/2"	10.45
3/8"	10.45
#4	10.55
#10	10.78
#16	
#20	11.03
#40	13.13
#50	
#60	31.40
#100	57.40
#200	77.37
Pan	78.29

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 11/27/15



ARI Project: ARP2

MTC JOB#
15TC01-152 6.2°C

Laboratory: Materials Testing & Consulting, InARI Client: Dalton, Olmsted & Fuglevand, I
Lab Contact: Harold Benny Project ID: ICS/Former NW Cooperage
Lab Address: 4611 S. 134th Pl ARI PM: Cheronne Oreiro
Tukwila, WA 98168 Phone: 206-695-6214
Phone: 360-255-9802 Fax: 206-695-6201
Fax: Email: subdata@arilabs.com

Analytical Protocol: In-house Requested Turn Around: 12/11/15
Special Instructions: *NO Pkg* Email Results (Y/N): Yes

Limits of Liability. Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
15-23070-ARP2A <i>T15-2891</i>	ICS-P28-SO-13-121514	12/15/14 13:00	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23071-ARP2B <i>T15-2892</i>	ICS-P28-SO-22-121514	12/15/14 13:20	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23072-ARP2C <i>T15-2893</i>	ICS-P28-SO-42-121514	12/15/14 15:00	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23073-ARP2D <i>T15-2894</i>	ICS-P32-SO-13-121514	12/15/14 08:00	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23074-ARP2E <i>T15-2895</i>	ICS-P32-SO-22-121514	12/15/14 08:20	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23075-ARP2F <i>T15-2896</i>	ICS-P32-SO-42-121514	12/15/14 10:50	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					
15-23076-ARP2G <i>T15-2897</i>	ICS-P31-SO-13-120914	12/09/14 08:30	Soil	1	ASTM D422 SUB GSASTM <i>1432</i>
Special Instructions: None					

Carrier		Airbill		Date	
Relinquished by <i>[Signature]</i>	Company <i>ARI</i>	Date <i>12/2/15</i>	Time <i>1150</i>		
Received by <i>an</i>	Company <i>MTC</i>	Date <i>12/2/15</i>	Time <i>1150</i>		

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 11/27/15



ARI Project: ARP2
MTC JOB #15T001-152

Laboratory: Materials Testing & Consulting, InARI Client: Dalton, Olmsted & Fuglev
Lab Contact: Harold Benny Project ID: ICS/Former NW Cooperage

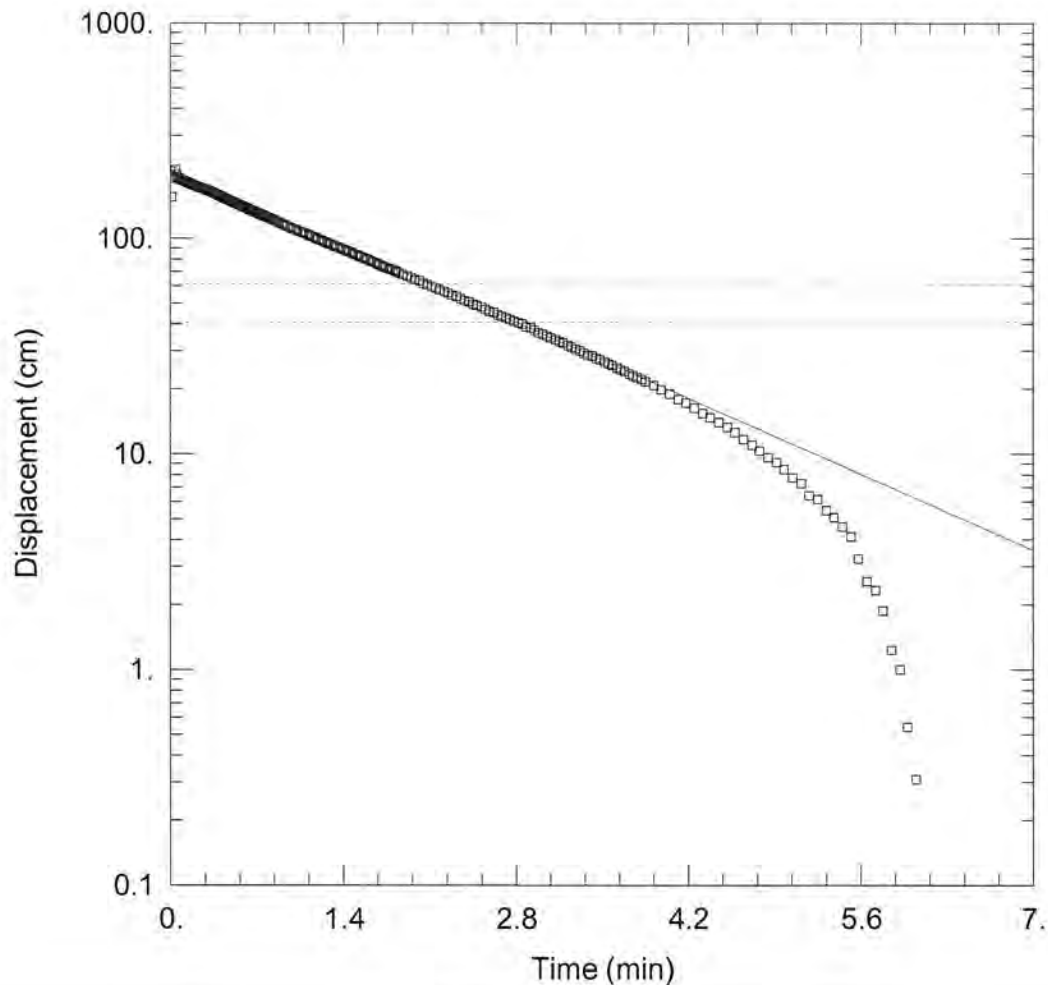
ARI Sample ID	Client Sample ID/ Add'l Sample ID	Sampled	Matrix	Bottles	Analyses
15-23077-ARP2H TIS-2898	ICS-P31-SO-22-120914	12/09/14 08:50	Soil	1	ASTM D422 SUB GSASTM D422
Special Instructions: None					
15-23078-ARP2I TIS-2899	ICS-P31-SO-42-120914	12/09/14 10:30	Soil	1	ASTM D422 SUB GSASTM D422
Special Instructions: None					

11. 170 per sample

- Need GC (N/C)

- Samples have been stored frozen.

Carrier		Airbill		Date	
Relinquished by <i>[Signature]</i>	Company ARI	Date 12/2/15	Time 1150		
Received by AM	Company MTC	Date 12/2/15	Time 1150		



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\laPhase 2b Data Gap\K Testing\Aqtw1 - HCB1.aqt
 Date: 09/10/16 Time: 10:52:05

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: HC-B1
 Test Date: 1-25-16

AQUIFER DATA

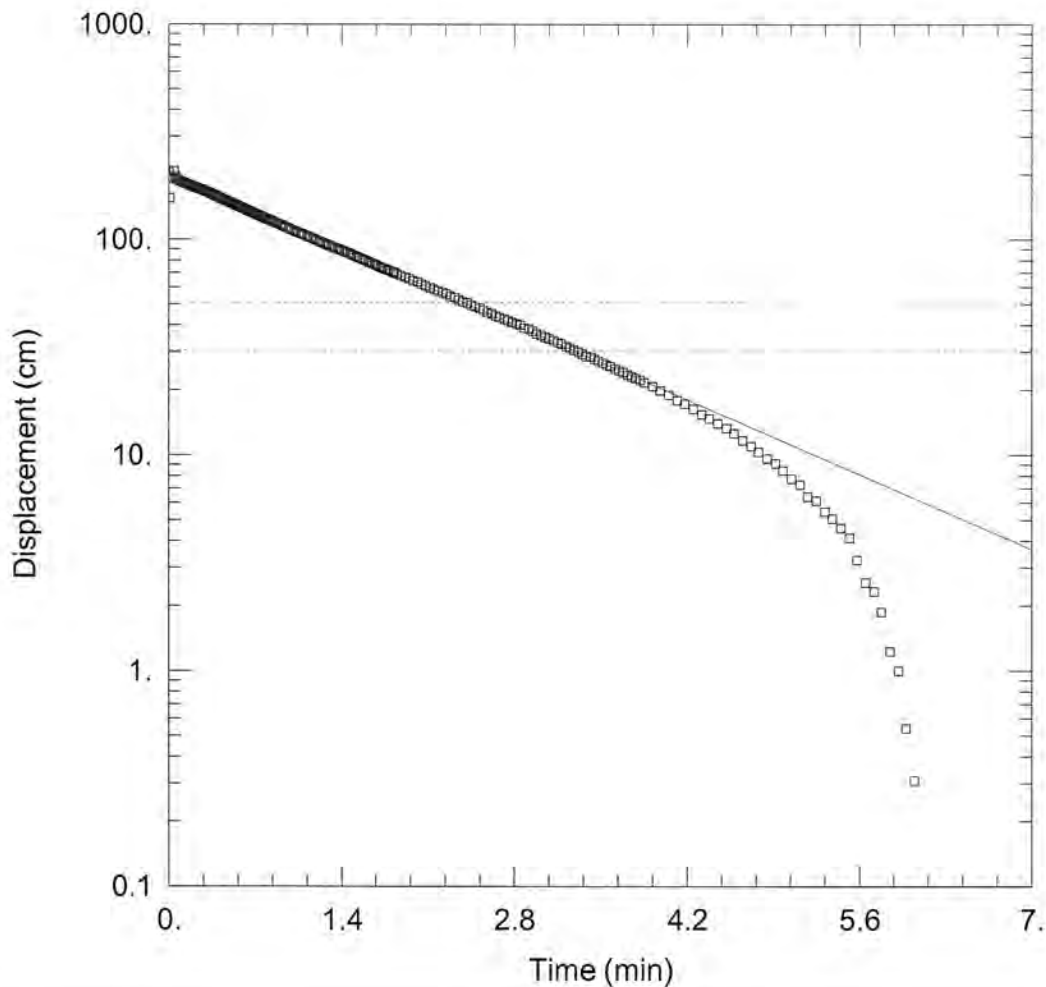
Saturated Thickness: 700. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (New Well)

Initial Displacement: 204. cm Static Water Column Height: 436. cm
 Total Well Penetration Depth: 436. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 $K = 0.0003151$ cm/sec $y_0 = 206.7$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\APhase 2b Data Gap\K Testing\Aqtw1 - HCB1.aqt
 Date: 09/10/16 Time: 10:48:35

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: HC-B1
 Test Date: 1-25-16

AQUIFER DATA

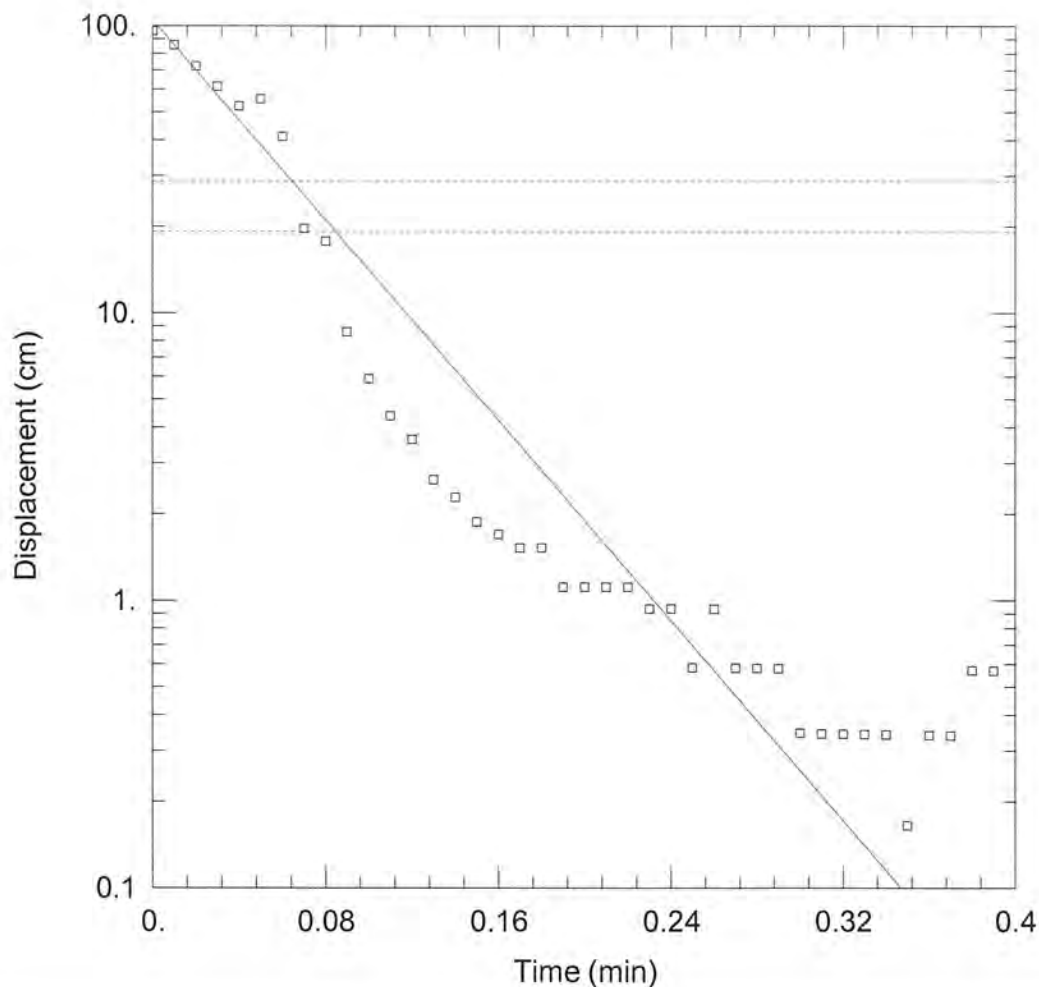
Saturated Thickness: 700. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (New Well)

Initial Displacement: 204. cm Static Water Column Height: 436. cm
 Total Well Penetration Depth: 436. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 $K = 0.000395$ cm/sec $y_0 = 199.3$ cm



MW-6

WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\laPhase 2b Data Gap\K Testing\Aqtw1 - MW6.aqt
 Date: 09/10/16 Time: 11:06:31

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW6
 Test Date: 1-25-16

AQUIFER DATA

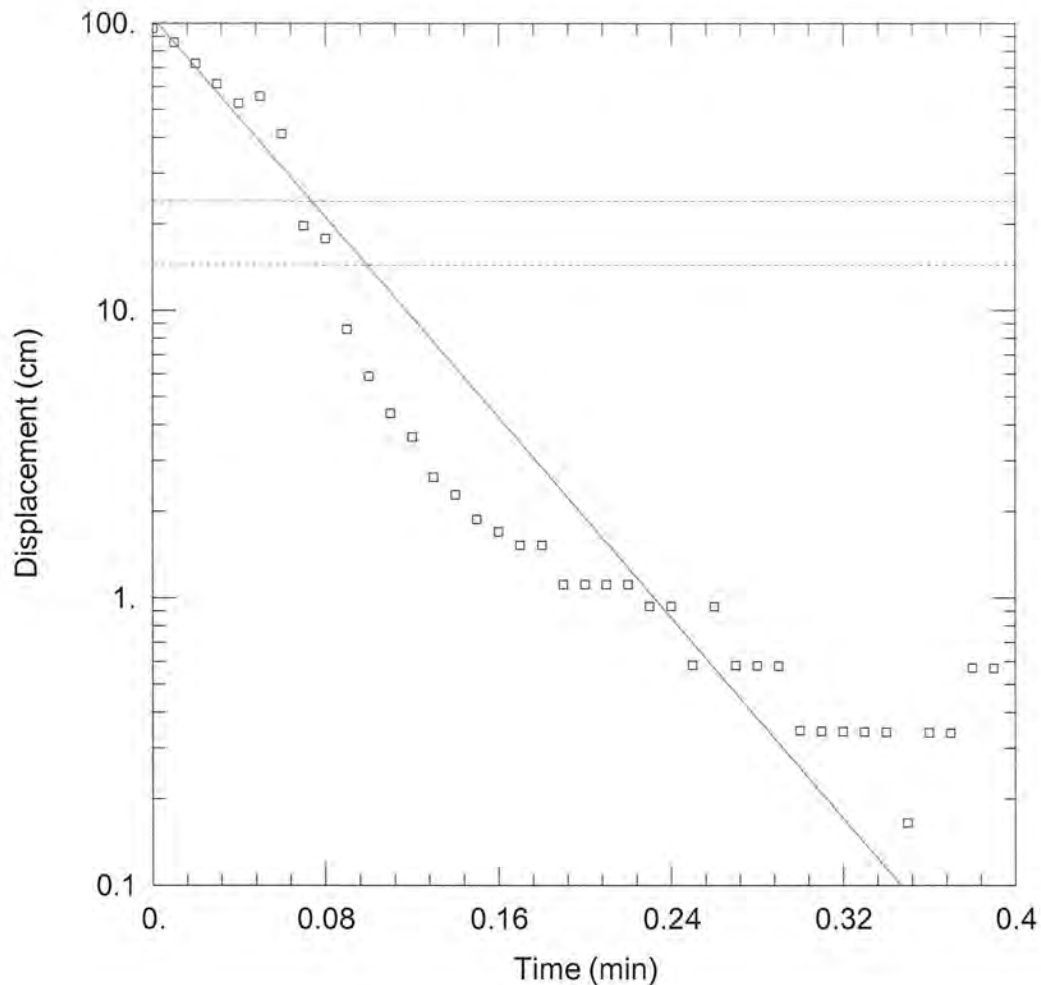
Saturated Thickness: 518. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW6)

Initial Displacement: 95.8 cm Static Water Column Height: 365. cm
 Total Well Penetration Depth: 366. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice
 $K = 0.01081$ cm/sec $y_0 = 104.5$ cm



MW-6

WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\laPhase 2b Data Gap\K Testing\Aqtw1 - MW6.aqt
 Date: 09/10/16 Time: 11:07:04

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW6
 Test Date: 1-25-16

AQUIFER DATA

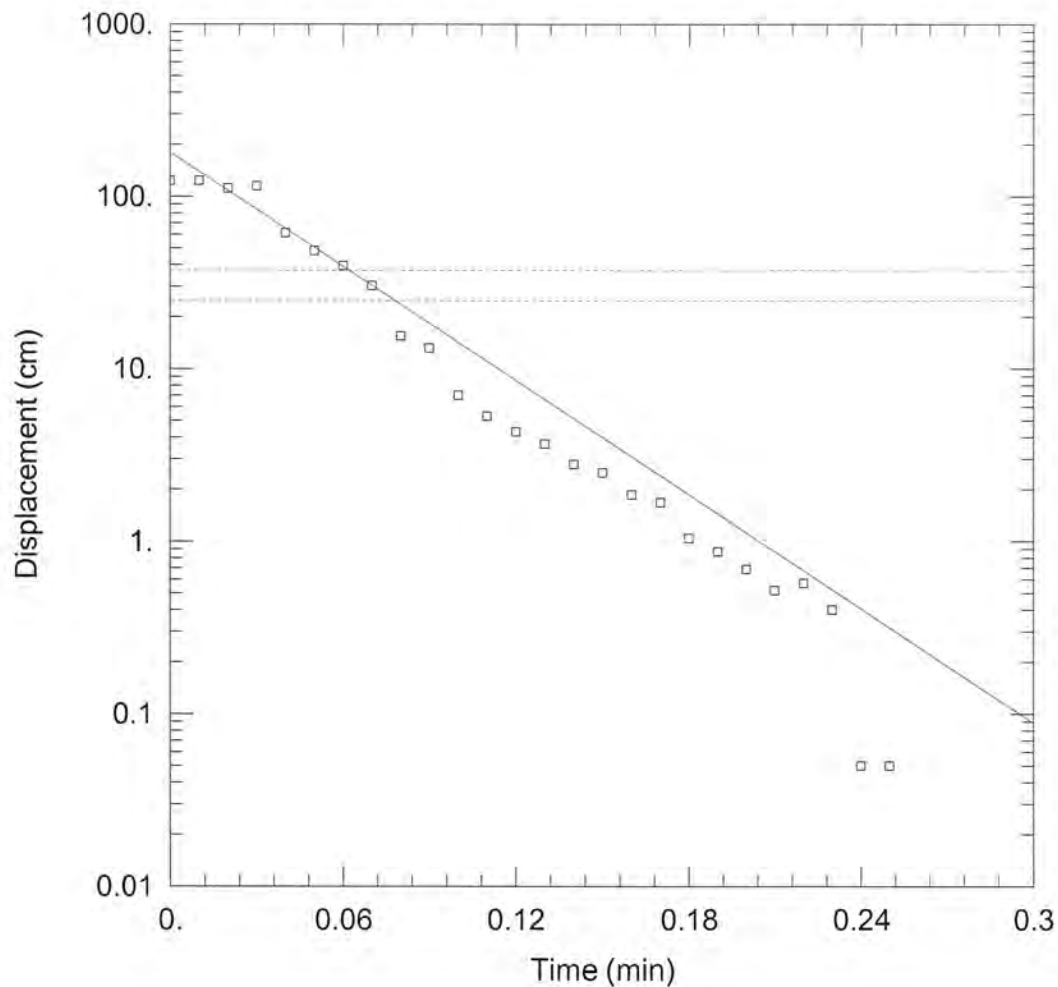
Saturated Thickness: 518. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW6)

Initial Displacement: 95.8 cm Static Water Column Height: 365. cm
 Total Well Penetration Depth: 366. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev
 $K = 0.01386$ cm/sec $y_0 = 104.5$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\Phase 2b Data Gap\K Testing\Aqtw1 - MW7.aqt
 Date: 09/10/16 Time: 11:00:05

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW7
 Test Date: 1-25-16

AQUIFER DATA

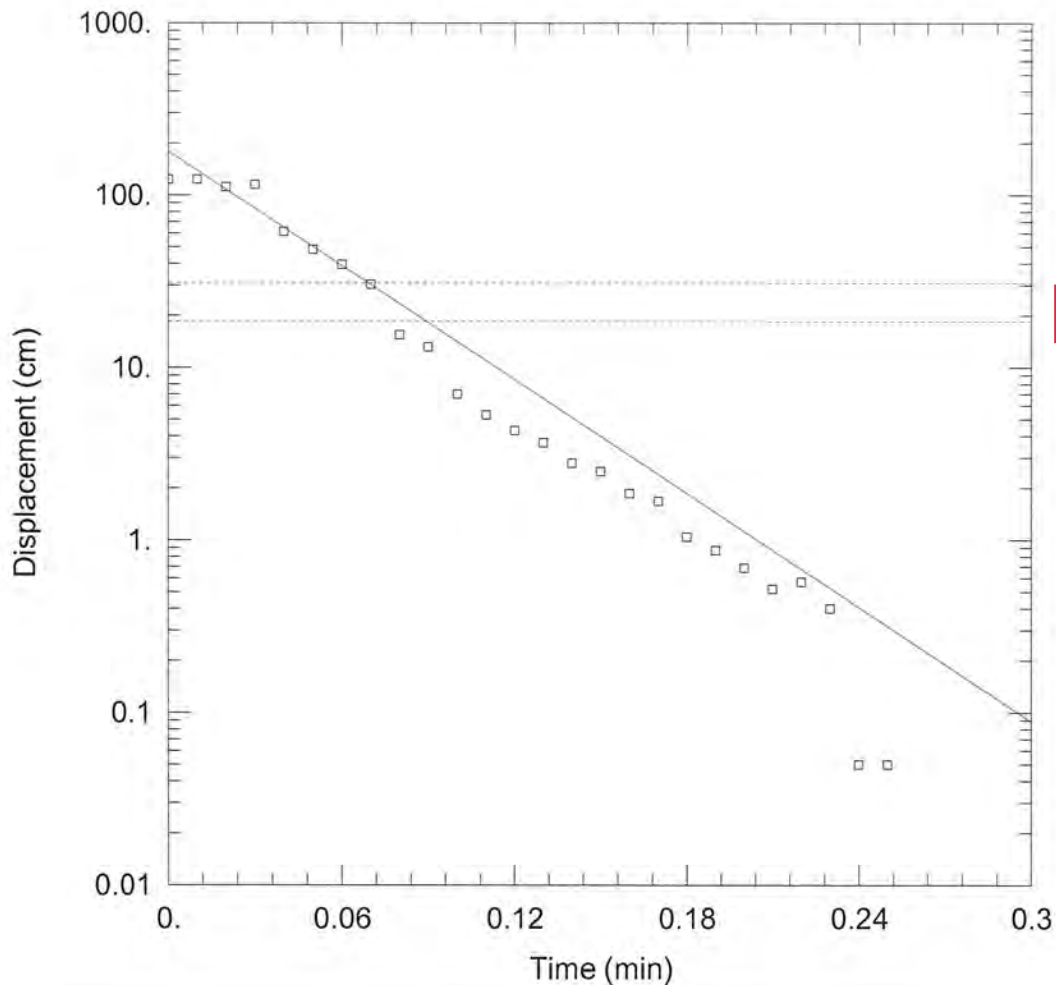
Saturated Thickness: 464. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW7)

Initial Displacement: 123.5 cm Static Water Column Height: 309. cm
 Total Well Penetration Depth: 309. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 $K = 0.01337$ cm/sec $y_0 = 179.1$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\Phase 2b Data Gap\K Testing\Aqtw1 - MW7.aqt
 Date: 09/10/16 Time: 11:00:36

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW7
 Test Date: 1-25-16

AQUIFER DATA

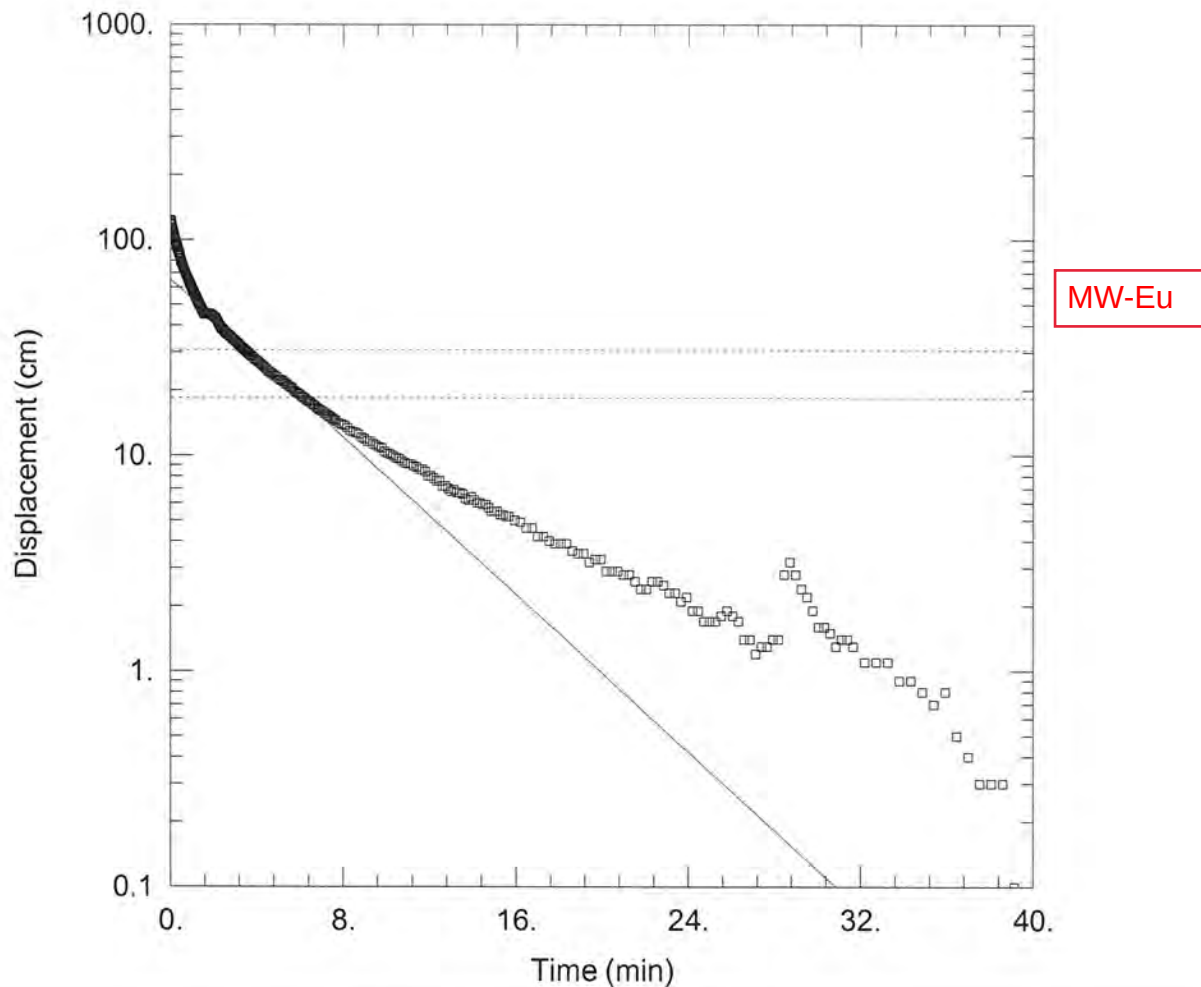
Saturated Thickness: 464. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW7)

Initial Displacement: 123.5 cm Static Water Column Height: 309. cm
 Total Well Penetration Depth: 309. cm Screen Length: 152. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 $K = 0.01754$ cm/sec $y_0 = 179.1$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\APhase 2b Data Gap\K Testing\Aqtw1 - MWEu.aqt
 Date: 09/10/16 Time: 11:03:39

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW-Eu
 Test Date: 1-25-16

AQUIFER DATA

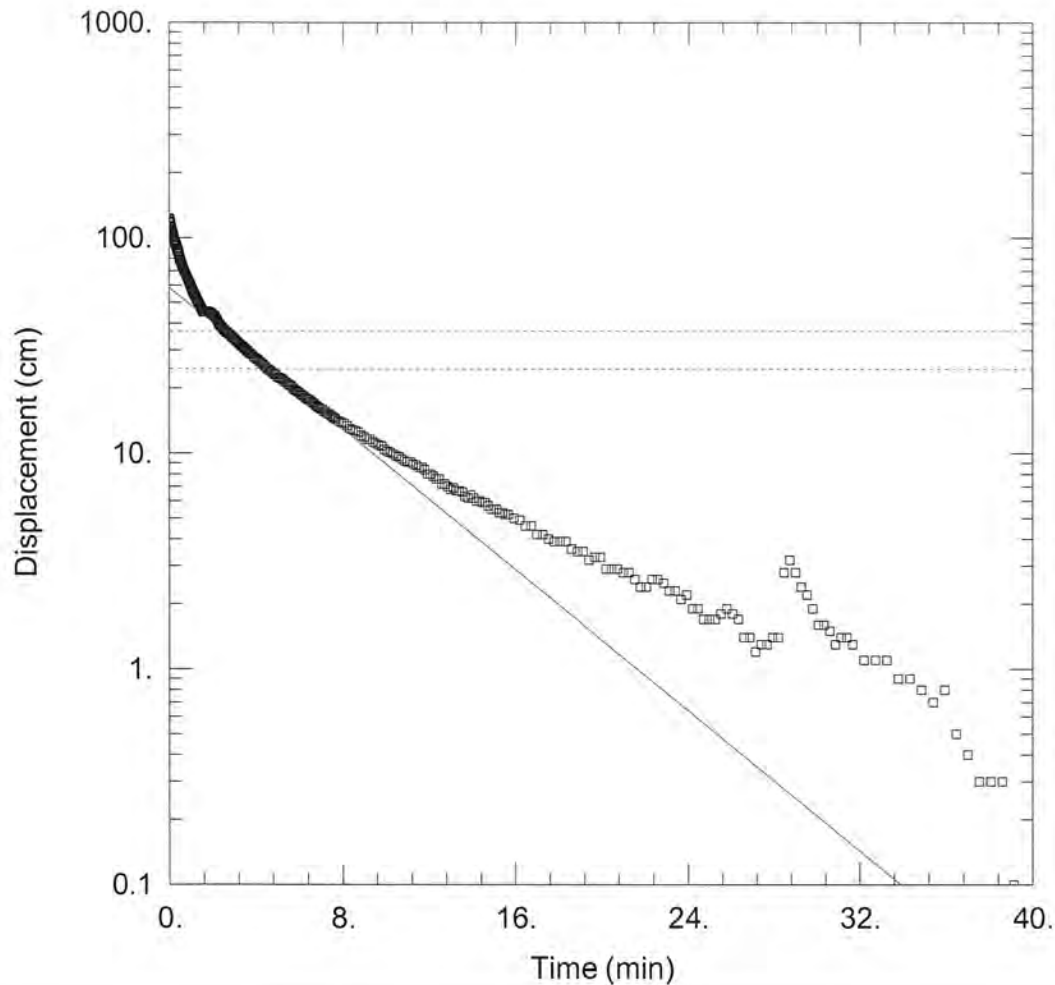
Saturated Thickness: 440. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW-Eu)

Initial Displacement: 123. cm Static Water Column Height: 145. cm
 Total Well Penetration Depth: 305.1 cm Screen Length: 305. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 $K = 8.371E-5$ cm/sec $y_0 = 65.2$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\Phase 2b Data Gap\K Testing\Aqtw1 - MWEu.aqt
 Date: 09/10/16 Time: 11:04:34

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW-Eu
 Test Date: 1-25-16

AQUIFER DATA

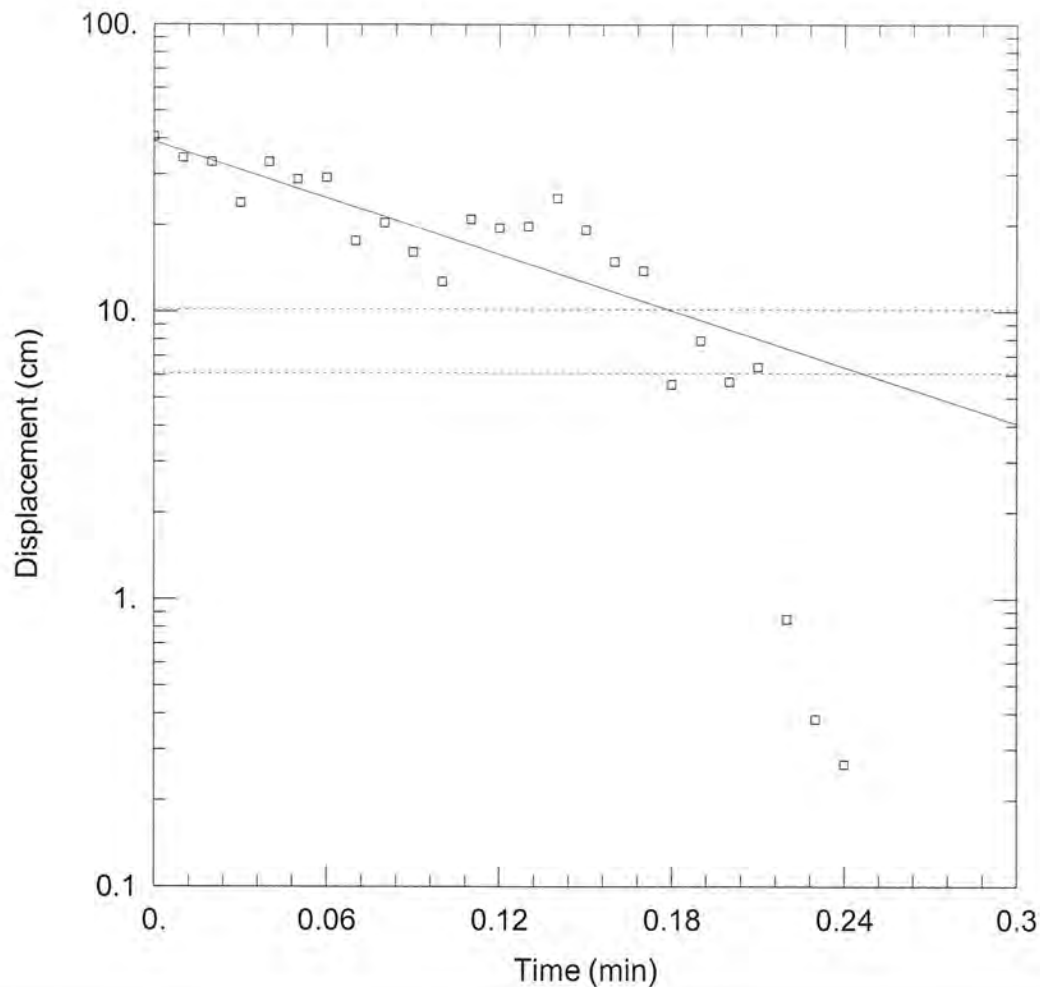
Saturated Thickness: 440. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MW-Eu)

Initial Displacement: 123. cm Static Water Column Height: 145. cm
 Total Well Penetration Depth: 305.1 cm Screen Length: 305. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 $K = 5.324E-5$ cm/sec $y_0 = 58.37$ cm



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\APhase 2b Data Gap\K Testing\Aqtw1 - MWIL.aqt
 Date: 09/10/16 Time: 11:12:10

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW-II
 Test Date: 1-25-16

AQUIFER DATA

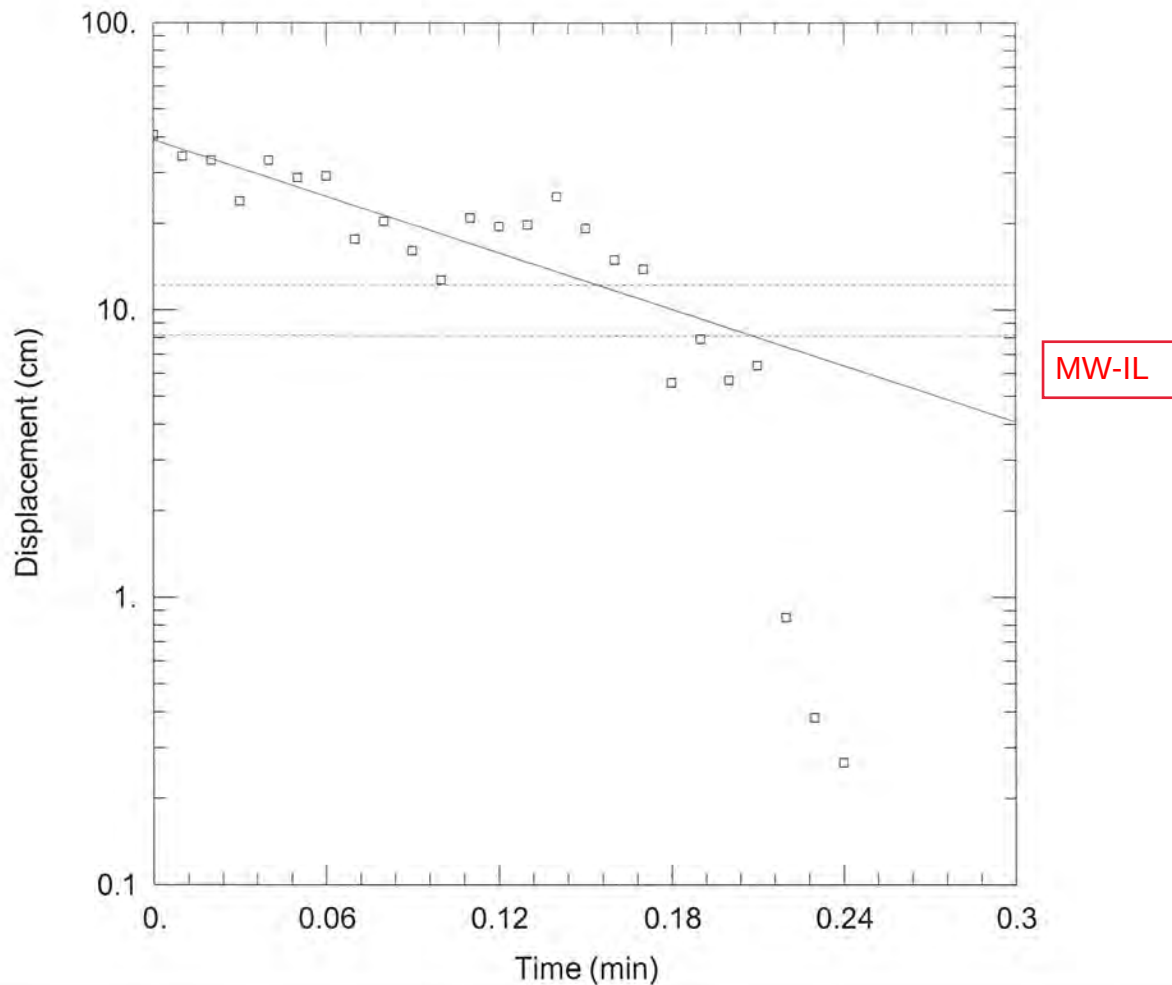
Saturated Thickness: 949. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MWIL)

Initial Displacement: 40.65 cm Static Water Column Height: 812. cm
 Total Well Penetration Depth: 812. cm Screen Length: 305. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 $K = 0.003005 \text{ cm/sec}$ $y_0 = 39.01 \text{ cm}$



WELL TEST ANALYSIS

Data Set: D:\Project Files New\Ind. Container Serv\Phase 2b Data Gap\K Testing\Aqtw1 - MWIL.aqt
 Date: 09/10/16 Time: 11:12:48

PROJECT INFORMATION

Company: DOF
 Client: ICS-NWC
 Project: SUM-008
 Location: Seattle
 Test Well: MW-II
 Test Date: 1-25-16

AQUIFER DATA

Saturated Thickness: 949. cm Anisotropy Ratio (K_z/K_r): 0.5

WELL DATA (MWIL)

Initial Displacement: 40.65 cm Static Water Column Height: 812. cm
 Total Well Penetration Depth: 812. cm Screen Length: 305. cm
 Casing Radius: 2.54 cm Well Radius: 2.54 cm

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 $K = 0.002441$ cm/sec $y_0 = 39.01$ cm

APPENDIX F
SEDIMENT ANALYTICAL DATA TABLES
1991 to 2007 (Various), 2008 (DOF), 2012 (DOF) AND 2014 (DOF) SAMPLE ANALYSES
ICS/NWC – EMBAYMENT SAMPLE LOCATIONS

REMEDIAL INVESTION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON

- **TABLE F.1** – RESULTS OF SURFACE SEDIMENT SAMPLE ANALYSES – 1991 to 2007
- **TABLE F.2a** – RESULTS OF SURFACE SEDIMENT SAMPLE ANALYSES – 2012 and 2014
- **TABLE F.2b** – BaPEq-TEQ CALCULATIONS – Embayment Surface Sediment – 2012 Data
- **TABLE F.3** – SURFACE SEDIMENT GRAIN SIZE ANALYSES – 2012
- **TABLE F.4a** – RESULTS OF SUBSURFACE SEDIMENT SAMPLE ANALYSES – 2012
- **TABLE F.4b** – BaPEq-TEQ CALCULATIONS – Embayment Subsurface Sediment – 2012 Data
- **TABLE F.5** – LDW-SC40 CORE SEDIMENT DATA

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	SS-1 1991 (a) ----- ----- <8 (mg/kg)	SS-2 1991 (a) ----- ----- <8 (mg/kg)	SS-3 1991 (a) ----- ----- <8 (mg/kg)	Sed. 1 May-07 (b) ----- ----- <10 (mg/kg)	Sed. 2 May-07 (b) ----- ----- <10 (mg/kg)	Sed. 3 May-07 (b) ----- ----- <10 (mg/kg)	Sed. 4 May-07 (b) ----- ----- <10 (mg/kg)	Sed. 4 FD May-07 (b) ----- ----- <10 (mg/kg)	Sed. 5 (d) May-07 (b) ----- ----- ----- (mg/kg)
Total Solids (%)	-----	-----	-----	57.7	48.6	85.5	84.1	80.7	71.7
Total Organic Carbon (%)	-----	-----	-----	12	6.45	1.07	0.95	1.02	1.88
Petroleum Hydrocarbons									
Gasoline Range Organics	-----	-----	-----	<20	200	<20	<20	<20	<20
Diesel Range Organics	-----	-----	-----	10000	6800	100	380	210	280
Residual Range Organics	-----	-----	-----	20000	15000	400	1500	650	1200
Total Metals									
Aluminum	-----	-----	-----	-----	-----	-----	-----	-----	-----
Antimony	-----	-----	-----	-----	-----	-----	-----	-----	-----
Arsenic	<16	<22	<18	48.7	20.1	2.6	3.7	2.3	7.8
Barium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Beryllium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cadmium	<0.78	2.1	1.5	36.3	6.69	0.153	0.714	0.603	1.13
Calcium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chromium	60.2	103	89.9	1680	507	15.1	28.5	22.6	48.8
Cobalt	-----	-----	-----	-----	-----	-----	-----	-----	-----
Copper	370	211	289	1090	157	19.6	34.4	28.5	146
Iron	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lead	247	529	422	10400	4280	35.9	137	115	225
Magnesium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Manganese	-----	-----	-----	-----	-----	-----	-----	-----	-----
Mercury	0.22	0.29	1.8	247	59.5	0.21	0.203	0.179	0.296
Molybdenum	-----	-----	-----	-----	-----	-----	-----	-----	-----
Nickel	17.4	26.2	23.6	-----	-----	-----	-----	-----	-----
Potassium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Selenium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Silver	-----	-----	-----	19	0.676	0.174	0.13	0.231	0.918
Sodium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Thallium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tin	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vanadium	-----	-----	-----	-----	-----	-----	-----	-----	-----
Zinc	287	362	280	4580	2140	43.5	175	141	255
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,1,1-Trichloroethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,1,2,2-Tetrachloroethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,1,2-Trichloroethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,1,2-Trichlorotrifluoroethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,1-Dichloroethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,1-Dichloroethene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,1-Dichloropropene	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2,3-Trichlorobenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2,3-Trichloropropane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2,4-Trimethylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dibromo-3-chloropropane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dibromoethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dichloroethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,2-Dichloropropane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
1,3,5-Trimethylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,3-Dichloropropane	-----	-----	-----	-----	-----	-----	-----	-----	-----
1-Chlorobutane	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,2-Dichloropropane	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Chlorotoluene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Hexanone	<0.016	<0.022	<0.018	-----	-----	-----	-----	-----	-----
2-Nitropropane	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Chlorotoluene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acetone	0.075	0.53	<0.018	-----	-----	-----	-----	-----	-----
Allyl chloride	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Bromobenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	SS-1 1991 (a) (mg/kg)	SS-2 1991 (a) (mg/kg)	SS-3 1991 (a) (mg/kg)	Sed. 1 May-07 (b) (mg/kg)	Sed. 2 May-07 (b) (mg/kg)	Sed. 3 May-07 (b) (mg/kg)	Sed. 4 May-07 (b) (mg/kg)	Sed. 4 FD May-07 (b) (mg/kg)	Sed. 5 (d) May-07 (b) (mg/kg)
Bromochloromethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bromodichloromethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Bromoform	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Bromomethane	<0.016	<0.022	<0.018	-----	-----	-----	-----	-----	-----
Carbon disulfide	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Carbon Tetrachloride	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Chlorobenzene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Chloroethane	<0.016	<0.022	<0.018	-----	-----	-----	-----	-----	-----
Chloroform	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Chloromethane	<0.016	<0.022	<0.018	-----	-----	-----	-----	-----	-----
cis-1,2-Dichloroethene	-----	-----	-----	-----	-----	-----	-----	-----	-----
cis-1,3-Dichloropropene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Dibromochloromethane	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Dibromomethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dichlorodifluoromethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dichloromethane	<0.0078	0.011	<0.009	-----	-----	-----	-----	-----	-----
Diethyl ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ethy Methacrylate	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ethylbenzene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Iodomethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Isopropylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Methacrylonitrile	-----	-----	-----	-----	-----	-----	-----	-----	-----
Methyl Acrylate	-----	-----	-----	-----	-----	-----	-----	-----	-----
Methyl ethyl ketone	<0.016	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Methyl isobutyl ketone	-----	-----	-----	-----	-----	-----	-----	-----	-----
Methyl methacrylate	-----	-----	-----	-----	-----	-----	-----	-----	-----
n-Butylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
n-Propylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
p-Cymene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pentachloroethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
sec-Butylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Styrene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Tert-butyl methyl ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
tert-Butylbenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tetrachloroethene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Toluene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
trans-1,2-Dichloroethene	-----	-----	-----	-----	-----	-----	-----	-----	-----
trans-1,3-Dichloropropene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Trichloroethene	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Trichlorofluoromethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vinyl chloride	<0.016	<0.022	<0.018	-----	-----	-----	-----	-----	-----
Xylene (m & p)	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Xylene (o)	<0.0078	<0.011	<0.009	-----	-----	-----	-----	-----	-----
Semivolatile Organic Compounds									
1,2,4-Trichlorobenzene	-----	-----	-----	0.94	<2.1	<0.049	<0.1	<0.1	<0.1
1,2-Dichlorobenzene	-----	-----	-----	0.67	<2.1	<0.049	<0.1	<0.1	<0.1
1,3-Dichlorobenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,4-Dichlorobenzene	-----	-----	-----	<2	1.1	<0.049	<0.1	<0.1	<0.1
1-Methylnaphthalene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dichlorophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dinitrophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dinitrotoluene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,6-Dinitrotoluene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dimethylphenol	-----	-----	-----	<10	<11	<0.25	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4,6-Trichlorophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Chloronaphthalene	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Chlorophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Methylnaphthalene	-----	-----	-----	1.6	0.49	<0.049	0.028	0.032	0.035
2-Methylphenol	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	SS-1 1991 (a) (mg/kg)	SS-2 1991 (a) (mg/kg)	SS-3 1991 (a) (mg/kg)	Sed. 1 May-07 (b) (mg/kg)	Sed. 2 May-07 (b) (mg/kg)	Sed. 3 May-07 (b) (mg/kg)	Sed. 4 May-07 (b) (mg/kg)	Sed. 4 FD May-07 (b) (mg/kg)	Sed. 5 (d) May-07 (b) (mg/kg)
2-Nitroaniline	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Nitrophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,3-Dchlorobenzidine	-----	-----	-----	-----	-----	-----	-----	-----	-----
3-Nitroaniline	-----	-----	-----	-----	-----	-----	-----	-----	-----
4,6-Dinitro-o-cresol	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Bromophenyl phenyl ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Chloro-3-methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Chloroaniline	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Chlorophenyl phenyl ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Methylphenol	-----	-----	-----	0.51	<2.1	0.03	<0.1	<0.1	<0.1
4-Nitroaniline	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Nitrophenol	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acenaphthene	<0.51	<0.73	<0.60	0.47	<2.1	0.012	<0.1	0.041	<0.1
Acenaphthylene	<0.51	<0.73	<0.60	0.48	<2.1	<0.049	<0.1	<0.1	<0.1
Aniline	-----	-----	-----	-----	-----	-----	-----	-----	-----
Anthracene	<0.51	<0.73	<0.60	0.63	0.75	0.012	0.023	0.15	0.035
Benzo(a)anthracene	<0.51	<0.73	<0.60	0.53	4.2	0.019	0.087	0.34	0.067
Benzo(a)pyrene	<0.51	<0.73	<0.60	0.94	3.3	0.019	0.09	0.26	0.07
Benzo(b)fluoranthene	<0.51	<0.73	<0.60	1.1	4.5	0.031	0.14	0.42	0.13
Benzo(e)pyrene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(ghi)perylene	<0.51	<0.73	<0.60	0.91	2.2	0.02	0.088	0.21	0.098
Benzo(k)fluoranthene	<0.51	<0.73	<0.60	0.38	2	0.012	0.053	0.15	0.036
Total Benzo(a)fluoranthenes	<0.51	<0.73	<0.60	1.29	4.2	0.032	0.141	0.36	0.134
Benzoic Acid	-----	-----	-----	<40	<42	<0.98	<2	<2	<2
Benzyl Alcohol	-----	-----	-----	<4	<4.2	<0.098	<0.2	<0.2	<0.2
Biphenyl	-----	-----	-----	-----	-----	-----	-----	-----	-----
bis(2-chloroethoxy)methane	-----	-----	-----	-----	-----	-----	-----	-----	-----
bis(2-chlorethyl)ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
bis(2-chloroisopropyl)ether	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bis(2-ethylhexyl)phthalate	-----	-----	-----	6.5	17	0.14	0.76	0.42	2.2
Butylbenzylphthalate	-----	-----	-----	3.3	<2.1	<0.049	<0.1	<0.1	0.88
Carbazole	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chrysene	<0.51	<0.73	<0.60	0.92	4.8	0.022	0.098	0.29	0.074
Dibenzo(ah)anthracene	<0.51	<0.73	<0.60	0.32	0.57	<0.049	0.02	0.042	<0.1
Dibenzofuran	-----	-----	-----	<2	<2.1	0.0083	<0.1	0.035	<0.1
Diethylphthalate	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1
Dimethylphthalate	-----	-----	-----	0.44	<2.1	<0.049	0.013	<0.1	0.13
Di-N-Butylphthalate	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.12
Di-n-octyl phthalate	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1
Fluoranthene	<0.51	<0.73	<0.60	1.1	7.3	0.054	0.17	1	0.17
Fluorene	<0.51	<0.73	<0.60	0.44	<2.1	0.0098	<0.1	0.081	0.019
Hexachlorobenzene	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1
Hexachlorobutadiene	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	-----	-----	-----	-----	-----	-----	-----	-----	-----
Hexachloroethane	-----	-----	-----	-----	-----	-----	-----	-----	-----
Indeno(123-cd)pyrene	<0.51	<0.73	<0.60	0.77	1.9	0.02	0.085	0.21	0.069
Isophorone	-----	-----	-----	-----	-----	-----	-----	-----	-----
Naphthalene	<0.51	<0.73	<0.60	0.84	<2.1	0.017	0.034	<0.1	0.035
Nitrobenzene	-----	-----	-----	-----	-----	-----	-----	-----	-----
N-Nitrosodimethylamine	-----	-----	-----	<2	<2.1	<0.049	<0.1	<0.1	<0.1
N-Nitroso-di-n-propylamine	-----	-----	-----	-----	-----	-----	-----	-----	-----
N-Nitrosodiphenylamine	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pentachlorophenol	-----	-----	-----	14	<21	<0.49	<1	<1	<1
Phenanthrene	<0.51	<0.73	<0.60	1.4	0.72	0.032	0.057	0.8	0.097
Phenol	-----	-----	-----	0.74	<6.2	0.024	<0.3	<0.3	<0.3
Pyrene	<0.51	-----	-----	1.5	7.7	0.053	0.19	0.82	0.22
Pesticides/PCBs									
2,4'-DDD	-----	-----	-----	<22	<1.8	<0.0099	<0.015	<0.028	0.11
2,4'-DDE	-----	-----	-----	<10	<1	<0.0099	<0.0098	<0.0098	<0.0086
2,4'-DDT	-----	-----	-----	<45	5.9	0.021	0.032	0.044	0.15

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	SS-1 1991 (a) (mg/kg)	SS-2 1991 (a) (mg/kg)	SS-3 1991 (a) (mg/kg)	Sed. 1 May-07 (b) (mg/kg)	Sed. 2 May-07 (b) (mg/kg)	Sed. 3 May-07 (b) (mg/kg)	Sed. 4 May-07 (b) (mg/kg)	Sed. 4 FD May-07 (b) (mg/kg)	Sed. 5 (d) May-07 (b) (mg/kg)
4,4'-DDD	<0.011	<0.380	<0.310	15	2	0.0066	0.022	0.034	0.035
4,4'-DDE	<0.011	<0.380	<0.310	16	3.6	0.02	0.042	0.06	0.21
4,4'-DDT	<0.011	<0.380	<0.310	46	5.8	0.022	0.047	0.051	<0.00099
Aldrin	<0.0053	<0.090	<0.150	<10	<1	<0.0099	<0.0098	<0.0098	<0.00099
alpha-BHC	<0.0053	<0.090	<0.150	----	----	----	----	----	----
alpha-Chlordane	----	----	----	----	----	----	----	----	----
alpha-Endosulfan	----	----	----	----	----	----	----	----	----
beta-BHC	<0.0053	<0.090	<0.150	----	----	----	----	----	----
beta-Endosulfan	----	----	----	----	----	----	----	----	----
delta-BHC	<0.0053	<0.090	<0.150	----	----	----	----	----	----
Chlordane	----	----	----	<100	<12	<0.099	<0.098	<0.11	<0.16
Cis-Nonachlor	----	----	----	----	----	----	----	----	----
Dieldrin	<0.011	<0.380	<0.310	<10	<1	<0.0099	<0.0098	<0.0099	<0.0025
Endosulfan sulfate	<0.011	<0.380	<0.310	----	----	----	----	----	----
Endrin	<0.011	<0.380	<0.310	----	----	----	----	----	----
Endrin aldehyde	<0.011	<0.380	<0.310	----	----	----	----	----	----
Endrin ketone	----	----	----	----	----	----	----	----	----
gamma-BHC	----	----	----	----	----	----	----	----	----
gamma-chlordane	----	----	----	----	----	----	----	----	----
Heptachlor	<0.0053	<0.090	<0.150	<10	<1	<0.0099	<0.0098	<0.0098	<0.00099
Heptachlor epoxide	<0.0053	<0.090	<0.150	----	----	----	----	----	----
Lindane	<0.0053	<0.090	<0.150	<10	<1	<0.0099	<0.0098	<0.0098	0.0017
Methoxychlor	<0.053	<3.800	<1.500	----	----	----	----	----	----
Mirex	----	----	----	----	----	----	----	----	----
Oxychlordane	----	----	----	----	----	----	----	----	----
Toxaphene	<0.110	<3.800	<3.100	----	----	----	----	----	----
Trans-Nonachlor	----	----	----	----	----	----	----	----	----
PCB 1016	<0.0053	<1.900	<1.500	<100	<10	<0.099	<0.098	<0.98	<0.99
PCB 1221	<0.0053	<1.900	<1.500	<200	<20	<0.2	<0.2	<2.0	<2
PCB 1232	<0.0053	<1.900	<1.500	<100	<10	<0.099	<0.098	<0.98	<0.99
PCB 1242	<0.0053	<1.900	<1.500	850	70	0.21	0.89	2.7	0.6
PCB 1248	<0.0053	<1.900	<1.500	<100	<10	<0.099	<0.098	<0.98	<0.99
PCB 1254	<0.0053	<1.900	<1.500	1500	120	0.36	0.74	2	1.3
PCB 1260	0.22	4.2	0.94	580	41	0.22	0.3	<0.98	1.7
Total PCBs	0.22	4.2	0.94	2930	231	0.79	1.93	4.7	3.6
Dioxin/Furans (ng/kg)									
1,2,3,4,6,7,8-HpCDD	----	----	----	----	----	----	----	----	----
1,2,3,4,6,7,8-HpCDF	----	----	----	----	----	----	----	----	----
1,2,3,4,7,8,9-HpCDF	----	----	----	----	----	----	----	----	----
1,2,3,4,7,8-HxCDD	----	----	----	----	----	----	----	----	----
1,2,3,4,7,8-HxCDF	----	----	----	----	----	----	----	----	----
1,2,3,6,7,8-HxCDD	----	----	----	----	----	----	----	----	----
1,2,3,6,7,8-HxCDF	----	----	----	----	----	----	----	----	----
1,2,3,7,8,9-HxCDD	----	----	----	----	----	----	----	----	----
1,2,3,7,8,9-HxCDF	----	----	----	----	----	----	----	----	----
1,2,3,7,8-PeCDD	----	----	----	----	----	----	----	----	----
1,2,3,7,8-PeCDF	----	----	----	----	----	----	----	----	----
2,3,4,6,7,8-HxCDF	----	----	----	----	----	----	----	----	----
2,3,4,7,8-PeCDF	----	----	----	----	----	----	----	----	----
2,3,7,8-TCDD	----	----	----	----	----	----	----	----	----
2,3,7,8-TCDF	----	----	----	----	----	----	----	----	----
OCDD	----	----	----	----	----	----	----	----	----
OCDF	----	----	----	----	----	----	----	----	----
TEQ (h)	----	----	----	----	----	----	----	----	----

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

ICS/NW Cooperage Site
Seattle, WA

Location	SS-1	SS-2	SS-3	Sed. 1	Sed. 2	Sed. 3	Sed. 4	Sed. 4 FD	Sed. 5 (d)
Date	1991	1991	1991	May-07	May-07	May-07	May-07	May-07	May-07
Source	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Coordinate X	-----	-----	-----	-----	-----	-----	-----	-----	-----
Coordinate Y	-----	-----	-----	-----	-----	-----	-----	-----	-----
Depth (cm)	<8	<8	<8	<10	<10	<10	<10	<10	-----
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Other Compounds									
Dibutyltin as ion	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monobutyltin as ion	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tetrabutyltin as ion	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tributyltin as ion	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: nd - Not detected
 TR - Trace
 (a) - SAIC Feb. 2007
 (b) - SAIC July 2007
 (c) - LDW Round 1 RI
 (d) - Outfall sediment
 (e) - EPA SI
 (f) - LDW RI

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location	LDW SS84	DR139	B5a-2	DR157	DR138
Date	Jan-05	Sep-98	Sep-04	Aug-98	Aug-98
Source	(c)	(e)	(g)	(e)	(e)
Coordinate X	1269997	1270186	1270183	1270346	1270354
Coordinate Y	200324	200341	200299	200349	200326
Depth (cm)	<15	<15	<15	<15	<15
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Total Solids (%)	56.6	-----	66.2	-----	-----
Total Organic Carbon (%)	4.12	2.96	1.4	5.47	0.47
Petroleum Hydrocarbons					
Gasoline Range Organics	-----	-----	-----	-----	-----
Diesel Range Organics	-----	-----	-----	-----	-----
Residual Range Organics	-----	-----	-----	-----	-----
Total Metals					
Aluminum	-----	21000	-----	18000	8700
Antimony	0.3	6	0.74	<10	<10
Arsenic	12.3	9.9	7.4	10	5.2
Barium	-----	74	-----	81	23
Beryllium	-----	0.38	-----	0.32	0.14
Cadmium	2	0.9	0.296	1.2	<0.2
Calcium	-----	5.9	-----	6100	3900
Chromium	122	52	27	55	16
Cobalt	13.1	10	7.7	9	4
Copper	117	86	36.7	83	20
Iron	-----	32000	-----	27000	16000
Lead	615	180	74.7	250	23
Magnesium	-----	8100	-----	7700	3300
Manganese	-----	250	-----	200	280
Mercury	2.46	0.82	0.16	1.6	0.05
Molybdenum	5.1	-----	1.7	-----	-----
Nickel	39	24	16	19	9.7
Potassium	-----	2200	-----	2300	920
Selenium	8	1	0.3	14	8
Silver	1.7	1.1	0.168	1.1	0.11
Sodium	-----	9600	-----	17000	5300
Thallium	<0.30	0.11	0.068	0.1	0.03
Tin	-----	10	-----	9	<4
Vanadium	55.1	71	46.5	67	50
Zinc	417	240	121	250	57
Volatile Organic Compounds					
1,1,1,2-Tetrachloroethane	-----	<0.0033	-----	-----	-----
1,1,1-Trichloroethane	-----	<0.0033	-----	-----	-----
1,1,2,2-Tetrachloroethane	-----	<0.0033	-----	-----	-----
1,1,2-Trichloroethane	-----	<0.0033	-----	-----	-----
1,1,2-Trichlorotrifluoroethane	-----	<0.0033	-----	-----	-----
1,1-Dichloroethane	-----	<0.0033	-----	-----	-----
1,1-Dichloroethene	-----	<0.0033	-----	-----	-----
1,1-Dichloropropene	-----	<0.0033	-----	-----	-----
1,2,3-Trichlorobenzene	-----	<0.0065	-----	-----	-----
1,2,3-Trichloropropane	-----	<0.0033	-----	-----	-----
1,2,4-Trimethylbenzene	-----	<0.0033	-----	-----	-----
1,2-Dibromo-3-chloropropane	-----	<0.016	-----	-----	-----
1,2-Dibromoethane	-----	<0.0033	-----	-----	-----
1,2-Dichloroethane	-----	<0.0033	-----	-----	-----
1,2-Dichloropropane	-----	<0.0033	-----	-----	-----
1,3,5-Trimethylbenzene	-----	<0.0033	-----	-----	-----
1,3-Dichloropropane	-----	<0.0033	-----	-----	-----
1-Chlorobutane	-----	<0.0033	-----	-----	-----
2,2-Dichloropropane	-----	<0.0033	-----	-----	-----
2-Chlorotoluene	-----	<0.0033	-----	-----	-----
2-Hexanone	-----	<0.0065	-----	-----	-----
2-Nitropropane	-----	<0.016	-----	-----	-----
4-Chlorotoluene	-----	<0.0033	-----	-----	-----
Acetone	-----	<0.033	-----	-----	-----
Allyl chloride	-----	<0.0033	-----	-----	-----
Benzene	-----	<0.0033	-----	-----	-----
Bromobenzene	-----	<0.0033	-----	-----	-----

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	LDW SS84 Jan-05 (c) 1269997 200324 <15 (mg/kg)	DR139 Sep-98 (e) 1270186 200341 <15 (mg/kg)	B5a-2 Sep-04 (g) 1270183 200299 <15 (mg/kg)	DR157 Aug-98 (e) 1270346 200349 <15 (mg/kg)	DR138 Aug-98 (e) 1270354 200326 <15 (mg/kg)
Bromochloromethane	----	<0.0033	----	----	----
Bromodichloromethane	----	<0.0033	----	----	----
Bromoform	----	<0.0065	----	----	----
Bromomethane	----	<0.016	----	----	----
Carbon disulfide	----	<0.0065	----	----	----
Carbon Tetrachloride	----	<0.0033	----	----	----
Chlorobenzene	----	<0.0033	----	----	----
Chloroethane	----	<0.0065	----	----	----
Chloroform	----	<0.0033	----	----	----
Chloromethane	----	<0.0033	----	----	----
cis-1,2-Dichloroethene	----	<0.0033	----	----	----
cis-1,3-Dichloropropene	----	<0.0035	----	----	----
Dibromochloromethane	----	<0.0033	----	----	----
Dibromomethane	----	<0.0033	----	----	----
Dichlorodifluoromethane	----	<0.0033	----	----	----
Dichloromethane	----	<0.016	----	----	----
Diethyl ether	----	<0.0033	----	----	----
Ethy Methacrylate	----	<0.0033	----	----	----
Ethylbenzene	----	<0.0033	----	----	----
Iodomethane	----	<0.0033	----	----	----
Isopropylbenzene	----	<0.016	----	----	----
Methacrylonitrile	----	<0.016	----	----	----
Methyl Acrylate	----	<0.016	----	----	----
Methyl ethyl ketone	----	<0.0065	----	----	----
Methyl isobutyl ketone	----	<0.0065	----	----	----
Methyl methacrylate	----	<0.0065	----	----	----
n-Butylbenzene	----	<0.0033	----	----	----
n-Propylbenzene	----	<0.0033	----	----	----
p-Cymene	----	<0.0033	----	----	----
Pentachloroethane	----	<0.0033	----	----	----
sec-Butylbenzene	----	<0.0033	----	----	----
Styrene	----	<0.0033	----	----	----
Tert-butyl methyl ether	----	<0.0033	----	----	----
tert-Butylbenzene	----	<0.0033	----	----	----
Tetrachloroethene	----	<0.0033	----	----	----
Toluene	----	<0.0033	----	----	----
trans-1,2-Dichloroethene	----	<0.0033	----	----	----
trans-1,3-Dichloropropene	----	<0.0061	----	----	----
Trichloroethene	----	<0.0033	----	----	----
Trichlorofluoromethane	----	<0.0033	----	----	----
Vinyl chloride	----	<0.0033	----	----	----
Xylene (m & p)	----	<0.0065	----	----	----
Xylene (o)	----	<0.0033	----	----	----
Semivolatile Organic Compound					
1,2,4-Trichlorobenzene	<0.29	<0.02	<0.0086	<0.02	<0.02
1,2-Dichlorobenzene	<0.29	<0.02	<0.0086	<0.02	<0.02
1,3-Dichlorobenzene	<0.29	<0.02	<0.0086	<0.02	<0.02
1,4-Dichlorobenzene	<0.29	<0.02	<0.0086	<0.02	<0.02
1-Methylnaphthalene	----	----	0.01	----	----
2,4-Dichlorophenol	<1.4	<0.06	<0.0086	<0.06	<0.06
2,4-Dinitrophenol	<2.9	<0.20	<0.180	<0.20	<0.20
2,4-Dinitrotoluene	<1.4	<0.20	<0.0086	<0.20	<0.20
2,6-Dinitrotoluene	<1.4	<0.20	<0.0086	<0.20	<0.20
2,4-Dimethylphenol	<0.29	<0.02	<0.043	<0.02	<0.02
2,4,5-Trichlorophenol	<1.4	<0.20	<0.0086	<0.20	<0.20
2,4,6-Trichlorophenol	<1.4	<0.20	<0.0086	<0.20	<0.20
2-Chloronaphthalene	<0.29	<0.02	<0.0086	<0.02	<0.02
2-Chlorophenol	<0.29	<0.02	<0.0086	<0.02	<0.02
2-Methylnaphthalene	<0.29	0.07	0.014	0.10	<0.02
2-Methylphenol	<0.29	<0.02	<0.0086	<0.02	<0.02

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	LDW SS84 Jan-05 (c) 1269997 200324 <15 (mg/kg)	DR139 Sep-98 (e) 1270186 200341 <15 (mg/kg)	B5a-2 Sep-04 (g) 1270183 200299 <15 (mg/kg)	DR157 Aug-98 (e) 1270346 200349 <15 (mg/kg)	DR138 Aug-98 (e) 1270354 200326 <15 (mg/kg)
2-Nitroaniline	<1.4	<0.10	<0.018	<0.10	<0.10
2-Nitrophenol	<1.4	<0.10	<0.0086	<0.10	<0.10
3,3-Dichlorobenzidine	<1.4	<0.20	<0.086	<0.20	<0.20
3-Nitroaniline	<1.4	<0.20	<0.018	<0.20	<0.20
4,6-Dinitro-o-cresol	<2.9	<0.20	<0.086	<0.20	<0.20
4-Bromophenyl phenyl ether	<0.29	<0.04	<0.0086	<0.04	<0.04
4-Chloro-3-methylphenol	<1.4	<0.04	<0.0086	<0.04	<0.04
4-Chloroaniline	<1.4	<0.06	<0.0086	<0.06	<0.06
4-Chlorophenyl phenyl ether	<0.29	<0.02	<0.0086	<0.02	<0.02
4-Methylphenol	<0.29	0.03	<0.0086	0.03	<0.02
4-Nitroaniline	<1.4	<0.10	<0.018	<0.10	<0.10
4-Nitrophenol	<1.4	<0.10	<0.086	<0.10	<0.10
Acenaphthene	<0.29	0.18	0.0041	0.05	<0.02
Acenaphthylene	<0.29	<0.02	0.0046	<0.02	<0.02
Aniline	<0.29	-----	<0.018	-----	-----
Anthracene	<0.29	0.46	0.015	0.16	<0.02
Benzo(a)anthracene	0.4	0.33	0.041	0.44	<0.02
Benzo(a)pyrene	0.51	0.31	0.037	0.32	<0.02
Benzo(b)fluoranthene	0.69	0.51	0.054	0.48	0.02
Benzo(e)pyrene	-----	-----	0.044	-----	-----
Benzo(ghi)perylene	0.23	0.22	0.041	0.18	<0.02
Benzo(k)fluoranthene	0.44	0.29	0.046	0.36	<0.02
Total Benzo(a)fluoranthenes	0.67	0.51	0.087	0.54	<0.02
Benzoic Acid	<2.9	<0.20	<0.180	<0.20	<0.20
Benzyl Alcohol	<0.29	<0.050	0.0082	<0.05	<0.05
Biphenyl	-----	-----	0.0041	-----	-----
bis(2-chloroethoxy)methane	<0.29	<0.040	<0.0086	<0.04	<0.04
bis(2-chlorethyl)ether	<0.29	<0.040	<0.0086	<0.04	<0.04
bis(2-chloroisopropyl)ether	<0.29	<0.040	<0.0086	<0.04	<0.04
Bis(2-ethylhexyl)phthalate	4.2	2.5	0.052	2.3	0.03
Butylbenzylphthalate	<0.29	0.11	0.0074	0.09	<0.02
Carbazole	<0.29	0.21	0.0076	0.07	<0.02
Chrysene	0.7	0.48	0.081	0.68	0.03
Dibenzo(ah)anthracene	<0.29	0.08	0.0086	<0.02	<0.02
Dibenzofuran	<0.29	0.06	0.0058	0.03	<0.02
Diethylphthalate	<0.29	<0.020	<0.0086	<0.02	<0.02
Dimethylphthalate	<0.29	0.04	0.0034	0.03	<0.02
Di-N-Butylphthalate	0.38	0.07	0.0072	0.3	<0.02
Di-n-octyl phthalate	<0.29	<0.020	<0.018	<0.02	<0.02
Fluoranthene	1.1	0.82	0.16	0.68	0.03
Fluorene	<0.29	0.14	0.0065	0.05	<0.02
Hexachlorobenzene	<0.017	<0.020	0.0006	<0.02	<0.02
Hexachlorobutadiene	<0.017	<0.020	<0.0086	<0.02	<0.02
Hexachlorocyclopentadiene	<1.4	<0.100	<0.043	0.1	<0.10
Hexachloroethane	<0.29	<0.020	<0.0086	<0.02	<0.02
Indeno(123-cd)pyrene	0.22	0.22	0.0036	0.18	<0.02
Isophorone	<0.29	<0.020	<0.0086	<0.02	<0.02
Naphthalene	<0.29	0.06	0.01	0.05	<0.02
Nitrobenzene	<0.29	<0.020	<0.0086	<0.02	<0.02
N-Nitrosodimethylamine	<0.29	-----	<0.0043	-----	-----
N-Nitroso-di-n-propylamine	<1.4	<0.040	<0.0086	<0.04	<0.04
N-Nitrosodiphenylamine	<0.29	<0.040	<0.0086	<0.04	<0.04
Pentachlorophenol	<1.4	0.1	0.014	0.3	<0.10
Phenanthrene	0.33	0.36	0.031	0.32	<0.02
Phenol	<0.29	0.04	0.024	0.05	<0.02
Pyrene	0.98	0.87	0.13	1.4	0.03
Pesticides/PCBs					
2,4'-DDD	<0.034	-----	<0.014	-----	-----
2,4'-DDE	<0.034	-----	0.0028	-----	-----
2,4'-DDT	<0.46	-----	0.0055	-----	-----

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	LDW SS84 Jan-05 (c) 1269997 200324 <15 (mg/kg)	DR139 Sep-98 (e) 1270186 200341 <15 (mg/kg)	B5a-2 Sep-04 (g) 1270183 200299 <15 (mg/kg)	DR157 Aug-98 (e) 1270346 200349 <15 (mg/kg)	DR138 Aug-98 (e) 1270354 200326 <15 (mg/kg)
4,4'-DDD	<0.54	0.033	0.022	----	----
4,4'-DDE	<0.80	0.14	0.031	----	----
4,4'-DDT	<0.034	<0.011	0.016	----	----
Aldrin	<0.017	<0.010	<0.001	----	----
alpha-BHC	<0.017	<0.010	<0.001	----	----
alpha-Chlordane	<0.017	<0.010	0.0016	----	----
alpha-Endosulfan	<0.017	<0.010	<0.001	----	----
beta-BHC	<0.017	<0.010	<0.0011	----	----
beta-Endosulfan	<0.034	<0.010	0.01	----	----
delta-BHC	<0.017	----	<0.0015	----	----
Chlordane	----	----	----	----	----
Cis-Nonachlor	<0.33	----	----	----	----
Dieldrin	<0.034	0.017	<0.001	----	----
Endosulfan sulfate	<0.034	<0.010	<0.001	----	----
Endrin	<0.034	<0.010	0.0015	----	----
Endrin aldehyde	<0.25	<0.050	<0.0047	----	----
Endrin ketone	<0.034	<0.010	0.006	----	----
gamma-BHC	<0.017	<0.010	0.0013	----	----
gamma-chlordane	<0.017	<0.011	0.016	----	----
Heptachlor	<0.070	<0.010	<0.001	----	----
Heptachlor epoxide	<0.510	<0.011	<0.0062	----	----
Lindane	----	----	----	----	----
Methoxychlor	<0.170	<0.010	<0.0031	----	----
Mirex	<0.034	----	<0.001	----	----
Oxychlordane	<0.034	----	----	----	----
Toxaphene	<1.7	<0.10	<0.054	----	----
Trans-Nonachlor	<0.034	----	----	----	----
PCB 1016	<0.69	<0.020	<0.010	<0.02	<0.02
PCB 1221	<0.69	<0.040	<0.020	<0.04	<0.02
PCB 1232	<0.69	<0.020	<0.010	<0.02	<0.02
PCB 1242	<0.69	0.61	<0.010	2.4	0.092
PCB 1248	12	<0.020	0.60	<0.02	<0.02
PCB 1254	6.8	1.1	0.63	1.3	0.063
PCB 1260	4.3	1.2	0.50	0.98	0.032
Total PCBs	23.1	2.91	1.73	4.68	0.187
Dioxin/Furans (ng/kg)					
1,2,3,4,6,7,8-HpCDD	11400	----	----	----	----
1,2,3,4,6,7,8-HpCDF	2360	----	----	----	----
1,2,3,4,7,8,9-HpCDF	147	----	----	----	----
1,2,3,4,7,8-HxCDD	66.7	----	----	----	----
1,2,3,4,7,8-HxCDF	382	----	----	----	----
1,2,3,6,7,8-HxCDD	401	----	----	----	----
1,2,3,6,7,8-HxCDF	85.8	----	----	----	----
1,2,3,7,8,9-HxCDD	308	----	----	----	----
1,2,3,7,8,9-HxCDF	5.74	----	----	----	----
1,2,3,7,8-PeCDD	57.1	----	----	----	----
1,2,3,7,8-PeCDF	16.5	----	----	----	----
2,3,4,6,7,8-HxCDF	50.9	----	----	----	----
2,3,4,7,8-PeCDF	56	----	----	----	----
2,3,7,8-TCDD	30.6	----	----	----	----
2,3,7,8-TCDF	46.6	----	----	----	----
OCDD	103000	----	----	----	----
OCDF	7320	----	----	----	----
TEQ (h)	412	----	----	----	----

TABLE F.1 - Results of Surface Sediment Sample Analyses - 1991 to 2007ICS/NW Cooperage Site
Seattle, WA

Location	LDW SS84	DR139	B5a-2	DR157	DR138
Date	Jan-05	Sep-98	Sep-04	Aug-98	Aug-98
Source	(c)	(e)	(g)	(e)	(e)
Coordinate X	1269997	1270186	1270183	1270346	1270354
Coordinate Y	200324	200341	200299	200349	200326
Depth (cm)	<15	<15	<15	<15	<15
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Other Compounds					
Dibutyltin as ion	-----	-----	0.01	-----	-----
Monobutyltin as ion	-----	-----	0.0052	-----	-----
Tetrabutyltin as ion	-----	-----	<0.0016	-----	-----
Tributyltin as ion	-----	-----	0.0064	-----	-----

Notes: nd - Not detected
 TR - Trace
 (a) - SAIC Feb. 2007
 (b) - SAIC July 2007
 (c) - LDW Round 1 RI
 (d) - Outfall sediment
 (e) - EPA SI
 (f) - LDW RI

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

 ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Collection Date	Comments	ARI Delivery Group	% solids %	Specific gravity SU	Wet density lb/ft ³	Moisture content %	Dry density lb/ft ³	TOC %	Antimony mg/kg, dry	Arsenic mg/kg, dry
Screening Levels										na	7
ICS-DSS-01-SE	12/10/12		VW14	77	----	----	----	----	2.65	0.5 J_R	61.1
ICS-DSS-02-SE	7/3/12		VB16	76	----	137.1	17.0	117.2	3.24	0.2 U	10.0
ICS-DSS-03-SE	7/3/12		VB16	49	----	----	----	----	3.45	0.4 U	17.2
ICS-DSS-04-SE	7/3/12		VB16	64	2.60	103.6	55.1	66.8	2.83	0.7 J_R	13.2
ICS-DUP-02-SE	7/3/12	field dup of 04	VB16	61	----	----	----	----	7.86	1.2 J_R	17.6
ICS-DSS-05-SE	7/3/12		VB16	65	----	----	----	----	2.62	0.5 J_R	28.8
ICS-DSS-06-SE	7/3/12		VB16	62	----	----	----	----	5.55	0.5 J_R	7.1
ICS-DSS-07-SE	7/3/12		VB16	76	----	----	----	----	3.34	0.3 U	10.6
ICS-DSS-08-SE	7/3/12		VB16	76	----	106.4	11.3	95.6	2.92	0.3 J_R	13.9
ICS-DSS-09-SE	7/3/12		VB16	71	----	----	----	----	18.1	1.9 J_R	13.0
ICS-DSS-10-SE	7/3/12		VB16	79	----	----	----	----	0.553	0.3 U	4.2
ICS-DSS-11-SE	7/3/12		VB16	69	----	----	----	----	2.73	0.3 J_R	8.1
ICS-DSS-12-SE	7/3/12		VB16	69	----	----	----	----	30.9	2.2 J_R	8.3
ICS-DSS-13-SE	7/3/12		VB16	77	----	----	----	----	1.85	0.2 U	3.4
ICS-DUP-01-SE	7/3/12	field dup of 13	VB16	79	----	----	----	----	1.55	0.2 U	3.3
ICS-DSS-14-SE	7/2/12		VB00	62	----	----	----	----	4.96	0.5 J_R	23.2
ICS-DSS-15-SE	7/3/12		VB16	59	----	----	----	----	4.25	0.3 U	19.1
ICS-DSS-16-SE	7/2/12		VB00	83	----	----	----	----	1.05	0.2 U	14.9
ICS-DSS-17-SE	7/2/12		VB00	74	2.69	111.7	30.8	85.4	2.32	0.3 U	8.3
ICS-DSS-18-SE	7/2/12		VB00	70	----	----	----	----	2.66	0.3 U	21.0
ICS-DSS-19-SE	7/2/12		VB00	48	2.61	88.8	105.7	43.2	2.93	0.8 J_R	16.4
ICS-DSS-20-SE	7/2/12		VB00	65	----	----	----	----	1.54	0.3 U	12.1
ICS-DSS-21-SE	7/2/12		VB00	53	----	----	----	----	1.92	0.4 U	10.4
ICS-DSS-22-SE	7/2/12		VB00	68	----	----	----	----	1.22	0.3 U	7.0
ICS-DSS-23-SE	7/2/12		VB00	82	----	----	----	----	1.42	0.2 U	3.1
ICS-DSS-24-SE	7/3/12		VB16	45	----	----	----	----	2.64	0.4 U	11.1
ICS-DSS-25-SE	7/3/12		VB16	44	----	----	----	----	3.48	0.4 U	9.7
ICS-DSS-26-SE	7/2/12		VB00	70	----	----	----	----	2.63	0.6 J_R	12.6
ICS-DDS26-SE	9/19/14		ZA94	68	----	----	----	----	----	----	20 U
ICS-DSS-27-SE	7/2/12		VB00	69	----	----	----	----	2.92	0.3 U	17.1
ICS-DSS-28-SE	7/2/12		VB00	64	----	----	----	----	2.24	0.3 U	14.5
ICS-DSS-29-SE	7/2/12		VB00	78	----	----	----	----	1.93	0.2 U	8.9
ICS-DSS-30-SE	7/2/12		VB00	80	2.73	102.5	21.6	84.3	0.442	0.2 U	5.4
ICS-DSS-31-SE	7/3/12		VB16	61	----	----	----	----	----	----	----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Collection Date	Comments	ARI Delivery Group	% solids %	Specific gravity SU	Wet density lb/ft ³	Moisture content %	Dry density lb/ft ³	TOC %	Antimony mg/kg, dry	Arsenic mg/kg, dry
Screening Levels										na	7
ICS-DSS-32-SE	7/3/12		VB16	35	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	9/19/14		ZA94	48	-----	-----	-----	-----	-----	-----	30 U
ICS-SED2	9/19/14		ZA94	53	-----	-----	-----	-----	-----	-----	30
ICS-SED4	9/19/14		ZA94	73	-----	-----	-----	-----	-----	-----	6 U
ICS-LDWSS84	9/19/14		ZA94	54	-----	-----	-----	-----	-----	-----	9 U
ICS-B5a2	9/19/14		ZA94	62	-----	-----	-----	-----	-----	-----	8 U

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry	Lead mg/kg, dry	Mercury mg/kg, dry	Nickel mg/kg, dry	Silver mg/kg, dry	Zinc mg/kg, dry	Total Petroleum Hydrocarbons		
										Diesel-range mg/kg, dry	Lube-range mg/kg, dry	Total mg/kg, dry
Screening Levels	na	5.1	260	390	450	0.41	na	6.1	410	-----	-----	2000
ICS-DSS-01-SE	0.02 U	0.3	35.2	96.3	69.8	0.17	35.8	0.2 U	125	84	550	634
ICS-DSS-02-SE	0.2 U	0.2	26.4	88.3	35.5	0.12	32.1	0.2 U	98	52	280	332
ICS-DSS-03-SE	0.4 U	0.6	37	90	92.3	0.45	27	0.4 U	289	120	440	560
ICS-DSS-04-SE	0.3 U	5.3	167	217	1250	2.42	27.7	0.3	1270	1400	3000	4400
ICS-DUP-02-SE	0.3 U	7.4	298	224	2190	2.20	32.8	0.5	1590	1400	2600	4000
ICS-DSS-05-SE	0.3 U	0.7	84.6	144	150	0.28	41.3	0.3 U	190	76	240	316
ICS-DSS-06-SE	0.3 U	2.6	612	115	633	7.7	25.9	1.3	400	570	1600	2170
ICS-DSS-07-SE	0.3 U	0.2	24.0	36.1	75.6	0.25	26.6	0.3 U	141	17	83	100
ICS-DSS-08-SE	0.3 U	0.9	70.5	91.1	201	3.8	26.7	0.3	195	200	620	820
ICS-DSS-09-SE	0.3 U	8.2	288	260	5920	14.3	39.1	1.3	1220	6700	15,000	21700
ICS-DSS-10-SE	0.3 U	0.3	28.4	24.5	59.0	0.21	25.2	0.3 U	74	14	56	70
ICS-DSS-11-SE	0.3 U	1.0	90.6	67.1	626	0.71	31.8	0.3 U	281	56	220	276
ICS-DSS-12-SE	0.3 U	4.3	1110	115	3930	0.16	151	0.4	3820	12,000	42,000	54000
ICS-DSS-13-SE	0.3	0.2	25.0	24.8	42.1	0.12	25.3	0.2 U	52	43	90	133
ICS-DUP-01-SE	0.3	0.1	20.1	22.5	48.3	0.11	21.6	0.2 U	55	40	67	107
ICS-DSS-14-SE	0.3 U	0.5	36.1	70.8	201	0.17	34.9	0.3 U	188	24	130	154
ICS-DSS-15-SE	0.4	0.4	23.2	49.4	55.5	0.21	20.5	0.3 U	168	68	280	348
ICS-DSS-16-SE	0.2 U	0.1	15.3	24.6	18.0	0.03	23.5	0.2 U	66	8.5	35	43.5
ICS-DSS-17-SE	0.3	0.1 U	32	40.3	44.4	0.15	28.7	0.3 U	75	24	100	124
ICS-DSS-18-SE	0.3 U	0.3	21.2	46.8	55.5	0.20	24.7	0.3 U	150	18	83	101
ICS-DSS-19-SE	0.4 U	1.3	65	103	343	1.73	26	1.2	318	240	710	950
ICS-DSS-20-SE	0.4	0.2	26	37.4	42.3	0.18	18.0	0.3 U	109	28	88	116
ICS-DSS-21-SE	0.4 U	0.4	29	54.4	55.9	0.54	20.5	0.4 U	146	49	150	199
ICS-DSS-22-SE	0.4	0.3	21	33.4	22.3	0.17	18.2	0.3	81	58	170	228
ICS-DSS-23-SE	0.2 U	0.2	24.3	38.9	29.5	0.08	26.9	0.2 U	58	34	95	129
ICS-DSS-24-SE	0.5	0.2 U	27	53	59.7	0.22	19	0.4 U	117	52	180	232
ICS-DSS-25-SE	0.4 U	0.4	28	58	50.4	0.34	22	0.4 U	130	77	230	307
ICS-DSS-26-SE	0.3 U	1.6	268	182	1690	0.83	70.8	0.4	1340	54	180	234
ICS-DDS26-SE	-----	0.90	151	-----	665	0.47	-----	1 U	-----	-----	-----	-----
ICS-DSS-27-SE	0.3 U	0.6	39.6	120	683	0.92	26.5	0.5	242	150	520	670
ICS-DSS-28-SE	0.5	0.6	33	55.5	47.5	0.34	25.7	0.60	121	170	570	740
ICS-DSS-29-SE	0.2 U	0.3	15.7	30.3	74.1	0.05	17.7	0.2 U	100	11	120	131
ICS-DSS-30-SE	0.2 U	0.1 U	13.2	17.4	16.3	0.06	10.5	0.2 U	62	6.3 U	14	14
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry	Lead mg/kg, dry	Mercury mg/kg, dry	Nickel mg/kg, dry	Silver mg/kg, dry	Zinc mg/kg, dry	Total Petroleum Hydrocarbons		
										Diesel-range mg/kg, dry	Lube-range mg/kg, dry	Total mg/kg, dry
Screening Levels	na	5.1	260	390	450	0.41	na	6.1	410	-----	-----	2000
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	47	2940	-----	6330	61	-----	5	-----	-----	-----	-----
ICS-SED2	-----	3.7	465	-----	4080	9.0	-----	1 U	-----	-----	-----	-----
ICS-SED4	-----	0.3 U	17.7	-----	30	0.06	-----	0.4 U	-----	-----	-----	-----
ICS-LDWSS84	-----	1.0	60.7	-----	226	0.78	-----	0.5 U	-----	-----	-----	-----
ICS-B5a2	-----	0.60	55.5	-----	136	0.18	-----	0.5 U	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable

lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Phenol	2-Chloro-phenol	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Benzyl alcohol	1,2-Dichloro-benzene	2-Methyl-phenol	4-Methyl-phenol	N-Nitroso-di-N-propylamine
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	420	na	na	(a)	57	(a)	63	670	na
ICS-DSS-01-SE	35 J	58 U	14 U	14 U	58 U	14 U	14 U	70 J	58 U
ICS-DSS-02-SE	55 U	55 U	14 U	14 U	55 U	14 U	14 U	110 U	55 U
ICS-DSS-03-SE	28	19 U	4.8 U	4.1 J	62	4.8 U	4.6 J	13 J	19 U
ICS-DSS-04-SE	83 U	83 U	21 U	21 U	83 U	21 U	21 U	79 J	83 U
ICS-DUP-02-SE	50 J	84 U	21 U	21 U	34 J	21 U	12 J	46 J	84 U
ICS-DSS-05-SE	18 J	20 U	5.0 U	4.4 J	29	5.0 U	5.0 U	14 J	20 U
ICS-DSS-06-SE	88	20 U	5.0 U	3.4 J	25	6.3	16	32 J	20 U
ICS-DSS-07-SE	19 U	19 U	4.7 U	4.7 U	9.0 J	3.4 J	4.7 U	37 U	19 U
ICS-DSS-08-SE	55	19 U	4.8 U	12	12 J	13	4.9	14 J	19 U
ICS-DSS-09-SE	650 J	720 U	900	7600	640 J	12,000	620	1900	720 U
ICS-DSS-10-SE	18 U	18 U	4.6 U	4.6 U	7.1 J	4.6 U	4.6 U	37 U	18 U
ICS-DSS-11-SE	66	19 U	4.8 U	4.8	18 J	9.4	12	42	19 U
ICS-DSS-12-SE	5700	1700 U	440 U	440 U	20,000	1000	440 U	3500 U	14,000
ICS-DSS-13-SE	14 J	19 U	2.4 J	3.9 J	7.3 J	4.1 J	4.7 U	38 U	19 U
ICS-DUP-01-SE	14 J	19 U	4.8 U	2.5 J	8.8 J	4.8 U	4.8 U	38 U	19 U
ICS-DSS-14-SE	31 J _Q	20 U	4.9 U	4.9 U	40	4.9 U	2.8 J	39 U	20 U
ICS-DSS-15-SE	28	20 U	5.0 U	4.3 J	30	4.3 J	3.8 J	27 J	20 U
ICS-DSS-16-SE	19 U	19 U	4.8 U	4.8 U	8.5 J	4.8 U	4.8 U	39 U	19 U
ICS-DSS-17-SE	16 J	18 U	4.6 U	4.6 U	7.4 J	4.6 U	21	12 J	18 U
ICS-DSS-18-SE	12 J	19 U	4.7 U	4.7 U	21	4.7 U	4.7 U	38 U	19 U
ICS-DSS-19-SE	140 J _Q	20 U	12	30	110	17	22	90	20 U
ICS-DSS-20-SE	44 J _Q	19 U	4.7 U	4.7 U	52	4.7 U	4.7 U	11 J	19 U
ICS-DSS-21-SE	67 J _Q	19 U	2.5 J	8.1	200	3.0 J	18	29 J	19 U
ICS-DSS-22-SE	11 J	19 U	4.8 U	4.6 J	9.6 J	4.8 U	4.8 U	38 U	19 U
ICS-DSS-23-SE	20 U	20 U	4.9 U	4.9 U	8.2 J	4.9 U	4.9 U	39 U	20 U
ICS-DSS-24-SE	19 U	19 U	4.8 U	3.5 J	84	4.8 U	3.5 J	14 J	19 U
ICS-DSS-25-SE	32	20 U	4.9 U	5.4	170	3.8 J	4.9 U	18 J	20 U
ICS-DSS-26-SE	190 J _Q	18 U	4.6 U	8.5	33	16	43	71	18 U
ICS-DDS26-SE	----	----	----	----	----	----	----	----	----
ICS-DSS-27-SE	35 J _Q	18 U	4.6 U	4.4 J	19	3.6 J	6.6	17 J	18 U
ICS-DSS-28-SE	28 J _Q	19 U	5.6	5.8	51	2.4 J	4.7 U	17 J	19 U
ICS-DSS-29-SE	18 U	18 U	4.6 U	4.6 U	7.3 J	4.6 U	4.6 U	37 U	18 U
ICS-DSS-30-SE	19 U	19 U	4.8 U	4.8 U	10 J	4.8 U	4.8 U	38 U	19 U
ICS-DSS-31-SE	----	----	----	----	----	----	----	----	----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Phenol	2-Chloro-phenol	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Benzyl alcohol	1,2-Dichloro-benzene	2-Methyl-phenol	4-Methyl-phenol	N-Nitroso-di-N-propylamine
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	420	na	na	(a)	57	(a)	63	670	na
ICS-DSS-32-SE	----	----	----	----	----	----	----	----	----
ICS-SED1	----	----	----	----	----	----	----	----	----
ICS-SED2	----	----	----	----	----	----	----	----	----
ICS-SED4	----	----	----	----	----	----	----	----	----
ICS-LDWSS84	----	----	----	----	----	----	----	----	----
ICS-B5a2	----	----	----	----	----	----	----	----	----

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry
Screening Levels	na	na	na	29	650	na	(a)	(a)	na
ICS-DSS-01-SE	58 U	58 U	58 U	29 J	1200 U	580 U	14 U	52 J	290 U
ICS-DSS-02-SE	55 U	55 U	55 U	55 U	1100 U	550 U	14 U	55 U	270 U
ICS-DSS-03-SE	19 U	19 U	19 U	4.8 J	160 J	190 U	19 U	18 J	97 U
ICS-DSS-04-SE	83 U	83 U	50 J	50 J	1700 U	830 U	15 J	79 J	420 U
ICS-DUP-02-SE	84 U	84 U	50 J	34 J	940 J	840 U	20 J	96	420 U
ICS-DSS-05-SE	20 U	20 U	20 U	20 U	400 U	200 U	5.0 U	20 U	99 U
ICS-DSS-06-SE	20 U	20 U	20 U	11 J	250 J	200 U	6.8	43	99 U
ICS-DSS-07-SE	19 U	19 U	19 U	19 U	370 U	190 U	4.7 U	19 U	93 U
ICS-DSS-08-SE	19 U	19 U	19 U	4.8 J	210 J	190 U	3.6 J	47	96 U
ICS-DSS-09-SE	720 U	720 U	1400 U	830	14,000 U	1100 J	1400	12,000	3600 U
ICS-DSS-10-SE	18 U	18 U	18 U	18 U	370 U	180 U	4.6 U	62	92 U
ICS-DSS-11-SE	19 U	19 U	14 J	14 J	330 J	190 U	15	130	96 U
ICS-DSS-12-SE	1700 U	1700 U	1700 U	4400	35,000 U	17,000 U	440 U	120,000	8700 U
ICS-DSS-13-SE	19 U	19 U	19 U	19 U	380 U	190 U	12	110	94 U
ICS-DUP-01-SE	19 U	19 U	19 U	19 U	380 U	190 U	8.4	82	96 U
ICS-DSS-14-SE	20 U	20 U	20 U	20 U	230 J	200 U	4.9 U	20	97 U
ICS-DSS-15-SE	20 U	20 U	20 U	3.2 J	120 J	200 U	5.0 U	15 J	99 U
ICS-DSS-16-SE	19 U	19 U	19 U	19 U	390 U	190 U	4.8 U	19 U	97 U
ICS-DSS-17-SE	18 U	18 U	18 U	3.4 J	370 U	180 U	4.6 U	130	92 U
ICS-DSS-18-SE	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19 U	94 U
ICS-DSS-19-SE	20 U	20 U	22	20 J	380 J	200 U	22	92	98 U
ICS-DSS-20-SE	19 U	19 U	19 U	3.0 J	1200	190 U	4.7 U	18 J	93 U
ICS-DSS-21-SE	19 U	19 U	19 U	8.9 J	360 J	190 U	2.9 J	41	94 U
ICS-DSS-22-SE	19 U	19 U	19 U	3.0 J	380 U	190 U	4.8 U	64	96 U
ICS-DSS-23-SE	20 U	20 U	20 U	20 U	390 U	200 U	4.6 J	110	98 U
ICS-DSS-24-SE	19 U	19 U	19 U	3.0 J	190 J	190 U	4.8 U	20	97 U
ICS-DSS-25-SE	20 U	20 U	20 U	3.1 J	250 J	200 U	3.0 J	20	99 U
ICS-DSS-26-SE	18 U	18 U	500	13 J	610	20 J	36	180	93 U
ICS-DDS26-SE	----	----	----	----	----	----	----	----	----
ICS-DSS-27-SE	18 U	18 U	21	5.7 J	220 J	180 U	7.0	78	92 U
ICS-DSS-28-SE	19 U	19 U	19 U	3.7 J	120 J	190 U	3.6 J	21	94 U
ICS-DSS-29-SE	18 U	18 U	18 U	18 U	370 U	180 U	4.6 U	18 U	92 U
ICS-DSS-30-SE	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	19 U	96 U
ICS-DSS-31-SE	----	----	----	----	----	----	----	----	----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Hexachloro-ethane	Nitrobenzene	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	1,2,4-Trichloro-benzene	Naphthalene	4-Chloro-3-methylphenol
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	na	na	29	650	na	(a)	(a)	na
ICS-DSS-32-SE	----	----	----	----	----	----	----	----	----
ICS-SED1	----	----	----	----	----	----	----	----	----
ICS-SED2	----	----	----	----	----	----	----	----	----
ICS-SED4	----	----	----	----	----	----	----	----	----
ICS-LDWSS84	----	----	----	----	----	----	----	----	----
ICS-B5a2	----	----	----	----	----	----	----	----	----

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaph-thylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	(a)	na	na	na	(a)	(a)	(a)	(a)	na
ICS-DSS-01-SE	38 J	290 U	290 U	58 U	58 U	58 U	260	67	290 U
ICS-DSS-02-SE	55 U	270 U	270 U	55 U	55 U	55 U	100	30 J	270 U
ICS-DSS-03-SE	16 J	97 U	97 U	19 U	19 U	31	22	18 J	97 U
ICS-DSS-04-SE	75 J	420 U	420 U	83 U	180	58 J	83 U	83 U	420 U
ICS-DUP-02-SE	100	420 U	420 U	84 U	67 J	50 J	84 U	84 U	420 U
ICS-DSS-05-SE	20 U	99 U	99 U	20 U	11 J	23	20 U	20 U	99 U
ICS-DSS-06-SE	80	99 U	99 U	20 U	54	11 J	20 U	20 U	99 U
ICS-DSS-07-SE	19 U	93 U	93 U	19 U	19 U	19 U	19 U	19 U	93 U
ICS-DSS-08-SE	52	96 U	96 U	19 U	500	12 J	19 U	12 J	96 U
ICS-DSS-09-SE	13,000	3600 U	3600 U	720 U	720 U	650 J	4600	3800	3600 U
ICS-DSS-10-SE	12 J	92 U	92 U	18 U	18 U	18 U	18 U	18 U	92 U
ICS-DSS-11-SE	100	96 U	96 U	19 U	60	19 U	19 U	60	96 U
ICS-DSS-12-SE	50,000	8700 U	8700 U	1700 U	1700 U	8700	39,000	26,000	8700 U
ICS-DSS-13-SE	62	94 U	94 U	19 U	19 U	17 J	13 J	30	94 U
ICS-DUP-01-SE	45	96 U	96 U	19 U	19 U	11 J	19 U	21	96 U
ICS-DSS-14-SE	18 J	97 U	97 U	20 U	9.7 J	11 J	20 U	20 U	97 U
ICS-DSS-15-SE	15 J	99 U	99 U	20 U	20 U	20 U	20 U	20 U	99 U
ICS-DSS-16-SE	19 U	97 U	97 U	19 U	19 U	19 U	19 U	19 U	97 U
ICS-DSS-17-SE	35	92 U	92 U	18 U	12 J	11 J	18 U	34	92 U
ICS-DSS-18-SE	19 U	94 U	94 U	19 U	19 U	19 U	19 U	19 U	94 U
ICS-DSS-19-SE	120	98 U	98 U	20 U	68	25	49	33	98 U
ICS-DSS-20-SE	17 J	93 U	93 U	19 U	2900	10 J	19 U	15 J	93 U
ICS-DSS-21-SE	35	94 U	94 U	19 U	20	15 J	44	24	94 U
ICS-DSS-22-SE	21	96 U	96 U	19 U	19 U	12 J	31	20	96 U
ICS-DSS-23-SE	36	98 U	98 U	20 U	9.8 J	20 U	190	220	98 U
ICS-DSS-24-SE	14 J	97 U	97 U	19 U	19 U	13 J	9.7 J	14 J	97 U
ICS-DSS-25-SE	15 J	99 U	99 U	20 U	20 U	20 U	20 U	11 J	99 U
ICS-DSS-26-SE	150	93 U	93 U	18 U	82	12 J	36	52	93 U
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	68	92 U	20 J	18 U	100	54	10 J	27	92 U
ICS-DSS-28-SE	21	94 U	94 U	19 U	19 U	19 U	19 U	14 J	94 U
ICS-DSS-29-SE	18 U	92 U	92 U	18 U	18 U	18 U	18 U	18 U	92 U
ICS-DSS-30-SE	19 U	96 U	96 U	19 U	19 U	19 U	19 U	19 U	96 U
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	(a)	na	na	na	(a)	(a)	(a)	(a)	na
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

 ICS/NW Cooperage Site
 Seattle, WA

	2,4-Dinitro- toluene	Diethyl- phthalate	4-Chlorophenyl- phenylether	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phenanthrene	Carbazole	Anthracene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	(a)	na	(a)	(a)	360	(a)	na	(a)
ICS-DSS-01-SE	290 U	140 U	58 U	220	58 U	150 J _Q	3700	470	720
ICS-DSS-02-SE	270 U	140 U	55 U	66	55 U	140 U	710	52 J	180
ICS-DSS-03-SE	97 U	48 U	19 U	23	19 U	56	270	70	85
ICS-DSS-04-SE	420 U	210 U	83 U	83 U	32 J	360	460	83 U	71 J
ICS-DUP-02-SE	420 U	210 U	84 U	84 U	38 J	400	160	84 U	50 J
ICS-DSS-05-SE	99 U	50 U	20 U	12 J	3.5 J	22 J	390	32	29
ICS-DSS-06-SE	99 U	50 U	20 U	20 U	14 J	820	74	20 U	25
ICS-DSS-07-SE	93 U	47 U	19 U	19 U	19 U	25 J	29	19 U	19 U
ICS-DSS-08-SE	96 U	48 U	19 U	10 J	9.1 J	920	110	19	33
ICS-DSS-09-SE	3600 U	1800 U	720 U	6200	4000	6500 J	14,000	4500	16,000
ICS-DSS-10-SE	92 U	46 U	18 U	18 U	18 U	48 J _Q	28	18 U	18 U
ICS-DSS-11-SE	96 U	48 U	19 U	14 J	14 J	290	200	15 J	36
ICS-DSS-12-SE	8700 U	4400 U	1700 U	58,000	4800	1000 J	380,000	48,000	78,000
ICS-DSS-13-SE	94 U	47 U	19 U	25	11 J	45 J	180	19 U	40
ICS-DUP-01-SE	96 U	48 U	19 U	18 J	8.4 J	27 J	130	19 U	29
ICS-DSS-14-SE	97 U	49 U	20 U	20 U	3.5 J	21 J	60	16 J	18 J
ICS-DSS-15-SE	99 U	50 U	20 U	20 U	3.3 J	51	61	9.9 J	15 J
ICS-DSS-16-SE	97 U	48 U	19 U	19 U	19 U	48 U	19 U	19 U	19 U
ICS-DSS-17-SE	92 U	46 U	18 U	18 U	2.9 J	24 J	110	10 J	23
ICS-DSS-18-SE	94 U	39 J	19 U	19 U	3.4 J	15 J	24	22	11 J
ICS-DSS-19-SE	98 U	36 J	20 U	51	20 U	400	330	49	100
ICS-DSS-20-SE	93 U	47 U	19 U	16 J	3.1 J	47 U	100	20	33
ICS-DSS-21-SE	94 U	47 U	19 U	41	19 U	65 J	430	31	90
ICS-DSS-22-SE	96 U	48 U	19 U	18 J	19 U	48 U	110	11 J	28
ICS-DSS-23-SE	98 U	49 U	20 U	400	20 U	49 U	150	14 J	70
ICS-DSS-24-SE	97 U	48 U	19 U	16 J	19 U	18 J	230	20	35
ICS-DSS-25-SE	99 U	49 U	20 U	12 J	2.7 J	28 J	90	16 J	28
ICS-DSS-26-SE	93 U	46 U	18 U	40	42	400	380	50	68
ICS-DDS26-SE	----	----	----	----	----	----	----	----	----
ICS-DSS-27-SE	92 U	46 U	18 U	12 J	7.8 J	140 J	170	29	62
ICS-DSS-28-SE	94 U	47 U	19 U	18 J	19	47 U	55	19 U	26
ICS-DSS-29-SE	92 U	46 U	18 U	18 U	18 U	46 U	18 J	18 U	18 U
ICS-DSS-30-SE	96 U	48 U	19 U	19 U	19 U	48 U	18 J	19 U	19 U
ICS-DSS-31-SE	----	----	----	----	----	----	----	----	----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2,4-Dinitro- toluene	Diethyl- phthalate	4-Chlorophenyl- phenylether	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phenanthrene	Carbazole	Anthracene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	(a)	na	(a)	(a)	360	(a)	na	(a)
ICS-DSS-32-SE	----	----	----	----	----	----	----	----	----
ICS-SED1	----	----	----	----	----	----	----	----	----
ICS-SED2	----	----	----	----	----	----	----	----	----
ICS-SED4	----	----	----	----	----	----	----	----	----
ICS-LDWSS84	----	----	----	----	----	----	----	----	----
ICS-B5a2	----	----	----	----	----	----	----	----	----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

 Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Di-n-butyl- phthalate	Fluoranthene	Pyrene	Butylbenzyl- phthalate	Benzo(a)- anthracene	bis (2-Ethylhexyl)- phthalate	Chrysene	Di-n-octyl- phthalate	total Benzo- fluoranthenes
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	(a)	(a)	(a)	(a)	(b)	(a)	(b)	(a)	(b)
ICS-DSS-01-SE	58 U	5100	5400	13 J	3500	520	3800	58 U	5000
ICS-DSS-02-SE	55 U	1100	1000	55 U	470	260	680	55 U	940
ICS-DSS-03-SE	19 U	1100	920	43 J _Q	340	620	770	19 U	850
ICS-DSS-04-SE	130	1100	710	230 J _Q	190	1300	410	83 U	470
ICS-DUP-02-SE	120	200	250	84 U	120	1200	180	84 U	290
ICS-DSS-05-SE	20 U	1100	770	20 U	110	320	310	20 U	360
ICS-DSS-06-SE	85	78	78	20 U	35	260	110	20 U	180
ICS-DSS-07-SE	19 U	49	41	19 U	20	36 B	36	19 U	52
ICS-DSS-08-SE	72	150	160	19 U	72	150	130	19 U	190
ICS-DSS-09-SE	3400	7000	6800	1100	2700	9600	5200	720 U	3300
ICS-DSS-10-SE	18 J	29	28	18 U	12 J	57	19	18 U	30 J
ICS-DSS-11-SE	43	160	150	58 J _Q	80	330	130	19 U	190
ICS-DSS-12-SE	44,000	390,000	290,000	44,000 J _Q	130,000	180,000	180,000	1700 U	120,000
ICS-DSS-13-SE	19 U	180	170	19 U	76	79	87	19 U	130
ICS-DUP-01-SE	19 U	130	120	19 U	60	63	77	19 U	100
ICS-DSS-14-SE	20 U	120	110	25 J _Q	47	83	100	20 U	140
ICS-DSS-15-SE	20 U	130	130	31 J _Q	53	300	98	40	140
ICS-DSS-16-SE	19 U	11 J	9.7 J	19 U	19 U	16 JB	19 U	19 U	14 J
ICS-DSS-17-SE	18 U	98	89	14 J	42	49	66	18 U	98
ICS-DSS-18-SE	22	63	66	16 J	34	79	67	19 U	140
ICS-DSS-19-SE	130	500	730	110 J _Q	260	1400	460	20 U	730
ICS-DSS-20-SE	320	290	280	19 U	160	98	370	19 U	300
ICS-DSS-21-SE	38	540	540	150 J _Q	200	320	340	19 U	410
ICS-DSS-22-SE	19 U	190	230	12 J	63	60	81	19 U	110
ICS-DSS-23-SE	20 U	510	350	20 U	71	84	92	20 U	110
ICS-DSS-24-SE	19 U	370	280	28 J _Q	96	300	190	19 U	230
ICS-DSS-25-SE	13 J	200	180	27 J _Q	100	270	160	27	240
ICS-DSS-26-SE	220	410	360	260 J _Q	170	550	240	18 U	420
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	31	410	400	18 U	250	180	360	18 U	580
ICS-DSS-28-SE	14 J	160	160	19 U	43	190	50	19 U	77
ICS-DSS-29-SE	10 J	41	41	18 U	18 J	26	45	18 U	54
ICS-DSS-30-SE	19 U	24	25	19 U	19 U	24	15 J	19 U	26 J
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Di-n-butyl- phthalate	Fluoranthene	Pyrene	Butylbenzyl- phthalate	Benzo(a)- anthracene	bis (2-Ethylhexyl)- phthalate	Chrysene	Di-n-octyl- phthalate	total Benzo- fluoranthenes
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	(a)	(a)	(a)	(a)	(b)	(a)	(b)	(a)	(b)
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

 Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene	LPAH	HPAH	Tributyltin ion	alpha-BHC	beta-BHC	delta-BHC
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	90 (b)	(b)	(b)	(a)	(a)	(a)	na	na	na	na
ICS-DSS-01-SE	3000	1200	510	1200	4952	28,710	-----	4.9 U	4.9 U	6.9 U
ICS-DSS-02-SE	440	270	140	300	1056	5340	-----	0.47 U	3.8 U	0.47 U
ICS-DSS-03-SE	260	140	70	140	449	4590	-----	2.8 U	2.3 U	4.9 U
ICS-DSS-04-SE	220	140	71 J	210	668	3521	-----	3.8 U	30 U	3.8 U
ICS-DUP-02-SE	180	120	71 J	190	356	1601	-----	3.8 U	3.8 U	3.8 U
ICS-DSS-05-SE	95	51	27	58	454	2881	-----	0.48 U	4.6 U	9.5 U
ICS-DSS-06-SE	150	61	17 J	83	153	792	3.6 U	3.1 U	3.1 U	3.1 U
ICS-DSS-07-SE	24	19	10 J	24	29	275	-----	0.48 U	0.48 U	0.48 U
ICS-DSS-08-SE	78	110	37	160	212	1087	-----	1.6 U	1.6 U	1.6 U
ICS-DSS-09-SE	1800	900	580 J	1100	53,450	29,380	150	54 U	34 U	34 U
ICS-DSS-10-SE	13 J	9.2 J	18 U	13 J	90	153	-----	0.48 U	0.48 U	0.48 U
ICS-DSS-11-SE	96	65	21	73	380	965	-----	1.5 U	1.5 U	1.5 U
ICS-DSS-12-SE	71,000	21,000	13,000	19,000	683,700	1,234,000	-----	300 U	300 U	300 U
ICS-DSS-13-SE	76	43	13 J	49	385	824	-----	0.48 U	0.48 U	0.48 U
ICS-DUP-01-SE	54	36	12 J	38	270	627	-----	0.49 U	0.49 U	0.49 U
ICS-DSS-14-SE	46	38	14 J	47	109	662	-----	0.47 U	0.47 U	0.47 U
ICS-DSS-15-SE	52	38	20	57	91	718	-----	0.84 U	3.1 U	1.8 U
ICS-DSS-16-SE	19 U	19 U	19 U	19 U	19	35	-----	0.49 U	0.49 U	0.49 U
ICS-DSS-17-SE	41	18 U	18 U	45	274	479	-----	0.48 U	2.4 U	1.2 U
ICS-DSS-18-SE	44	34	19 U	38	35	486	-----	0.48 U	0.48 U	0.48 U
ICS-DSS-19-SE	350	190	99	220	647	3539	16	1.0 U	1.0 U	1.0 U
ICS-DSS-20-SE	82	51	21	53	177	1607	-----	0.49 U	0.49 U	0.49 U
ICS-DSS-21-SE	180	110	53	140	661	2513	-----	1.7 U	2.4 U	0.49 U
ICS-DSS-22-SE	56	34	11 J	46	263	821	-----	0.46 U	0.46 U	0.46 U
ICS-DSS-23-SE	41	27	20 U	32	920	1233	-----	0.48 U	0.48 U	0.48 U
ICS-DSS-24-SE	94	50	26	50	324	1386	4.3	0.49 U	1.2 U	3.4 U
ICS-DSS-25-SE	100	58	20	70	150	1128	-----	1.1 U	3.3 U	37 U
ICS-DSS-26-SE	200	160	47	200	716	2207	-----	4.8 U	4.8 U	0.48 U
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	280	170	77	180	386	2707	-----	2.5 U	1.1 U	4.4 U
ICS-DSS-28-SE	28	18 J	19 U	23	120	559	-----	0.48 U	0.48 U	0.48 U
ICS-DSS-29-SE	19	17 J	18 U	25	18	260	-----	0.46 U	0.46 U	0.46 U
ICS-DSS-30-SE	19 U	10 J	19 U	10 J	18	110	-----	0.49 U	0.49 U	0.49 U
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	10	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Benzo(a)- pyrene	Indeno(1,2,3- cd)pyrene	Dibenz(a,h)- anthracene	Benzo(g,h,i)- perylene	LPAH	HPAH	Tributyltin ion	alpha-BHC	beta-BHC	delta-BHC
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	90 (b)	(b)	(b)	(a)	(a)	(a)	na	na	na	na
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	9.6	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	4,4'-DDE	Endrin	Endosulfan II	4,4'-DDD
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	na	na	na	na	na	na	na	na	na
ICS-DSS-01-SE	4.9 U	4.9 U	4.9 U	9.9 U	4.9 U	9.9 U	51 J _p	9.9 U	9.9 U	9.9 U
ICS-DSS-02-SE	2.2 U	0.47 U	4.7 U	9.4 U	0.47 U	9.4 U	3.2 U	9.4 U	9.4 U	0.94 U
ICS-DSS-03-SE	4.5 U	4.6 U	0.49 U	23 U	0.49 U	17 U	68	9.7 U	9.7 U	0.97 U
ICS-DSS-04-SE	15 U	44 U	190 U	380 U	27 U	1200 U	2000	1600 U	380 U	400 J _M
ICS-DUP-02-SE	14 U	37 U	190 U	380 U	24 U	930 U	1400 U	380 U	380 U	380 U
ICS-DSS-05-SE	4.2 U	10 U	19 U	29 U	1.6 U	36 U	130	34 U	12 U	9.3 U
ICS-DSS-06-SE	3.1 U	8.8 U	31 U	180 U	11 U	460 U	2000	650 U	110 U	400 J _M
ICS-DSS-07-SE	0.48 U	0.48 U	0.80 U	3.8 U	0.48 U	9.5 U	9.5 U	9.5 U	9.5 U	5.5 U
ICS-DSS-08-SE	1.6 U	2.8 U	1.6 U	32 U	16 U	69 U	120 U	32 U	32 U	3.2 U
ICS-DSS-09-SE	680 U	2000 U	680 U	3200 U	200 U	1400 U	5000 J _M	68 U	1400 U	1000 J _M
ICS-DSS-10-SE	0.48 U	0.48 U	17 U	28 U	1.6 U	14 U	400	48 U	17 U	0.97 U
ICS-DSS-11-SE	1.5 U	1.5 U	7.5 U	15 U	3.3 U	26 U	180 U	100 U	15 U	15 U
ICS-DSS-12-SE	300 U	300 U	300 U	600 U	300 U	600 U	600 U	600 U	600 U	600 U
ICS-DSS-13-SE	0.48 U	0.48 U	3.0 U	15 U	0.48 U	8.1 U	22 U	21 U	6.4 U	6.9 U
ICS-DUP-01-SE	1.1 U	0.49 U	1.2 U	4.9 U	0.49 U	8.7 U	25 U	7.0 U	4.9 U	0.98 U
ICS-DSS-14-SE	0.47 U	0.47 U	0.47 U	0.93 U	0.47 U	7.2 U	9.1	9.3 U	0.93 U	1.5
ICS-DSS-15-SE	2.7 U	2.2 U	4.8 U	14 U	0.48 U	9.6 U	37	9.6 U	9.6 U	0.96 U
ICS-DSS-16-SE	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-DSS-17-SE	0.48 U	1.8 U	4.8 U	18 U	27 U	25 U	110	0.95 U	41 U	20 J _M
ICS-DSS-18-SE	0.48 U	0.48 U	1.5 U	3.3 U	0.48 U	5.6 U	12	9.6 U	2.2 U	1.5
ICS-DSS-19-SE	8.2 U	22 U	10 U	130 U	10 U	120 U	380	170 U	74 U	60 J _M
ICS-DSS-20-SE	0.49 U	0.49 U	1.6 U	3.1 U	0.49 U	4.8 U	8.8	8.7 U	0.98 U	2.3
ICS-DSS-21-SE	1.6 U	2.2 U	4.9 U	9.9 U	4.9 U	9.9 U	41	0.99 U	9.2 U	16
ICS-DSS-22-SE	0.46 U	1.6 U	0.46 U	9.2 U	4.6 U	9.2 U	28	0.92 U	9.2 U	5.9
ICS-DSS-23-SE	1.6 U	0.76 U	2.2 U	0.96 U	0.48 U	4.5 U	5.4	6.7 U	0.96 U	2.2
ICS-DSS-24-SE	1.4 U	2.5 U	4.9 U	9.8 U	4.9 U	9.8 U	60 U	9.8 U	9.8 U	0.98 U
ICS-DSS-25-SE	2.4 U	0.48 U	4.8 U	9.6 U	0.48 U	9.6 U	57 U	9.6 U	9.6 U	0.96 U
ICS-DSS-26-SE	4.8 U	3.5 U	4.8 U	9.7 U	0.48 U	32 U	70	0.97 U	58 U	21
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	5.7 U	0.70 U	7.0 U	69 U	7.0 U	120 U	310	160 U	100 U	40 J _M
ICS-DSS-28-SE	2.4 U	5.2 U	4.8 U	9.6 U	4.8 U	24 U	40	9.6 U	9.6 U	39
ICS-DSS-29-SE	0.46 U	0.46 U	0.46 U	0.93 U	0.46 U	0.93 U	1.5	0.93 U	0.93 U	0.93 U
ICS-DSS-30-SE	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	1.3	0.97 U	0.97 U	0.97 U
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	4,4'-DDE	Endrin	Endosulfan II	4,4'-DDD
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	na	na	na	na	na	na	na	na	na
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde	trans- Chlordane	cis- Chlordane	Toxaphene	Hexachloro- benzene	Hexachloro- butadiene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	na	na	na	na	na	na	na	na	na
ICS-DSS-01-SE	9.9 U	12 U	49 U	9.9 U	9.9 U	4.9 U	4.9 U	990 U	9.9 U	9.9 U
ICS-DSS-02-SE	9.4 U	9.4 U	29 U	9.4 U	9.4 U	4.7 U	4.7 U	570 U	2.9 U	0.47 U
ICS-DSS-03-SE	11 U	42	34 U	9.7 U	14 U	16 U	2.0 U	740 U	4.2 U	0.86 U
ICS-DSS-04-SE	7.7 U	2200 J_M	1900 U	380 U	380 U	140 J_M	100 J_M	8400 U	17 U	3.8 U
ICS-DUP-02-SE	7.7 U	2200 U	1900 U	380 U	380 U	190 U	190 U	6300 U	15 U	3.8 U
ICS-DSS-05-SE	9.3 U	50 J_M	19 U	25 U	18 U	5 J_M	0.48 U	97 U	0.48 U	0.48 U
ICS-DSS-06-SE	6.2 U	820 J_M	310 U	62 U	330 U	50 J_M	40 J_M	2800 U	5.7 U	3.1 U
ICS-DSS-07-SE	0.95 U	50 U	4.8 U	9.5 U	22 U	3.2 U	2.9 U	95 U	0.48 U	0.48 U
ICS-DSS-08-SE	3.2 U	32 U	16 U	32 U	49 U	31 U	16 U	730 U	2.0 U	1.6 U
ICS-DSS-09-SE	1400 U	6600 J_M	340 U	990 U	1300 U	200 U	200 U	10,000 U	1300 U	150 U
ICS-DSS-10-SE	24 U	48 U	4.8 U	35 U	22 U	8.1 U	9.5 U	240 U	0.85 U	0.48 U
ICS-DSS-11-SE	15 U	15 U	15 U	15 U	64 U	24 U	25 U	590 U	3.6 U	1.5 U
ICS-DSS-12-SE	600 U	600 U	3000 U	600 U	600 U	300 U	300 U	60,000 U	300 U	300 U
ICS-DSS-13-SE	0.97 U	20 U	10 U	19 U	18 U	2.3 U	4.0 U	97 U	0.48 U	0.48 U
ICS-DUP-01-SE	0.98 U	0.98 U	4.9 U	4.9 U	11 U	8.7 U	2.5 U	98 U	1.0 U	0.49 U
ICS-DSS-14-SE	0.93 U	9.3 U	4.7 U	9.3 U	6.0 U	0.47 U	0.47 U	93 U	0.47 U	0.47 U
ICS-DSS-15-SE	7.3 U	9.6 U	5.6 U	9.6 U	9.6 U	4.8 U	1.4 U	96 U	0.48 U	0.77 U
ICS-DSS-16-SE	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	99 U	0.49 U	0.49 U
ICS-DSS-17-SE	20 U	40 J_M	120 U	37 U	64 U	9.6 U	9.6 U	950 U	0.60 U	0.48 U
ICS-DSS-18-SE	4.1 U	8.6 U	4.8 U	0.96 U	4.4 U	0.95 U	1.7 U	96 U	0.48 U	0.48 U
ICS-DSS-19-SE	21 U	240 J_M	46 U	21 U	66 U	20 J_M	10 J_M	1800 U	9.8 U	1.0 U
ICS-DSS-20-SE	0.98 U	9.8 U	4.9 U	7.3 U	4.3 U	0.49 U	0.49 U	98 U	0.49 U	0.49 U
ICS-DSS-21-SE	9.9 U	28 U	14 U	9.9 U	16 U	4.9 U	1.6 U	99 U	2.0 U	0.49 U
ICS-DSS-22-SE	0.92 U	26 U	4.6 U	5.3 U	0.92 U	0.46 U	0.46 U	92 U	0.46 U	0.46 U
ICS-DSS-23-SE	1.9 U	5.3 U	4.8 U	2.8 U	4.0 U	0.48 U	0.48 U	96 U	0.48 U	0.48 U
ICS-DSS-24-SE	9.8 U	0.98 U	8.7 U	9.8 U	23 U	4.9 U	2.7 U	98 U	1.6 U	0.49 U
ICS-DSS-25-SE	9.6 U	9.6 U	14 U	9.6 U	9.6 U	4.8 U	4.8 U	150 U	4.3 U	0.48 U
ICS-DSS-26-SE	0.97 U	22	13 U	9.7 U	16 U	29 J_M	17 J_M	430 U	3.3 U	0.48 U
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	14 U	400	33 U	14 U	78 U	10 J_M	7 J_M	1400 U	4.9 U	0.70 U
ICS-DSS-28-SE	8.9 U	44 U	16 U	0.96 U	9.6 U	4.8 U	2.2 U	340 U	0.48 U	0.48 U
ICS-DSS-29-SE	0.93 U	2.3 U	4.6 U	0.93 U	0.93 U	0.46 U	0.46 U	93 U	0.46 U	0.46 U
ICS-DSS-30-SE	0.97 U	2.6	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	97 U	0.49 U	0.49 U
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde	trans- Chlordane	cis- Chlordane	Toxaphene	Hexachloro- benzene	Hexachloro- butadiene
Sample Location	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Levels	na	na	na	na	na	na	na	na	na	na
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

 ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	2
ICS-DSS-01-SE	20 U	20 U	420	420	350	20 U	20 U	1190
ICS-DSS-02-SE	38 U	38 U	190	210	170	38 U	38 U	570
ICS-DSS-03-SE	97 U	97 U	450	530	560	97 U	97 U	1540
ICS-DSS-04-SE	310 U	310 U	3800 J _M	10,000	14,000	310 U	310 U	27,800
ICS-DUP-02-SE	770 U	770 U	5800 U	14,000	18,000	770 U	770 U	32,000
ICS-DSS-05-SE	97 U	3500	97 U	1700	1200	97 U	97 U	6400
ICS-DSS-06-SE	250 U	250 U	2500 J _M	5800	7000	250 U	250 U	15,300
ICS-DSS-07-SE	38 U	38 U	71	190 U	520	38 U	38 U	591
ICS-DSS-08-SE	63 U	63 U	950 U	2000	1400	63 U	63 U	3400
ICS-DSS-09-SE	5400 U	120,000	5400 U	44,000	30,000	5400 U	5400 U	194,000
ICS-DSS-10-SE	39 U	39 U	690	630	600	39 U	39 U	1920
ICS-DSS-11-SE	120 U	120 U	1500	1800	2000	120 U	120 U	5300
ICS-DSS-12-SE	240 U	11,000	240 U	8900	2600	240 U	240 U	22,500
ICS-DSS-13-SE	39 U	39 U	280	230	200	39 U	39 U	710
ICS-DUP-01-SE	39 U	39 U	260	260	210	39 U	39 U	730
ICS-DSS-14-SE	39 U	39 U	72	180	330	39 U	39 U	582
ICS-DSS-15-SE	96 U	96 U	680	740	680	96 U	96 U	2100
ICS-DSS-16-SE	4.0 U	4.0 U	8.0	12	22	4.0 U	4.0 U	42
ICS-DSS-17-SE	39 U	39 U	190	270	280	39 U	39 U	740
ICS-DSS-18-SE	40 U	40 U	110	190	200	40 U	40 U	500
ICS-DSS-19-SE	410 U	410 U	4400	4700	3400	410 U	410 U	12,500
ICS-DSS-20-SE	39 U	39 U	240	320	230	39 U	39 U	790
ICS-DSS-21-SE	40 U	40 U	450	580	490	40 U	40 U	1520
ICS-DSS-22-SE	38 U	38 U	540	760	400	38 U	38 U	1700
ICS-DSS-23-SE	20 U	20 U	180	200	180	20 U	20 U	560
ICS-DSS-24-SE	98 U	98 U	590	560	560	98 U	98 U	1710
ICS-DSS-25-SE	96 U	96 U	500	530	420	96 U	96 U	1450
ICS-DSS-26-SE	39 U	39 U	1600	1800	770	39 U	39 U	4170
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	280 U	280 U	980 U	3100	2700	280 U	280 U	5800
ICS-DSS-28-SE	38 U	38 U	1100	1200	580	38 U	38 U	2880
ICS-DSS-29-SE	3.8 U	3.8 U	11 U	30	29	3.8 U	3.8 U	59
ICS-DSS-30-SE	3.9 U	3.9 U	39 U	130	44	3.9 U	3.9 U	174
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	2
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	82,000 U	82,000 U	630,000	770,000	200,000	82,000 U	82,000 U	1,600,000
ICS-SED2	470 U	470 U	12000	18000	5500	470 U	470 U	35,500
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	180 U	180 U	2000	2600	1800	180 U	180 U	6400
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2,3,7,8-TCDF	total TCDF	2,3,7,8-TCDD	total TCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	total PeCDF	1,2,3,7,8-PeCDD	total PeCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
Sample Location	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-01-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-02-SE	1.76	31.0	2.37	15.9	1.42 J	2.93	58.4	5.52	36.2	11.4	4.22
ICS-DSS-03-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-04-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DUP-02-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-05-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-06-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-07-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-08-SE	12.4	314	15.6	114	12.7	30.9	670	49.0	346	163	68.9
ICS-DSS-09-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-10-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-11-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-12-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-13-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DUP-01-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-14-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-15-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-16-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-17-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-18-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-19-SE	22.1	229	30.8	124	21.0	44.2	728	60.5	369	265	71.7
ICS-DSS-20-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-21-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-22-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-23-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-24-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-25-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-28-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-29-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-30-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2,3,7,8-TCDF	total TCDF	2,3,7,8-TCDD	total TCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	total PeCDF	1,2,3,7,8-PeCDD	total PeCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF
Sample Location	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

 Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2,3,4,6,7,8- HxCDF	1,2,3,7,8,9- HxCDF	total HxCDF	1,2,3,4,7,8- HxCDD	1,2,3,6,7,8- HxCDD	1,2,3,7,8,9- HxCDD	total HxCDD	1,2,3,4,6,7,8- HpCDF	1,2,3,4,7,8,9- HpCDF	total HpCDF	1,2,3,4,6,7,8- HpCDD
Sample Location	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-01-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-02-SE	3.80	1.86 J	162	7.05	26.9	27.3	236	144	5.09	381	771
ICS-DSS-03-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-04-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DUP-02-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-05-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-06-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-07-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-08-SE	86.9	19.3	1810	65.9	363	271	2780	1810	93.6	5000	8330
ICS-DSS-09-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-10-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-11-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-12-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-13-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DUP-01-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-14-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-15-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-16-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-17-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-18-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-19-SE	102	38.7	2750	67.1	367	306	3060	2090	117	6780	10,800
ICS-DSS-20-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-21-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-22-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-23-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-24-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-25-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DDS26-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-27-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-28-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-29-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-30-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-31-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

	2,3,4,6,7,8- HxCDF	1,2,3,7,8,9- HxCDF	total HxCDF	1,2,3,4,7,8- HxCDD	1,2,3,6,7,8- HxCDD	1,2,3,7,8,9- HxCDD	total HxCDD	1,2,3,4,6,7,8- HpCDF	1,2,3,4,7,8,9- HpCDF	total HpCDF	1,2,3,4,6,7,8- HpCDD
Sample Location	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
Screening Levels	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-32-SE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable
lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to
contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due
to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005
relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual
column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

 Exceeds dry-weight based screening level as available

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	total HpCDD	OCDF	OCDD	TEQ	
	ng/kg, dry	ng/kg, dry	ng/kg, dry	ND=0 ng/kg, dry	ND/2 ng/kg, dry
Screening Levels	-----	-----	-----	0.2	0.2
ICS-DSS-01-SE	-----	-----	-----	-----	-----
ICS-DSS-02-SE	1520	384	7400	28.8	28.8
ICS-DSS-03-SE	-----	-----	-----	-----	-----
ICS-DSS-04-SE	-----	-----	-----	-----	-----
ICS-DUP-02-SE	-----	-----	-----	-----	-----
ICS-DSS-05-SE	-----	-----	-----	-----	-----
ICS-DSS-06-SE	-----	-----	-----	-----	-----
ICS-DSS-07-SE	-----	-----	-----	-----	-----
ICS-DSS-08-SE	15,400	5080	70,100	304	304
ICS-DSS-09-SE	-----	-----	-----	-----	-----
ICS-DSS-10-SE	-----	-----	-----	-----	-----
ICS-DSS-11-SE	-----	-----	-----	-----	-----
ICS-DSS-12-SE	-----	-----	-----	-----	-----
ICS-DSS-13-SE	-----	-----	-----	-----	-----
ICS-DUP-01-SE	-----	-----	-----	-----	-----
ICS-DSS-14-SE	-----	-----	-----	-----	-----
ICS-DSS-15-SE	-----	-----	-----	-----	-----
ICS-DSS-16-SE	-----	-----	-----	-----	-----
ICS-DSS-17-SE	-----	-----	-----	-----	-----
ICS-DSS-18-SE	-----	-----	-----	-----	-----
ICS-DSS-19-SE	22,200	7250	117,000	396	396
ICS-DSS-20-SE	-----	-----	-----	-----	-----
ICS-DSS-21-SE	-----	-----	-----	-----	-----
ICS-DSS-22-SE	-----	-----	-----	-----	-----
ICS-DSS-23-SE	-----	-----	-----	-----	-----
ICS-DSS-24-SE	-----	-----	-----	-----	-----
ICS-DSS-25-SE	-----	-----	-----	-----	-----
ICS-DSS-26-SE	-----	-----	-----	-----	-----
ICS-DDS26-SE	-----	-----	-----	-----	-----
ICS-DSS-27-SE	-----	-----	-----	-----	-----
ICS-DSS-28-SE	-----	-----	-----	-----	-----
ICS-DSS-29-SE	-----	-----	-----	-----	-----
ICS-DSS-30-SE	-----	-----	-----	-----	-----
ICS-DSS-31-SE	-----	-----	-----	-----	-----

TABLE F.2a - Results of Surface Sediment Sample Analyses - 2012 and 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	total HpCDD	OCDF	OCDD	TEQ	
	ng/kg, dry	ng/kg, dry	ng/kg, dry	ND=0 ng/kg, dry	ND/2 ng/kg, dry
Screening Levels	-----	-----	-----	0.2	0.2
ICS-DSS-32-SE	-----	-----	-----	-----	-----
ICS-SED1	-----	-----	-----	-----	-----
ICS-SED2	-----	-----	-----	-----	-----
ICS-SED4	-----	-----	-----	-----	-----
ICS-LDWSS84	-----	-----	-----	-----	-----
ICS-B5a2	-----	-----	-----	-----	-----

Notes: *J* = estimate associated with value less than the verifiable lower quantitation limit

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

J_b & *B* = associated value may be biased high due to contribution from laboratory background or method blank

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD(M. 8081).

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M. 8081)

(a) - Screening level based on carbon normalized values

(b) - Screening level based on benzo(a)pyrene beach-play TEQ

na - Screening level not available

 Exceeds dry-weight based screening level as available

TABLE F.2b - BaPEq-TEQ Calculations
Embayment Surface Sediments - 2012 Data

ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Collection Date	ARI Delivery Group	Benzo(a)-anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo-fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)-pyrene µg/kg, dry	Adjusted Conc. TEF=1.0
ICS-DSS-01-SE	12/10/12	VW14	3500	350	3800	38	5000	500	3000	3000
ICS-DSS-02-SE	7/3/12	VB16	470	47	680	6.8	940	94	440	440
ICS-DSS-03-SE	7/3/12	VB16	340	34	770	7.7	850	85	260	260
ICS-DSS-04-SE	7/3/12	VB16	190	19	410	4.1	470	47	220	220
ICS-DSS-05-SE	7/3/12	VB16	110	11	310	3.1	360	36	95	95
ICS-DSS-06-SE	7/3/12	VB16	35	3.5	110	1.1	180	18	150	150
ICS-DSS-07-SE	7/3/12	VB16	20	2	36	0.36	52	5.2	24	24
ICS-DSS-08-SE	7/3/12	VB16	72	7.2	130	1.3	190	19	78	78
ICS-DSS-09-SE	7/3/12	VB16	2700	270	5200	52	3300	330	1800	1800
ICS-DSS-10-SE	7/3/12	VB16	12	1.2	19	0.19	30	3	13	13
ICS-DSS-11-SE	7/3/12	VB16	80	8	130	1.3	190	19	96	96
ICS-DSS-12-SE	7/3/12	VB16	130000	13000	180000	1800	120000	12000	71000	71000
ICS-DSS-13-SE	7/3/12	VB16	76	7.6	87	0.87	130	13	76	76
ICS-DSS-14-SE	7/2/12	VB00	47	4.7	100	1	140	14	46	46
ICS-DSS-15-SE	7/3/12	VB16	53	5.3	98	0.98	140	14	52	52
ICS-DSS-16-SE	7/2/12	VB00	19 U		19 U		14	1.4	19 U	
ICS-DSS-17-SE	7/2/12	VB00	42	4.2	66	0.66	98	9.8	41	41
ICS-DSS-18-SE	7/2/12	VB00	34	3.4	67	0.67	140	14	44	44
ICS-DSS-19-SE	7/2/12	VB00	260	26	460	4.6	730	73	350	350
ICS-DSS-20-SE	7/2/12	VB00	160	16	370	3.7	300	30	82	82
ICS-DSS-21-SE	7/2/12	VB00	200	20	340	3.4	410	41	180	180
ICS-DSS-22-SE	7/2/12	VB00	63	6.3	81	0.81	110	11	56	56
ICS-DSS-23-SE	7/2/12	VB00	71	7.1	92	0.92	110	11	41	41
ICS-DSS-24-SE	7/3/12	VB16	96	9.6	190	1.9	230	23	94	94
ICS-DSS-25-SE	7/3/12	VB16	100	10	160	1.6	240	24	100	100
ICS-DSS-26-SE	7/2/12	VB00	170	17	240	2.4	420	42	200	200
ICS-DSS-27-SE	7/2/12	VB00	250	25	360	3.6	580	58	280	280
ICS-DSS-28-SE	7/2/12	VB00	43	4.3	50	0.5	77	7.7	28	28
ICS-DSS-29-SE	7/2/12	VB00	18	1.8	45	0.45	54	5.4	19	19
ICS-DSS-30-SE	7/2/12	VB00	19 U		15	0.15	26	2.6	19 U	
ICS-DUP-13-SE	7/3/12	VB16	60	6	77	0.77	100	10	54	54
ICS-DUP-04-SE	7/3/12	VB16	120	12	180	1.8	290	29	180	180

TABLE F.2b - BaPEq-TEQ Calculations
Embayment Surface Sediments - 2012 Data

ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Collection Date	ARI Delivery Group	Benzo(a)-anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo-fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)-pyrene µg/kg, dry	Adjusted Conc. TEF=1.0
Number of Samples			32	-----	32		32		32	
Number of Detections			30	-----	31		32		30	
Percent Detected			93.8%	-----	96.9%		100.0%		93.8%	
Highest Conc.			130000	-----	180000		120000		71000	

Notes: *U = nondetected at the associated lower reporting limit.*

TEF -Toxicity Equivalency Factor

TEQ - Toxicity Equivalency Quotient

BaPEq. - Benzo(a)pyrene equivalent concentration

TABLE F.2b - BaPEq-TEQ Calculations
Embayment Surface Sediments - 2012 Data

ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Collection Date	ARI Delivery Group	Indeno(1,2,3-cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)-anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	TEQ Sum BaPEq µg/kg, dry
ICS-DSS-01-SE	12/10/12	VW14	1200	120	510	510	4518
ICS-DSS-02-SE	7/3/12	VB16	270	27	140	140	755
ICS-DSS-03-SE	7/3/12	VB16	140	14	70	70	471
ICS-DSS-04-SE	7/3/12	VB16	140	14	71	71	375
ICS-DSS-05-SE	7/3/12	VB16	51	5.1	27	27	177
ICS-DSS-06-SE	7/3/12	VB16	61	6.1	17	17	196
ICS-DSS-07-SE	7/3/12	VB16	19	1.9	10	10	43
ICS-DSS-08-SE	7/3/12	VB16	110	11	37	37	154
ICS-DSS-09-SE	7/3/12	VB16	900	90	580	580	3122
ICS-DSS-10-SE	7/3/12	VB16	9.2	0.92	18 U		18
ICS-DSS-11-SE	7/3/12	VB16	65	6.5	21	21	152
ICS-DSS-12-SE	7/3/12	VB16	21000	2100	13000	13000	112900
ICS-DSS-13-SE	7/3/12	VB16	43	4.3	13	13	115
ICS-DSS-14-SE	7/2/12	VB00	38	3.8	14	14	84
ICS-DSS-15-SE	7/3/12	VB16	38	3.8	20	20	96
ICS-DSS-16-SE	7/2/12	VB00	19 U		19 U		1.4
ICS-DSS-17-SE	7/2/12	VB00	18 U		18 U		56
ICS-DSS-18-SE	7/2/12	VB00	34	3.4	19 U		65
ICS-DSS-19-SE	7/2/12	VB00	190	19	99	99	572
ICS-DSS-20-SE	7/2/12	VB00	51	5.1	21	21	158
ICS-DSS-21-SE	7/2/12	VB00	110	11	53	53	308
ICS-DSS-22-SE	7/2/12	VB00	34	3.4	11	11	89
ICS-DSS-23-SE	7/2/12	VB00	27	2.7	20 U		63
ICS-DSS-24-SE	7/3/12	VB16	50	5	26	26	160
ICS-DSS-25-SE	7/3/12	VB16	58	5.8	20	20	161
ICS-DSS-26-SE	7/2/12	VB00	160	16	47	47	324
ICS-DSS-27-SE	7/2/12	VB00	170	17	77	77	461
ICS-DSS-28-SE	7/2/12	VB00	18	1.8	19 U		42
ICS-DSS-29-SE	7/2/12	VB00	17	1.7	18 U		28
ICS-DSS-30-SE	7/2/12	VB00	10	1	19 U		4
ICS-DUP-13-SE	7/3/12	VB16	36	3.6	12	12	86
ICS-DUP-04-SE	7/3/12	VB16	120	12	71	71	306

TABLE F.2b - BaPEq-TEQ Calculations
Embayment Surface Sediments - 2012 Data

ICS/NW Cooperage Site
 Seattle, WA

Sample Location	Collection Date	ARI Delivery Group	Indeno(1,2,3-cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)-anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	TEQ Sum BaPEq µg/kg, dry
Number of Samples			32		32		32
Number of Detections			30		24		32
Percent Detected			93.8%		75.0%		100%
Highest Conc.			21000		13000		112900

U = nondetected at the associated lower reporting limit.

TEF - Toxicity Equivalency Factor

TEQ - Toxicity Equivalency Quotient

BaPEq. - Benzo(a)pyrene equivalent concentration

**TABLE F.3 - Surface Sediment
Sample Grain Size Analyses - July 2012**

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Collection Date	ARI Delivery Group	gravel > 4750 μm %	coarse sand 4750 - 2000 μm %	medium sand 2000 - 425 μm %	fine sand 425 - 75 μm %	v. coarse silt 75 - 32 μm %	coarse silt 32 - 22 μm %	medium silt 22 - 13 μm %	fine silt 13 - 7 μm %
Screening Levels			-----	-----	-----	-----	-----	-----	-----	-----
ICS-DSS-02-SE	7/3/12	VB16	71.5	7.7	11.4	5.8	0.1	0.2	0.6	1.0
ICS-DSS-04-SE	7/3/12	VB16	23.9	7.9	21.4	32.6	0.4	1.1	2.6	2.5
ICS-DSS-08-SE	7/3/12	VB16	87.1	1.3	4.2	4.2	0.1	0.4	0.6	0.7
ICS-DSS-17-SE	7/2/12	VB00	25.4	8.7	12.2	36.1	1.9	1.7	2.4	4.5
ICS-DSS-19-SE	7/2/12	VB00	0.0	0.2	4.6	35.3	1.7	8.7	9.6	15.7
ICS-DSS-30-SE	7/2/12	VB00	8.1	2.7	14	56.5	4.7	2.7	1.3	3.1

Sample Location	Collection Date	ARI Delivery Group	v. fine silt	total silt	clay		total fines
			7 - 3.2 μm	32 - 3.2 μm	3.2 - 1.3 μm	< 1.3 μm	< 32 μm
			%	%	%	%	%
Screening Levels			-----	-----	-----	-----	-----
ICS-DSS-02-SE	7/3/12	VB16	0.4	1.9	0.3	0.9	3.1
ICS-DSS-04-SE	7/3/12	VB16	2.2	6.6	1.5	4.0	12.1
ICS-DSS-08-SE	7/3/12	VB16	0.5	1.8	0.3	0.7	2.8
ICS-DSS-17-SE	7/2/12	VB00	2.1	10.5	2.1	3.1	15.7
ICS-DSS-19-SE	7/2/12	VB00	9.6	35.7	3.5	11.3	50.5
ICS-DSS-30-SE	7/2/12	VB00	1.3	11.8	0.9	4.0	16.7

Notes: grain size analyses: % retained in each size fraction

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

 ICS/NW Cooperage Site
 Seattle, Washington

Core Location	Mid-Point Depth (feet)	Collection Date	ARI Delivery Group	% solids %	Wet density lb/ft ³	Moisture content %	Dry density lb/ft ³	TOC %	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry
Screening Levels		----	----	----	----	----	----	----	na	7	na	5.1
ICS-A-SE-1	0.4	11/26/12	VV01	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	11/26/12	VV01	76	----	----	----	1.37	0.3 U	11.5	0.3 U	0.3
ICS-A-SE-3	2.7	11/26/12	VV01	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	11/26/12	VV01	61	----	----	----	2.77	0.3 U	9.7	0.4	0.2
ICS-A-SE-5	5.1	11/26/12	VV01	66	----	----	----	1.61	0.3 U	6.5	0.5	0.1 U
ICS-A-SE-6	6.3	11/26/12	XD56	59	----	----	----	3.22	0.3 U	9.5	0.6	0.2
ICS-A-SE-7	7.2	11/26/12	XD56	62	----	----	----	4.22	0.3 U	9.2	0.6	0.2
ICS-B-SE-1	1.1	11/27/12	VV01	65	----	----	----	0.775	0.3 U	19.8	0.3 U	0.2 U
ICS-B-SE-2	2.2	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	11/27/12	VV01	49	----	----	----	3.96	0.8 J _R	31.1	0.4 U	5.4
ICS-B-SE-4	4.4	11/27/12	XD56	64	----	----	----	3.37	0.3 U	9.4	0.3 U	1.1
ICS-B-SE-5	5.5	11/27/12	VV01	61	----	----	----	3.64	0.3 U	7.7	0.5	0.2
ICS-B-SE-6	6.6	11/27/12	XD56	60	100.6	65.8	60.7	2.66	0.3 U	10.1	0.6	0.3
ICS-C-SE-1	0.5	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	11/27/12	VV01	73	----	----	----	0.894	0.3 U	5.6	0.3 U	0.1 U
ICS-C-SE-3	3.3	11/27/12	VV01	62	----	----	----	2.29	0.3 U	7.3	0.4	0.1
ICS-C-SE-4	4.4	11/27/12	VV01	80	----	----	----	1.57	0.2 U	4.1	0.2 U	0.1 U
ICS-D-SE-1	0.7	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	11/27/12	VV01	66	----	----	----	6.91	1.1 J _R	15.1	0.3 U	8.8
ICS-D-SE-3	3.8	11/27/12	VV01	65	----	----	----	2.07	0.3 U	8.7	0.4	0.2
ICS-D-SE-4	5.3	11/27/12	VV01	62	----	----	----	2.70	0.3 U	8.8	0.6	0.2
ICS-D-SE-5	6.7	11/27/12	XD56	61	----	----	----	2.26	0.3 U	9.4	0.5	0.2
ICS-F-SE-1	0.5	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	11/27/12	XD56	56	----	----	----	3.15	0.3 U	12.7	0.3 U	3.4
ICS-F-SE-3	3.1	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	12/10/12	VV01	----	99.5	70.8	58.3	----	----	----	----	----
ICS-F-SE-4	4.5	11/27/12	XD56	60	----	----	----	2.22	0.3 U	8.7	0.6	0.2
ICS-F-SE-5	5.8	11/27/12	VV01	60	----	----	----	2.67	0.3 U	11.2	0.5	0.2
ICS-F-SE-6	7	11/27/12	VV01	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	11/27/12	VV01	66	----	----	----	1.26	0.3 U	5.8	0.4	0.1 U
ICS-F-SE-8	9.7	11/27/12	VV01	76	115.7	28.5	90.1	0.436	0.3 U	2.0	0.3 U	0.1 U
ICS-F-SE-9	10.9	11/27/12	VV01	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

 ICS/NW Cooperage Site
 Seattle, Washington

Core Location	Mid-Point Depth (feet)	Collection Date	ARI Delivery Group	% solids %	Wet density lb/ft ³	Moisture content %	Dry density lb/ft ³	TOC %	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry
Screening Levels		-----	-----	-----	-----	-----	-----	-----	na	7	na	5.1
ICS-G-SE-1	0.6	11/28/12	VV01	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-2	1.8	11/28/12	VV01	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-3	3	11/28/12	VV01	63	-----	-----	-----	1.78	0.3 U	11.9	0.5	0.5
ICS-DUP1-SE	dup. of G-SE-3	11/28/12	VV01	61	-----	-----	-----	1.32	0.3 U	10.1	0.5	0.5
ICS-G-SE-4	4.1	11/28/12	VV01	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-5	5.1	11/28/12	VV01	58	-----	-----	-----	1.85	0.3 U	24.9	0.4	2.6
ICS-G-SE-6	6.8	11/28/12	VV01	60	-----	-----	-----	1.60	0.3 U	11.6	0.5	0.3
ICS-H-SE-1	0.4	11/28/12	VV01	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-H-SE-2	1.7	11/28/12	VV01	79	-----	-----	-----	2.00	0.2 U	4.7	0.3	0.5
ICS-H-SE-3	3.3	11/28/12	VV01	69	-----	-----	-----	3.41	0.2 U	7.2	0.2 U	1.3
ICS-H-SE-4	4.7	11/28/12	VV10	74	-----	-----	-----	0.856	0.3 U	2.7	0.3 U	0.1 U
ICS-I-SE-1	0.9	11/28/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-I-SE-2	2.6	11/28/12	VV10	70	-----	-----	-----	3.13	0.3	10.1	0.3	0.4
ICS-I-SE-3	4.2	11/28/12	VV10	58	96.2	84.7	52.1	2.28	0.3 U	6.6	0.4	0.2
ICS-I-SE-4	5.9	11/28/12	XD56	61	-----	-----	-----	2.84	0.3 U	11.1	0.5	0.2
ICS-I-SE-5	7.8	11/28/12	VV10	67	114	35.6	84.1	1.02	0.3 U	5.1	0.3 U	0.1 U
ICS-I-SE-6	9.5	11/28/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-1	0.8	11/28/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-2	2.6	11/28/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-3	4.9	11/28/12	VV10	56	-----	-----	-----	2.31	0.4 U	26.0	0.5	2.2
ICS-J-SE-4	6.8	11/28/12	XD56	66	-----	-----	-----	0.96	0.3 U	6.1	0.3 U	0.1 U
ICS-J-SE-5	8.5	11/28/12	VV10	67	-----	-----	-----	1.33	0.3 U	5.6	0.3	0.1 U
ICS-J-SE-6	10.4	11/28/12	VV10	63	-----	-----	-----	1.55	0.3 U	7.2	0.4	0.1 U
ICS-K-SE-1	0.7	11/30/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-K-SE-2	2.2	11/30/12	VV10	57	-----	-----	-----	2.37	0.3 U	11.3	0.3 U	2.5
ICS-DUP2-SE	dup. of K-SE-2	11/30/12	VV10	57	-----	-----	-----	2.03	0.3 U	12.6	0.3 U	1.5
ICS-K-SE-3	3.8	11/30/12	XD56	88	-----	-----	-----	0.88	0.2 U	4.1	0.2 U	0.2
ICS-K-SE-4	5.5	11/30/12	VV10	60	-----	-----	-----	2.31	0.3 U	21.0	0.4	1.6
ICS-K-SE-5	7	11/30/12	VV10	73	-----	-----	-----	1.83	0.3 U	6.9	0.3	0.1 U
ICS-L-SE-1	0.7	11/30/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-L-SE-2	1.9	11/30/12	VV10	74	-----	-----	-----	1.66	0.3 U	6.3	0.3 U	0.4
ICS-L-SE-3	3.5	11/30/12	VV10	62	-----	-----	-----	1.55	0.3 U	7.1	0.3	0.3

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Collection Date	ARI Delivery Group	% solids %	Wet density lb/ft ³	Moisture content %	Dry density lb/ft ³	TOC %	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry
Screening Levels		-----	-----	-----	-----	-----	-----	-----	na	7	na	5.1
ICS-L-SE-4	5	11/30/12	VV10	70	-----	-----	-----	1.44	0.3 U	6.2	0.3	0.1 U
ICS-L-SE-5	6.7	11/30/12	VV10	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	11/30/12	VV10	66	-----	-----	-----	2.55	0.3 U	7.7	0.3	0.4
ICS-M-SE-2	1.6	11/30/12	VV10	84	-----	-----	-----	2.95	0.2 U	2.9	0.2 U	0.1 U
ICS-M-SE-3	2.7	11/30/12	VV10	80	-----	-----	-----	0.283	0.2 U	1.1	0.2 U	0.1 U

Notes: *U* = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

 ICS/NW Cooperage Site
 Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	Total mg/kg, dry
Screening Levels		260	390	450	0.41	na	6.1	410	-----	-----	2000(c)
ICS-A-SE-1	0.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-A-SE-2	1.3	19.5	427	86.7	0.24	15.8	0.3 U	111	180	450	630
ICS-A-SE-3	2.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-A-SE-4	3.9	21.5	42.8	10.3	0.17	20.5	0.3 U	61	32	52	84
ICS-A-SE-5	5.1	22	33.7	10.6	0.12	17.9	0.3 U	52	29	43	72
ICS-A-SE-6	6.3	25.7	49.3	12.4	0.15	24.0	0.3 U	72	29	58	87
ICS-A-SE-7	7.2	23.3	43.5	10.4	0.14	20.3	0.3 U	63	44	77	121
ICS-B-SE-1	1.1	22.7	34.8	14.9	0.04	26.6	0.3 U	80	29	56	85
ICS-B-SE-2	2.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B-SE-3	3.3	153	169	796	13.1	29	0.5	670	6700	7600	14300
ICS-B-SE-4	4.4	45.8	133	218	1.84 J	17.8	0.3 U	286	4200	10000	14200
ICS-B-SE-5	5.5	24	43.1	12.4	0.13	21.3	0.3 U	65	39	75	114
ICS-B-SE-6	6.6	25.4	50.6	13.3	0.19 J	24.6	0.3 U	74	47	100	147
ICS-C-SE-1	0.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-C-SE-2	2.3	11.0	36.0	13.1	0.04	8.3	0.3 U	31	34	57	91
ICS-C-SE-3	3.3	18.9	34.0	7.9	0.12	18.1	0.3 U	53	27	39	66
ICS-C-SE-4	4.4	10.8	11.0	8.0	0.03	7.3	0.2 U	26	20	41	61
ICS-D-SE-1	0.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-D-SE-2	2.1	431	254	4430	38.8	43.9	0.4	3240	12,000	9900	21900
ICS-D-SE-3	3.8	25	41.3	28.3	2.05	21.1	0.3 U	79	39	64	103
ICS-D-SE-4	5.3	27	47.7	10.6	0.14	24.3	0.3 U	68	27	44	71
ICS-D-SE-5	6.7	25.1	46.6	11.6	0.15 J	21.9	0.3 U	67	43	76	119
ICS-F-SE-1	0.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-2	1.7	114	56.6	4380	0.29 J	23.2	0.3 U	1420	12000	2100	14100
ICS-F-SE-3	3.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-3	3.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-4	4.5	24.7	46.1	11.5	0.16 J	23.0	0.3 U	70	43	72	115
ICS-F-SE-5	5.8	24.4	50.9	17.4	0.17	22.7	0.3 U	66	40	49	89
ICS-F-SE-6	7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-7	8.3	18.4	33.7	11.5	0.09	17.9	0.3 U	54	17	26	43
ICS-F-SE-8	9.7	12.2	14.2	2.1	0.02	10.8	0.3 U	28	6.5 U	13 U	13 U
ICS-F-SE-9	10.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

 ICS/NW Cooperage Site
 Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	Total mg/kg,dry
Screening Levels		260	390	450	0.41	na	6.1	410	-----	-----	2000(c)
ICS-G-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-2	1.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-3	3	23.7	41.7	22.5	0.20	22.0	0.4	91	85	140	225
ICS-DUP1-SE	dup. of G-SE-3	22.5	39.3	20.4	0.21	21.2	0.4	84	82	130	212
ICS-G-SE-4	4.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-G-SE-5	5.1	112	141	1340	0.49	49.0	0.6	840	6700	9600	16300
ICS-G-SE-6	6.8	23.0	65.3	33.9	0.20	24.2	0.3 U	81	73	120	193
ICS-H-SE-1	0.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-H-SE-2	1.7	59.7	46.9	168	0.39	32.8	0.2 U	149	300	580	880
ICS-H-SE-3	3.3	96.4	61.3	936	4.85	19.8	0.2 U	377	1400	2000	3400
ICS-H-SE-4	4.7	14.0	18.1	6.5	0.04	10.5	0.3 U	37	28	50	78
ICS-I-SE-1	0.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-I-SE-2	2.6	24.9	37.3	123	1.77	17.3	0.2 U	109	290	560	850
ICS-I-SE-3	4.2	18.4	41.4	25.4	0.30	16.6	0.3 U	60	76	130	206
ICS-I-SE-4	5.9	26.3	58.5	38.5	0.24 J	22.0	0.3 U	91	61	120	181
ICS-I-SE-5	7.8	14.4	34.7	18.8	0.14	12.5	0.3 U	40	250	460	710
ICS-I-SE-6	9.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-1	0.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-2	2.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-J-SE-3	4.9	64.4	61.1	224	0.29	20.2	0.9	201	1600	1400	3000
ICS-J-SE-4	6.8	16.0	22.3	11.4	0.08 J	11.7	0.3 U	51	40	72	112
ICS-J-SE-5	8.5	15.3	25.3	13.7	0.11	13.1	0.3 U	44	33	62	95
ICS-J-SE-6	10.4	17.8	43.6	22.4	0.11	16.3	0.3 U	56	41	58	99
ICS-K-SE-1	0.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-K-SE-2	2.2	52.4	129	310	1.95	19.2	0.5	213	560	1200	1760
ICS-DUP2-SE	dup. of K-SE-2	59.3	115	364	2.32	21.6	0.6	261	530	1200	1730
ICS-K-SE-3	3.8	26.4	25.1	79.3	0.38 J	21.2	0.2 U	70	70	180	250
ICS-K-SE-4	5.5	45.2	46.3	241	0.21	18.0	0.5	143	620	440	1060
ICS-K-SE-5	7	14.9	25.1	17.7	0.12	13.2	0.3 U	46	28	55	83
ICS-L-SE-1	0.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-L-SE-2	1.9	23.6	21.9	87.2	0.34	10.5	0.3 U	82	1200	1400	2600
ICS-L-SE-3	3.5	17.9	44.3	62.0	0.63	14.0	0.3 U	89	77	120	197

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	Total mg/kg, dry
Screening Levels		260	390	450	0.41	na	6.1	410	-----	-----	2000(c)
ICS-L-SE-4	5	18.4	29.5	11.9	0.31	17.0	0.3 U	52	24	42	66
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	21.7	52.9	57.9	0.21	17.8	0.3 U	116	55	160	215
ICS-M-SE-2	1.6	13.0	16.8	23.7	0.04	10.1	0.2 U	48	16	29	45
ICS-M-SE-3	2.7	8.9	8.0	1.9	0.3 U	7.4	0.2 U	21	6.1 U	12 U	12 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
** bold-typed values resemble corresponding petroleum hydrocarbon mixture
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
(c) - SMS value not available. Based on Method A value (WAC 173-340-900, Tbl. 745-1)
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

 ICS/NW Cooperage Site
 Seattle, Washington

Core Location	Mid-Point Depth (feet)	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry
Screening Levels		420	na	na	(b)	57	(b)	63	670
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	72 J	20 U	4.9 J	3.0 J	130	6.5	5.5	57
ICS-A-SE-5	5.1	34 J	19 U	4.8 U	2.9 J	130	10	3.8 J	25 J
ICS-A-SE-6	6.3	61	20 U	5.0 U	5.0 U	190	5.0 U	6.8	50
ICS-A-SE-7	7.2	66	19 U	4.8 U	4.8 U	140	4.8 U	6.5	41
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	60 J	57 U	94	300	57 U	97	14 J	110 U
ICS-B-SE-4	4.4	96	52 U	160	370	52 U	150	42	55
ICS-B-SE-5	5.5	37 J	20 U	20	22	150	22	4.1 J	28 J
ICS-B-SE-6	6.6	42	20 U	4.9 U	4.9 U	160	4.9 U	5.1	32
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	17 J	18 U	3.0 J	4.6 U	54	4.6 U	3.2 J	18 J
ICS-C-SE-4	4.4	20 U	20 U	47	33	20 U	2.8 J	4.9 U	39 U
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	24 J	19 U	3.0 J	15	41	76	9.2	25 J
ICS-D-SE-4	5.3	21 J	20 U	5.0 U	5.0 U	100	5.0 U	3.1 J	23 J
ICS-D-SE-5	6.7	76	19 U	4.8 U	4.8 U	170	4.8 U	8.0	44
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	300 U	300 U	13 J	11 J	59 U	9.5 J	15 U	300 U
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	38	20 U	4.9 U	4.9 U	120	4.9 U	4.5 J	24
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	13 J	20 U	4.9 U	4.9 U	42	4.9 U	4.9 U	13 J
ICS-F-SE-8	9.7	18 U	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	37 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry
Screening Levels		420	na	na	(b)	57	(b)	63	670
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	110 U	110 U	38 J	140	110 U	29 U	29 U	230 U
ICS-G-SE-6	6.8	18 J	19 U	4.8 U	4.8 U	61	3.2 J	2.6 J	25 J
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	20 J	26 U	210	1000	26 U	100	4.2 J	51 U
ICS-H-SE-4	4.7	19 U	19 U	10	24	19 U	7.4	4.9 U	39 U
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	57 U	57 U	14 U	14 U	36 J	14 U	14 U	110 U
ICS-I-SE-4	5.9	30	19 U	4.8 U	4.8 U	72	3.0 J	3.9 J	21
ICS-I-SE-5	7.8	18 U	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	37 U
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	20	19 U	4.7 U	4.7 U	37	4.7 U	2.9 J	49
ICS-J-SE-5	8.5	13 J	19 U	4.7 U	4.7 U	27	4.7 U	2.4 J	42 J _Q
ICS-J-SE-6	10.4	10 J	19 U	4.8 U	4.8 U	44	4.8 U	4.8 U	14 J
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	19 U	19 U	3.0 J	5.0	19 U	3.1 J	4.7 U	19 U
ICS-K-SE-4	5.5	26 J	20 U	5.0 U	2.7 J	57	5.0 U	3.7 J	34 J
ICS-K-SE-5	7	20 U	20 U	4.9 U	4.9 U	20 U	4.9 U	4.9 U	39 U
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	17 J	20 U	4.9 U	4.9 U	25	4.9 U	3.7 J	28 J

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry
Screening Levels		420	na	na	(b)	57	(b)	63	670
ICS-L-SE-4	5	11 J	19 U	4.8 U	4.8 U	27	4.8 U	7.1	38 J
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	20 U	20 U	4.9 U	4.9 U	20 U	4.9 U	4.9 U	39 U
ICS-M-SE-3	2.7	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	38 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	N-Nitroso-di-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry
Screening Levels		na	na	na	na	29	650	na	(b)	(b)
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	20 U	20 U	20 U	20 U	15 J	620	200 U	6.9	66
ICS-A-SE-5	5.1	19 U	19 U	19 U	19 U	4.6 J	400	190 U	4.8 U	50
ICS-A-SE-6	6.3	20 U	20 U	20 U	20 U	25 U	470 J	99 U	5.0 U	71
ICS-A-SE-7	7.2	19 U	19 U	19 U	19 U	24 U	380 J	95 U	4.8 U	52
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	57 U	57 U	57 U	57 U	58	1100 U	570 U	66	360
ICS-B-SE-4	4.4	52 U	52 U	52 U	52 U	120	520 U	260 U	52	120
ICS-B-SE-5	5.5	20 U	20 U	20 U	20 U	5.4 J	440	200 U	4.9 U	57
ICS-B-SE-6	6.6	20 U	20 U	20 U	20 U	25 U	310 J	98 U	4.9 U	73
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	18 U	18 U	18 U	18 U	92	210 J	180 U	4.6 U	24
ICS-C-SE-4	4.4	20 U	20 U	20 U	20 U	22	390 U	200 U	4.9 U	18 J
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	19 U	19 U	19 U	19 U	82	230 J	190 U	4.8 U	620
ICS-D-SE-4	5.3	20 U	20 U	20 U	20 U	4.3 J	320 J	200 U	5.0 U	69
ICS-D-SE-5	6.7	19 U	19 U	19 U	19 U	24 U	540 J	96 U	4.8 U	77
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	300 U	300 U	300 U	300 U	890	3000 U	1500 U	15 U	17,000
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	20 U	20 U	20 U	20 U	24 U	230 J	98 U	4.9 U	72
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	20 U	20 U	20 U	20 U	20 U	120 J	200 U	4.9 U	22
ICS-F-SE-8	9.7	18 U	18 U	18 U	18 U	18 U	370 U	180 U	4.6 U	18 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	N-Nitroso-di-n-propylamine µg/kg, dry	Hexachloroethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethylphenol µg/kg, dry	Benzoic acid µg/kg, dry	2,4-Dichlorophenol µg/kg, dry	1,2,4-Trichlorobenzene µg/kg, dry	Naphthalene µg/kg, dry
Screening Levels		na	na	na	na	29	650	na	(b)	(b)
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	110 U	110 U	110 U	110 U	58 J	2300 U	1100 U	29 U	380
ICS-G-SE-6	6.8	19 U	19 U	19 U	19 U	4.9 J	170 J	190 U	4.8 U	84
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	26 U	26 U	26 U	26 U	15 J	510 U	260 U	36	190
ICS-H-SE-4	4.7	19 U	19 U	19 U	19 U	6.4 J	390 U	190 U	6.1	20
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	57 U	57 U	57 U	57 U	57 U	1100 U	570 U	14 U	86
ICS-I-SE-4	5.9	19 U	19 U	19 U	19 U	24 U	190 U	97 U	4.8 U	56
ICS-I-SE-5	7.8	18 U	18 U	18 U	18 U	18 U	370 U	180 U	4.6 U	23
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	19 U	19 U	19 U	19 U	24 U	190 U	95 U	4.7 U	53
ICS-J-SE-5	8.5	19 U	19 U	19 U	19 U	3.0 J	110 J	190 U	4.7 U	64
ICS-J-SE-6	10.4	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	23
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	19 U	19 U	19 U	19 U	24 U	190 U	94 U	3.8 J	19 U
ICS-K-SE-4	5.5	20 U	20 U	20 U	20 U	11 J	170 J	200 U	5.0 U	100
ICS-K-SE-5	7	20 U	20 U	20 U	20 U	20 U	390 U	200 U	4.9 U	83
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	20 U	20 U	20 U	20 U	6.4 J	390 U	200 U	4.9 U	160

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	N-Nitroso-di-n-propylamine µg/kg, dry	Hexachloroethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethylphenol µg/kg, dry	Benzoic acid µg/kg, dry	2,4-Dichlorophenol µg/kg, dry	1,2,4-Trichlorobenzene µg/kg, dry	Naphthalene µg/kg, dry
Screening Levels		na	na	na	na	29	650	na	(b)	(b)
ICS-L-SE-4	5	19 U	19 U	19 U	19 U	3.5 J	390 U	190 U	4.8 U	71
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	20 U	20 U	20 U	20 U	20 U	390 U	200 U	4.9 U	20 U
ICS-M-SE-3	2.7	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry	Dimethyl-phthalate µg/kg, dry	Acenaph-thylene µg/kg, dry	Acenaph-thene µg/kg, dry	Dibenzo-furan µg/kg, dry
Screening Levels		na	(b)	na	na	na	(b)	(b)	(b)	(b)
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	98 U	41	98 U	98 U	20 U	20 U	20 U	46	43
ICS-A-SE-5	5.1	95 U	34	95 U	95 U	19 U	19 U	19 U	21	30
ICS-A-SE-6	6.3	99 U	44	----	99 U	20 U	20 U	19 J	27	39
ICS-A-SE-7	7.2	95 U	39	----	95 U	19 U	19 U	19 U	25	37
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	280 U	260	280 U	280 U	57 U	57 U	57 U	910	57 U
ICS-B-SE-4	4.4	260 U	180	----	260 U	52 U	52 U	99	220	100
ICS-B-SE-5	5.5	97 U	44	97 U	97 U	20 U	20 U	20 U	29	39
ICS-B-SE-6	6.6	98 U	48	----	98 U	20 U	20 U	20 U	32	45
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	92 U	13 J	92 U	92 U	18 U	18 U	18 U	21	20
ICS-C-SE-4	4.4	98 U	20 U	98 U	98 U	20 U	20 U	20 U	23	20 U
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	96 U	520	96 U	96 U	19 U	19 U	19	34	33
ICS-D-SE-4	5.3	100 U	45	100 U	100 U	20 U	20 U	12 J	31	42
ICS-D-SE-5	6.7	96 U	63	----	96 U	19 U	19 U	19 U	23	47
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	1500 U	62,000	----	1500 U	300 U	300 U	900	980	1600
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	98 U	120	----	98 U	20 U	20 U	20 U	22	38
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	97 U	20	97 U	97 U	20 U	20 U	20 U	20 U	14 J
ICS-F-SE-8	9.7	92 U	18 U	92 U	92 U	18 U	18 U	18 U	18 U	18 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry	Dimethyl-phthalate µg/kg, dry	Acenaph-thylene µg/kg, dry	Acenaph-thene µg/kg, dry	Dibenzo-furan µg/kg, dry
Screening Levels		na	(b)	na	na	na	(b)	(b)	(b)	(b)
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	570 U	220	570 U	570 U	110 U	110 U	110 U	330	91 J
ICS-G-SE-6	6.8	96 U	40	96 U	96 U	19 U	19 U	34	34	35
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	130 U	91	130 U	130 U	26 U	26 U	26 U	240	86
ICS-H-SE-4	4.7	97 U	19 U	97 U	97 U	19 U	19 U	19 U	19 U	19 U
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	290 U	29 J	290 U	290 U	57 U	57 U	37 J	77	29 J
ICS-I-SE-4	5.9	97 U	19	----	97 U	19 U	19 U	19 U	290	40
ICS-I-SE-5	7.8	92 U	11 J	92 U	92 U	18 U	18 U	18 U	520	23
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	95 U	43	----	95 U	19 U	19 U	24	19	24
ICS-J-SE-5	8.5	94 U	17 J	94 U	94 U	19 U	19 U	22	44	25
ICS-J-SE-6	10.4	96 U	36	96 U	96 U	19 U	19 U	19 U	23	15 J
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	94 U	13 J	----	94 U	19 U	19 U	19 U	18 J	17 J
ICS-K-SE-4	5.5	100 U	140	100 U	100 U	20 U	20 U	20 U	62	34
ICS-K-SE-5	7	98 U	21	98 U	98 U	20 U	20 U	28	80	28
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	98 U	39	98 U	98 U	20 U	20 U	51	66	48

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry	Dimethyl-phthalate µg/kg, dry	Acenaph-thylene µg/kg, dry	Acenaph-thene µg/kg, dry	Dibenzo-furan µg/kg, dry
Screening Levels		na	(b)	na	na	na	(b)	(b)	(b)	(b)
ICS-L-SE-4	5	97 U	38	97 U	97 U	19 U	19 U	22	23	32
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	98 U	20 U	98 U	98 U	20 U	20 U	20 U	20 U	20 U
ICS-M-SE-3	2.7	94 U	19 U	94 U	94 U	19 U	19 U	19 U	19 U	19 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry	Fluorene µg/kg, dry	N-Nitrosodi-phenylamine µg/kg, dry	Pentachloro-phenol µg/kg, dry	Phenanthrene µg/kg, dry
Screening Levels		na	na	(b)	na	(b)	(b)	360	(b)
ICS-A-SE-1	0.4	-----	-----	-----	-----	-----	-----	-----	-----
ICS-A-SE-2	1.3	-----	-----	-----	-----	-----	-----	-----	-----
ICS-A-SE-3	2.7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-A-SE-4	3.9	98 U	98 U	49 U	20 U	51	20 U	18 J	180
ICS-A-SE-5	5.1	95 U	95 U	37 J	19 U	33	11 J	48 U	110
ICS-A-SE-6	6.3	99 U	99 U	27 J	20 U	44	5.0 U	20 U	150
ICS-A-SE-7	7.2	95 U	95 U	24 J	19 U	39	4.8 U	19 U	130
ICS-B-SE-1	1.1	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B-SE-2	2.2	-----	-----	-----	-----	-----	-----	-----	-----
ICS-B-SE-3	3.3	280 U	280 U	140 U	57 U	450	57 U	800	400
ICS-B-SE-4	4.4	260 U	260 U	220	52 U	260	13 U	52 U	630
ICS-B-SE-5	5.5	97 U	97 U	60	20 U	45	6.6 J	49 U	140
ICS-B-SE-6	6.6	98 U	98 U	20 J	20 U	54	4.9 U	20 U	170
ICS-C-SE-1	0.5	-----	-----	-----	-----	-----	-----	-----	-----
ICS-C-SE-2	2.3	-----	-----	-----	-----	-----	-----	-----	-----
ICS-C-SE-3	3.3	92 U	92 U	46 U	18 U	22	2.4 J	46 U	53
ICS-C-SE-4	4.4	98 U	98 U	51	20 U	13 J	20 U	49 U	49
ICS-D-SE-1	0.7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-D-SE-2	2.1	-----	-----	-----	-----	-----	-----	-----	-----
ICS-D-SE-3	3.8	96 U	96 U	48 U	19 U	51	6.1 J	48 U	130
ICS-D-SE-4	5.3	100 U	100 U	50 U	20 U	51	3.5 J	50 U	160
ICS-D-SE-5	6.7	96 U	96 U	19 U	19 U	40	4.8 U	19 U	140
ICS-F-SE-1	0.5	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-2	1.7	1500 U	1500 U	300 U	300 U	5000	15 U	59 U	6800
ICS-F-SE-3	3.1	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-3	3.1	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-4	4.5	98 U	98 U	35 J	20 U	42	4.9 U	20 U	130
ICS-F-SE-5	5.8	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-6	7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-F-SE-7	8.3	97 U	97 U	49 U	20 U	20	20 U	49 U	54
ICS-F-SE-8	9.7	92 U	92 U	220	18 U	18 U	18 U	46 U	12 J
ICS-F-SE-9	10.9	-----	-----	-----	-----	-----	-----	-----	-----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry	Fluorene µg/kg, dry	N-Nitrosodi-phenylamine µg/kg, dry	Pentachloro-phenol µg/kg, dry	Phenanthrene µg/kg, dry
Screening Levels		na	na	(b)	na	(b)	(b)	360	(b)
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	570 U	570 U	290 U	110 U	1200	1800	880 J	940
ICS-G-SE-6	6.8	96 U	96 U	48 U	19 U	52	9.6 J	48 U	170
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	130 U	130 U	64 U	26 U	490	260	190 J	800
ICS-H-SE-4	4.7	97 U	97 U	49	19 U	16 J	3.3 J	49 U	35
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	290 U	290 U	140 U	57 U	52 J	8.9 J	140 U	150
ICS-I-SE-4	5.9	97 U	97 U	80	19 U	59	4.8 U	19 U	67
ICS-I-SE-5	7.8	92 U	92 U	46 U	18 U	41	2.8 J	46 U	500
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	95 U	95 U	42 J	19 U	21	4.7 U	19 U	90
ICS-J-SE-5	8.5	94 U	94 U	47 U	19 U	35	19 U	47 U	120
ICS-J-SE-6	10.4	96 U	96 U	48 U	19 U	21	19 U	48 U	84
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	94 U	94 U	86	19 U	12 J	4.7 U	19 U	34
ICS-K-SE-4	5.5	100 U	100 U	50 U	20 U	49	20 U	59 J	100
ICS-K-SE-5	7	98 U	98 U	49 U	20 U	39	20 U	49 U	110
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	98 U	98 U	49 U	20 U	59	4.0 J	49 U	200

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry	Fluorene µg/kg, dry	N-Nitrosodi-phenylamine µg/kg, dry	Pentachloro-phenol µg/kg, dry	Phenanthrene µg/kg, dry
Screening Levels		na	na	(b)	na	(b)	(b)	360	(b)
ICS-L-SE-4	5	97 U	97 U	48 U	19 U	45	2.6 J	48 U	130
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	98 U	98 U	40 J	20 U	20 U	20 U	49 U	20 U
ICS-M-SE-3	2.7	94 U	94 U	47 U	19 U	19 U	19 U	47 U	19 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl-phthalate µg/kg, dry	Fluoranthene µg/kg, dry	Pyrene µg/kg, dry	Butylbenzyl-phthalate µg/kg, dry	Benzo(a)-anthracene µg/kg, dry	bis (2-Ethylhexyl)-phthalate µg/kg, dry
Screening Levels		na	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	13 J	45	20 U	200	160	4.9 U	53	40 J
ICS-A-SE-5	5.1	19 U	22	19 U	92	78	4.8 U	26	40 J
ICS-A-SE-6	6.3	20 U	29	20 U	110	100	8.2	30	50 U
ICS-A-SE-7	7.2	19 U	33	19 U	130	110	6.6	35	48 U
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	57 U	600	57 U	2200	2000	47	640	5600
ICS-B-SE-4	4.4	52 U	160	52 U	1700	980	13 U	280	2900
ICS-B-SE-5	5.5	20 U	26	20 U	120	95	4.9 U	29	66
ICS-B-SE-6	6.6	20 U	28	20 U	130	110	5.2	33	37 J
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	18 U	15 J	18 U	71	58	3.2 J	19	92
ICS-C-SE-4	4.4	20 U	14 J	20 U	83	86	4.9 U	35	28 J
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	17 J	39	19 U	240	200	4.8 U	59	37 J
ICS-D-SE-4	5.3	20 U	30	20 U	140	100	5.0 U	34	32 J
ICS-D-SE-5	6.7	19 U	34	19 U	140	120	5.0	39	48 U
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	300 U	440	300 U	860	740	15 U	280 J	740 U
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	20 U	24	20 U	100	93	4.9 U	29	49 U
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	20 U	16 J	20 U	74	62	4.9 U	18 J	32 J
ICS-F-SE-8	9.7	18 U	18 U	18 U	12 J	11 J	4.6 U	18 U	29 J
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl-phthalate µg/kg, dry	Fluoranthene µg/kg, dry	Pyrene µg/kg, dry	Butylbenzyl-phthalate µg/kg, dry	Benzo(a)-anthracene µg/kg, dry	bis (2-Ethylhexyl)-phthalate µg/kg, dry
Screening Levels		na	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	110 U	730	110 U	1600	4200	170	740	2800
ICS-G-SE-6	6.8	13 J	59	19 U	250	330	4.8 U	110	37 J
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	26 U	300	120	910	920	51	350	1400
ICS-H-SE-4	4.7	19 U	19 U	19 U	41	41	4.9 U	14 J	32 J
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	29 J	97	57 U	460	360	14 U	300	72 U
ICS-I-SE-4	5.9	19 U	25	19 U	130	130	9.5	42	48 U
ICS-I-SE-5	7.8	87	150	18 U	770	840	4.6 U	310	37 J
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	19 U	20	19 U	87	89	48	19	47 U
ICS-J-SE-5	8.5	12 J	57	19 U	380	270	4.7 U	94	25 J
ICS-J-SE-6	10.4	10 J	33	19 U	260	220	4.8 U	80	24 U
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	19 U	15 J	19 U	36	76	5.1	31	120
ICS-K-SE-4	5.5	20 U	44	20 U	180	200	5.0 U	54	46 J
ICS-K-SE-5	7	20 U	71	16 J	280	230	4.9 U	120	24 J
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	17 J	65	20 U	400	320	4.9 U	91	25 U

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl-phthalate µg/kg, dry	Fluoranthene µg/kg, dry	Pyrene µg/kg, dry	Butylbenzyl-phthalate µg/kg, dry	Benzo(a)-anthracene µg/kg, dry	bis (2-Ethylhexyl)-phthalate µg/kg, dry
Screening Levels		na	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-L-SE-4	5	11 J	37	19 U	180	150	4.8 U	40	24 U
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	20 U	20 U	20 U	26	26	4.9 U	20 U	41 J
ICS-M-SE-3	2.7	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	24 J

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chrysene µg/kg, dry	Di-n-octyl-phthalate µg/kg, dry	total Benzo-fluoranthenes µg/kg, dry	Benzo(a)-pyrene µg/kg, dry	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry
Screening Levels		(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	65	20 U	78	53	23	20 U	30	388	662
ICS-A-SE-5	5.1	38	19 U	43	19 U	12 J	19 U	19	236	308
ICS-A-SE-6	6.3	47	20 U	56	20 U	20	20 U	31	321	394
ICS-A-SE-7	7.2	47	19 U	59	19 U	18 J	19 U	24	279	423
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	1100	57 U	930	480	120	57	140	2720	7667
ICS-B-SE-4	4.4	480	52 U	460	200	83	52 U	83	1390	4266
ICS-B-SE-5	5.5	43	20 U	48	20 U	20 U	20 U	20	297	355
ICS-B-SE-6	6.6	45	20 U	56	20 U	17 J	20 U	25	357	416
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	22	18 U	30 J	18 U	18 U	18 U	12 J	135	212
ICS-C-SE-4	4.4	36	20 U	48	31	14 J	20 U	18 J	117	351
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	75	19 U	100	48	27	10 J	34	893	793
ICS-D-SE-4	5.3	44	20 U	48	20 U	13 J	20 U	18 J	322	397
ICS-D-SE-5	6.7	50	19 U	66	19 U	18 J	19 U	23	314	456
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	410	300 U	410 J	220 J	300 U	300 U	300 U	30220	2920
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	37	20 U	51	20 U	15 J	20 U	20	290	345
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	26	20 U	16 J	20 U	14 J	20 U	16 J	112	226
ICS-F-SE-8	9.7	18 U	18 U	37 U	18 U	18 U	18 U	18 U	18 U	23
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chrysene µg/kg, dry	Di-n-octyl-phthalate µg/kg, dry	total Benzo-fluoranthenes µg/kg, dry	Benzo(a)-pyrene µg/kg, dry	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry
Screening Levels		(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	1800	110 U	890	110 U	140	110 U	180	3580	9550
ICS-G-SE-6	6.8	130	19 U	180	110	45	16 J	56	433	1227
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	490	26 U	490	260	68	26	67	2020	3581
ICS-H-SE-4	4.7	15 J	19 U	20 J	19 U	19 U	19 U	19 U	71	131
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	540	57 U	780	360	180	63	210	499	3253
ICS-I-SE-4	5.9	45	19 U	80	19 U	18 J	19 U	22	497	467
ICS-I-SE-5	7.8	350	18 U	470	360	170	73	220	1234	3563
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	23	19 U	34 J	19 U	19 U	19 U	10 J	227	262
ICS-J-SE-5	8.5	160	19 U	140	72	36	11 J	34	342	1197
ICS-J-SE-6	10.4	78	19 U	120	64	34	16 J	42	184	914
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	67	19 U	56	22	19 U	19 U	19 U	79	288
ICS-K-SE-4	5.5	79	20 U	90	38	28	20 U	32	355	701
ICS-K-SE-5	7	170	20 U	210	110	49	17 J	65	411	1251
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	120	20 U	160	93	50	21	56	601	1311

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Chrysene µg/kg, dry	Di-n-octyl-phthalate µg/kg, dry	total Benzo-fluoranthenes µg/kg, dry	Benzo(a)-pyrene µg/kg, dry	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry
Screening Levels		(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
ICS-L-SE-4	5	50	19 U	67	19 U	21	19 U	32	328	540
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	14 J	20 U	25 J	9.8 J	20 U	20 U	20 U	20 U	101
ICS-M-SE-3	2.7	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	19 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Tributyltin ion µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U
ICS-A-SE-5	5.1	----	0.48 U	1.2 U	1.4 U	0.48 U	0.48 U	0.62 U	0.96 U	0.48 U
ICS-A-SE-6	6.3	----	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U
ICS-A-SE-7	7.2	----	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.77 U	0.96 U	0.48 U
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	----	25 U	120 U	25 U	25 U	100 U	190 U	340 U	25 U
ICS-B-SE-4	4.4	----	39 U	250 U	39 U	110 U	110 U	39 U	110 U	39 U
ICS-B-SE-5	5.5	----	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U
ICS-B-SE-6	6.6	----	0.50 U	1.1 U	1.3 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U
ICS-C-SE-4	4.4	----	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U
ICS-D-SE-4	5.3	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U
ICS-D-SE-5	6.7	----	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	----	5.1 U	14 U	7.4 U	5.9 U	7.2 U	4.1 U	12 U	6.6 U
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	----	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U
ICS-F-SE-8	9.7	----	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Tributyltin ion µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	----	24 U	24 U	24 U	24 U	36 U	24 U	120 U	24 U
ICS-G-SE-6	6.8	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	----	36 U	36 U	36 U	36 U	100 U	340 U	390 U	36 U
ICS-H-SE-4	4.7	----	0.47 U	0.47 U	0.47 U	1.5 U	4.2 U	8.9 U	4.8 U	0.47 U
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	----	2.4 U	3.7 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U
ICS-I-SE-4	5.9	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	6.3 U	11 U	2.4 U
ICS-I-SE-5	7.8	----	0.48 U	1.0 U	0.48 U	0.48 U	0.98 U	1.1 U	2.2 U	0.48 U
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	----	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.3 U	1.0 U	0.50 U
ICS-J-SE-5	8.5	----	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U
ICS-J-SE-6	10.4	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	59	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	----	2.4 U	4.4 U	2.4 U	2.4 U	4.1 U	2.4 U	25 U	2.4 U
ICS-K-SE-4	5.5	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U
ICS-K-SE-5	7	----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	3.7 U	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	----	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Tributyltin ion µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-L-SE-4	5	-----	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	-----	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	7.9 U	2.5 U
ICS-M-SE-3	2.7	-----	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U

Notes: *U* = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxychlor µg/kg, dry	Endrin ketone µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	----	----	----
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	5.8 U	24 U	4.7 U
ICS-A-SE-5	5.1	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-A-SE-6	6.3	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	1.3 U	4.8 U	0.96 U
ICS-A-SE-7	7.2	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-B-SE-1	1.1	----	----	----	----	----	----	----	----	----
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	430 U	870 J	120 U	210 U	640 U	140 U	990 U	250 U	50 U
ICS-B-SE-4	4.4	78 U	52 U	550 U	78 U	52 U	78 U	52 U	390 U	510 U
ICS-B-SE-5	5.5	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	25 U	4.9 U
ICS-B-SE-6	6.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.6 U	5.0 U	1.0 U
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	----	----	----
ICS-C-SE-3	3.3	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U
ICS-C-SE-4	4.4	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	----	----	----
ICS-D-SE-3	3.8	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U
ICS-D-SE-4	5.3	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	24 U	4.8 U
ICS-D-SE-5	6.7	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	6.7 U	13 U	4.8 U	4.8 U	4.8 U	4.8 U	6.4 U	24 U	4.8 U
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
ICS-F-SE-5	5.8	----	----	----	----	----	----	----	----	----
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U
ICS-F-SE-8	9.7	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxychlor µg/kg, dry	Endrin ketone µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	----	----	----
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	----	----	----
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	48 U	480	48 U	48 U	870	48 U	290 U	240 U	79 U
ICS-G-SE-6	6.8	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	----	----	----
ICS-H-SE-3	3.3	410 U	650 J	210 U	71 U	640 U	71 U	1100 U	360 U	220 U
ICS-H-SE-4	4.7	2.2 U	24	0.94 U	1.3 U	16	0.94 U	3.6 U	4.7 U	0.94 U
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-I-SE-3	4.2	4.9 U	29	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U
ICS-I-SE-4	5.9	4.9 U	53 J	4.9 U	4.9 U	6.8	4.9 U	9.7 U	24 U	4.9 U
ICS-I-SE-5	7.8	0.96 U	31 J	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	----	----	----
ICS-J-SE-4	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	4.1 U
ICS-J-SE-5	8.5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U
ICS-J-SE-6	10.4	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	----	----	----
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	----	----	----
ICS-K-SE-3	3.8	4.7 U	56 J	4.7 U	4.7 U	29 J	4.7 U	33 U	24 U	25 U
ICS-K-SE-4	5.5	4.8 U	41	4.8 U	4.8 U	27	4.8 U	4.8 U	24 U	4.8 U
ICS-K-SE-5	7	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	----	----	----
ICS-L-SE-3	3.5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxychlor µg/kg, dry	Endrin ketone µg/kg, dry
Screening Levels		na	na	na	na	na	na	na	na	na
ICS-L-SE-4	5	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	24 U	4.8 U
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-2	1.6	4.9 U	11 J	4.9 U	4.9 U	4.9 U	4.9 U	16 U	25 U	4.9 U
ICS-M-SE-3	2.7	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U

Notes: U = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
(a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
(b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Endrin aldehyde µg/kg, dry	trans - Chlordane µg/kg, dry	cis - Chlordane µg/kg, dry	Toxaphene µg/kg, dry	Hexachloro-benzene µg/kg, dry	Hexachloro-butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry
Screening Levels		na	na	na	na	(b)	(b)	----	----	----	----	----
ICS-A-SE-1	0.4	----	----	----	----	----	----	----	----	----	----	----
ICS-A-SE-2	1.3	----	----	----	----	----	----	75 U	75 U	810	870	690
ICS-A-SE-3	2.7	----	----	----	----	----	----	----	----	----	----	----
ICS-A-SE-4	3.9	4.7 U	2.4 U	2.4 U	470 U	4.7 U	4.7 U	3.8 U	3.8 U	42	31	26
ICS-A-SE-5	5.1	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U	3.8 U	3.8 U	12	7.8	7.3
ICS-A-SE-6	6.3	0.96 U	0.94 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	4.8 U	3.8 U	3.8 U
ICS-A-SE-7	7.2	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	6.3 U	3.8 U	3.8 U
ICS-B-SE-1	1.1	----	----	----	----	----	----	37 U	37 U	170	140	120
ICS-B-SE-2	2.2	----	----	----	----	----	----	----	----	----	----	----
ICS-B-SE-3	3.3	50 U	300 U	25 U	5000 U	57 U	50 U	400 U	400 U	9600	11,000	8600
ICS-B-SE-4	4.4	78 U	39 U	39 U	2700 U	130 U	78 U	1500 U	1500 U	23,000	12,000	9100
ICS-B-SE-5	5.5	4.9 U	2.5 U	2.5 U	490 U	4.9 U	4.9 U	3.9 U	50	3.9 U	24	23
ICS-B-SE-6	6.6	1.0 U	2.1 U	0.50 U	25 U	1.0 U	1.0 U	4.0 U	4.0 U	5.6 U	4.0 U	4.0 U
ICS-C-SE-1	0.5	----	----	----	----	----	----	----	----	----	----	----
ICS-C-SE-2	2.3	----	----	----	----	----	----	3.6 U	3.6 U	18	21	16
ICS-C-SE-3	3.3	4.7 U	2.4 U	2.4 U	470 U	4.7 U	4.7 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-C-SE-4	4.4	0.94 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
ICS-D-SE-1	0.7	----	----	----	----	----	----	----	----	----	----	----
ICS-D-SE-2	2.1	----	----	----	----	----	----	200 U	200 U	6200	7700	3100
ICS-D-SE-3	3.8	4.9 U	2.4 U	2.4 U	490 U	4.9 U	4.9 U	3.9 U	3.9 U	27	30	10
ICS-D-SE-4	5.3	4.8 U	2.4 U	2.4 U	480 U	4.8 U	4.8 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-D-SE-5	6.7	0.97 U	0.88 U	0.49 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-F-SE-1	0.5	----	----	----	----	----	----	----	----	----	----	----
ICS-F-SE-2	1.7	7.3 U	3.2 U	2.4 U	120 U	4.8 U	4.8 U	3.8 U	3.8 U	130 U	160	170
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----	----	----
ICS-F-SE-3	3.1	----	----	----	----	----	----	----	----	----	----	----
ICS-F-SE-4	4.5	0.99 U	0.50 U	0.50 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-F-SE-5	5.8	----	----	----	----	----	----	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-F-SE-6	7	----	----	----	----	----	----	----	----	----	----	----
ICS-F-SE-7	8.3	4.7 U	2.4 U	2.4 U	470 U	4.7 U	4.7 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-F-SE-8	9.7	0.92 U	0.46 U	0.46 U	92 U	0.92 U	0.92 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-F-SE-9	10.9	----	----	----	----	----	----	----	----	----	----	----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Endrin aldehyde µg/kg, dry	trans - Chlordane µg/kg, dry	cis - Chlordane µg/kg, dry	Toxaphene µg/kg, dry	Hexachloro-benzene µg/kg, dry	Hexachloro-butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry
Screening Levels		na	na	na	na	(b)	(b)	----	----	----	----	----
ICS-G-SE-1	0.6	----	----	----	----	----	----	----	----	----	----	----
ICS-G-SE-2	1.8	----	----	----	----	----	----	----	----	----	----	----
ICS-G-SE-3	3	----	----	----	----	----	----	39 U	39 U	610	670	270
ICS-DUP1-SE	dup. of G-SE-3	----	----	----	----	----	----	38 U	38 U	390	440	210
ICS-G-SE-4	4.1	----	----	----	----	----	----	----	----	----	----	----
ICS-G-SE-5	5.1	48 U	92 U	24 U	4800 U	48 U	48 U	78 U	78 U	3600	3600	2800
ICS-G-SE-6	6.8	4.9 U	2.4 U	2.4 U	490 U	4.9 U	4.9 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-H-SE-1	0.4	----	----	----	----	----	----	----	----	----	----	----
ICS-H-SE-2	1.7	----	----	----	----	----	----	170 U	170 U	7400	4900	5800
ICS-H-SE-3	3.3	71 U	36 U	36 U	7100 U	71 U	71 U	580 U	580 U	13,000	16,000	9100
ICS-H-SE-4	4.7	0.94 U	2.5 U	0.47 U	94 U	0.94 U	0.94 U	18 U	260	18 U	93 U	18 U
ICS-I-SE-1	0.9	----	----	----	----	----	----	----	----	----	----	----
ICS-I-SE-2	2.6	----	----	----	----	----	----	140 U	140 U	5100	6000	1900
ICS-I-SE-3	4.2	4.9 U	2.4 U	2.4 U	490 U	4.9 U	4.9 U	3.9 U	3.9 U	170	160	65
ICS-I-SE-4	5.9	4.9 U	10 U	2.4 U	120 U	4.9 U	4.9 U	3.9 U	3.9 U	70	46	27
ICS-I-SE-5	7.8	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U	3.8 U	36	3.8 U	19 U	5.6
ICS-I-SE-6	9.5	----	----	----	----	----	----	----	----	----	----	----
ICS-J-SE-1	0.8	----	----	----	----	----	----	----	----	----	----	----
ICS-J-SE-2	2.6	----	----	----	----	----	----	----	----	----	----	----
ICS-J-SE-3	4.9	----	----	----	----	----	----	3.8 U	3.8 U	47	110	180
ICS-J-SE-4	6.8	1.0 U	1.5 U	0.50 U	25 U	1.0 U	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-J-SE-5	8.5	5.0 U	2.5 U	2.5 U	500 U	5.0 U	5.0 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-J-SE-6	10.4	4.9 U	2.4 U	2.4 U	490 U	4.9 U	4.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-K-SE-1	0.7	----	----	----	----	----	----	----	----	----	----	----
ICS-K-SE-2	2.2	----	----	----	----	----	----	170 U	170 U	5000	5100	2900
ICS-DUP2-SE	dup. of K-SE-2	----	----	----	----	----	----	220 U	220 U	6700	6500	3400
ICS-K-SE-3	3.8	4.7 U	14 U	2.4 U	120 U	4.7 U	4.7 U	38 U	38 U	760	590	260
ICS-K-SE-4	5.5	4.8 U	2.4 U	2.4 U	480 U	4.8 U	4.8 U	3.8 U	3.8 U	22	76 U	81
ICS-K-SE-5	7	4.7 U	2.4 U	2.4 U	470 U	4.7 U	4.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-L-SE-1	0.7	----	----	----	----	----	----	----	----	----	----	----
ICS-L-SE-2	1.9	----	----	----	----	----	----	38 U	38 U	910	880	520
ICS-L-SE-3	3.5	5.0 U	2.5 U	2.5 U	500 U	5.0 U	5.0 U	4.0 U	4.0 U	8.0	9.2	6.0

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Endrin aldehyde µg/kg, dry	trans - Chlordane µg/kg, dry	cis - Chlordane µg/kg, dry	Toxaphene µg/kg, dry	Hexachloro-benzene µg/kg, dry	Hexachloro-butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry
Screening Levels		na	na	na	na	(b)	(b)	-----	-----	-----	-----	-----
ICS-L-SE-4	5	4.8 U	2.4 U	2.4 U	480 U	4.8 U	4.8 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-L-SE-5	6.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-M-SE-1	0.6	-----	-----	-----	-----	-----	-----	37 U	37 U	370	360	380
ICS-M-SE-2	1.6	4.9 U	2.5 U	2.5 U	490 U	4.9 U	4.9 U	3.8 U	3.8 U	98	120	94
ICS-M-SE-3	2.7	0.95 U	0.48 U	0.48 U	95 U	0.95 U	0.95 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U

Notes: U = nondetected at the associated lower reporting limit.
 J = estimate associated with value less than the verifiable lower quantitation limit.
 J_R = estimate; due to low matrix spike recovery. Value likely biased low.
 J_Q = estimate; due to noncompliant CCV check.
 J_B = associated value may be biased high due to contribution from laboratory background or method blank.
 J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
 (a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
 (b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 [Yellow Box] - Value exceeds SMS-SQS (based on dry weight criteria)

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Detected total PCBs µg/kg, dry
Screening Levels		-----	-----	2
ICS-A-SE-1	0.4	-----	-----	-----
ICS-A-SE-2	1.3	75 U	75 U	2370
ICS-A-SE-3	2.7	-----	-----	-----
ICS-A-SE-4	3.9	3.8 U	3.8 U	99
ICS-A-SE-5	5.1	3.8 U	3.8 U	27.1
ICS-A-SE-6	6.3	3.8 U	3.8 U	4.8 U
ICS-A-SE-7	7.2	3.8 U	3.8 U	6.3 U
ICS-B-SE-1	1.1	37 U	37 U	430
ICS-B-SE-2	2.2	-----	-----	-----
ICS-B-SE-3	3.3	400 U	400 U	29,200
ICS-B-SE-4	4.4	1500 U	1500 U	44,100
ICS-B-SE-5	5.5	3.9 U	3.9 U	97
ICS-B-SE-6	6.6	4.0 U	4.0 U	5.6 U
ICS-C-SE-1	0.5	-----	-----	-----
ICS-C-SE-2	2.3	3.6 U	3.6 U	55
ICS-C-SE-3	3.3	3.8 U	3.8 U	3.8 U
ICS-C-SE-4	4.4	3.6 U	3.6 U	3.6 U
ICS-D-SE-1	0.7	-----	-----	-----
ICS-D-SE-2	2.1	200 U	200 U	17,000
ICS-D-SE-3	3.8	3.9 U	3.9 U	67
ICS-D-SE-4	5.3	3.9 U	3.9 U	3.9 U
ICS-D-SE-5	6.7	3.9 U	3.9 U	3.9 U
ICS-F-SE-1	0.5	-----	-----	-----
ICS-F-SE-2	1.7	3.8 U	3.8 U	330
ICS-F-SE-3	3.1	-----	-----	-----
ICS-F-SE-3	3.1	-----	-----	-----
ICS-F-SE-4	4.5	4.0 U	4.0 U	4.0 U
ICS-F-SE-5	5.8	4.0 U	4.0 U	4.0 U
ICS-F-SE-6	7	-----	-----	-----
ICS-F-SE-7	8.3	3.9 U	3.9 U	3.9 U
ICS-F-SE-8	9.7	3.7 U	3.7 U	3.7 U
ICS-F-SE-9	10.9	-----	-----	-----

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Detected total PCBs µg/kg, dry
Screening Levels		-----	-----	2
ICS-G-SE-1	0.6	-----	-----	-----
ICS-G-SE-2	1.8	-----	-----	-----
ICS-G-SE-3	3	39 U	39 U	1550
ICS-DUP1-SE	dup. of G-SE-3	38 U	38 U	1040
ICS-G-SE-4	4.1	-----	-----	-----
ICS-G-SE-5	5.1	78 U	78 U	10,000
ICS-G-SE-6	6.8	4.0 U	4.0 U	4.0 U
ICS-H-SE-1	0.4	-----	-----	-----
ICS-H-SE-2	1.7	170 U	170 U	18,100
ICS-H-SE-3	3.3	580 U	580 U	38,100
ICS-H-SE-4	4.7	18 U	18 U	260
ICS-I-SE-1	0.9	-----	-----	-----
ICS-I-SE-2	2.6	140 U	140 U	13,000
ICS-I-SE-3	4.2	3.9 U	3.9 U	395
ICS-I-SE-4	5.9	3.9 U	3.9 U	143
ICS-I-SE-5	7.8	3.8 U	3.8 U	42
ICS-I-SE-6	9.5	-----	-----	-----
ICS-J-SE-1	0.8	-----	-----	-----
ICS-J-SE-2	2.6	-----	-----	-----
ICS-J-SE-3	4.9	3.8 U	3.8 U	337
ICS-J-SE-4	6.8	4.0 U	4.0 U	4.0 U
ICS-J-SE-5	8.5	3.8 U	3.8 U	3.8 U
ICS-J-SE-6	10.4	3.9 U	3.9 U	3.9 U
ICS-K-SE-1	0.7	-----	-----	-----
ICS-K-SE-2	2.2	170 U	170 U	13,000
ICS-DUP2-SE	dup. of K-SE-2	220 U	220 U	16,600
ICS-K-SE-3	3.8	38 U	38 U	1610
ICS-K-SE-4	5.5	3.8 U	3.8 U	103
ICS-K-SE-5	7	3.7 U	3.7 U	3.7 U
ICS-L-SE-1	0.7	-----	-----	-----
ICS-L-SE-2	1.9	38 U	38 U	2310
ICS-L-SE-3	3.5	4.0 U	4.0 U	23

TABLE F.4a - Results of Subsurface Sediment Sample Analyses - 2012

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Detected total PCBs µg/kg, dry
Screening Levels		-----	-----	2
ICS-L-SE-4	5	3.9 U	3.9 U	3.9 U
ICS-L-SE-5	6.7	-----	-----	-----
ICS-M-SE-1	0.6	37 U	37 U	1110
ICS-M-SE-2	1.6	3.8 U	3.8 U	312
ICS-M-SE-3	2.7	3.7 U	3.7 U	3.7 U

Notes: *U* = nondetected at the associated lower reporting limit.
J = estimate associated with value less than the verifiable lower quantitation limit.
J_R = estimate; due to low matrix spike recovery. Value likely biased low.
J_Q = estimate; due to noncompliant CCV check.
J_B = associated value may be biased high due to contribution from laboratory background or method blank.
J_P = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).
 grain size analyses: % retained in each size fraction
 (a) - SMS-SQS - Sediment Management Standards - Sediment Quality Standard (for those with dry weight criteria)
 (b) - SMS-SQS - Criteria carbon-normalized (see Table XX).
 - Value exceeds SMS-SQS (based on dry weight criteria)
 grain size analyses: % retained in each size fraction

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	ARI Delivery Group	Benzo(a)-anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo-fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)-pyrene µg/kg, dry
ICS-A-SE-1	0.4	VV01	----		----		----		----
ICS-A-SE-2	1.3	VV01	----		----		----		----
ICS-A-SE-3	2.7	VV01	----		----		----		----
ICS-A-SE-4	3.9	VV01	53	5.3	65	0.65	78	7.8	53
ICS-A-SE-5	5.1	VV01	26	2.6	38	0.38	43	4.3	19 U
ICS-A-SE-6	6.3	XD56	30	3	47	0.47	56	5.6	20 U
ICS-A-SE-7	7.2	XD56	35	3.5	47	0.47	59	5.9	19 U
ICS-B-SE-1	1.1	VV01	----		----		----		----
ICS-B-SE-2	2.2	VV01	----		----		----		----
ICS-B-SE-3	3.3	VV01	640	64	1100	11	930	93	480
ICS-B-SE-4	4.4	XD56	280	28	480	4.8	460	46	200
ICS-B-SE-5	5.5	VV01	29	2.9	43	0.43	48	4.8	20 U
ICS-B-SE-6	6.6	XD56	33	3.3	45	0.45	56	5.6	20 U
ICS-C-SE-1	0.5	VV01	----		----		----		----
ICS-C-SE-2	2.3	VV01	----		----		----		----
ICS-C-SE-3	3.3	VV01	19	1.9	22		30 J	3	18 U
ICS-C-SE-4	4.4	VV01	35	3.5	36		48	4.8	31
ICS-D-SE-1	0.7	VV01	----		----		----		----
ICS-D-SE-2	2.1	VV01	----		----		----		----
ICS-D-SE-3	3.8	VV01	59	5.9	75	0.75	100	10	48
ICS-D-SE-4	5.3	VV01	34	3.4	44	0.44	48	4.8	20 U
ICS-D-SE-5	6.7	XD56	39	3.9	50	0.5	66	6.6	19 U
ICS-F-SE-1	0.5	VV01	----		----		----		----
ICS-F-SE-2	1.7	XD56	280 J	28	410	4.1	410 J	41	220 J
ICS-F-SE-3	3.1	VV01	----		----		----		----
ICS-F-SE-3	3.1	VV01	----		----		----		----
ICS-F-SE-4	4.5	XD56	29	2.9	37	0.37	51	5.1	20 U
ICS-F-SE-5	5.8	VV01	----		----		----		----
ICS-F-SE-6	7	VV01	----		----		----		----
ICS-F-SE-7	8.3	VV01	18 J	1.8	26	0.26	16 J	1.6	20 U
ICS-F-SE-8	9.7	VV01	18 U		18 U		37 U		18 U
ICS-F-SE-9	10.9	VV01	----		----		----		----

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	ARI Delivery Group	Benzo(a)-anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo-fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)-pyrene µg/kg, dry
ICS-G-SE-1	0.6	VV01	----		----		----		----
ICS-G-SE-2	1.8	VV01	----		----		----		----
ICS-G-SE-3	3	VV01	----		----		----		----
ICS-G-SE-4	4.1	VV01	----		----		----		----
ICS-G-SE-5	5.1	VV01	740	74	1800	18	890	89	110 U
ICS-G-SE-6	6.8	VV01	110	11	130	1.3	180	18	110
ICS-H-SE-1	0.4	VV01	----		----		----		----
ICS-H-SE-2	1.7	VV01	----		----		----		----
ICS-H-SE-3	3.3	VV01	350	35	490	4.9	490	49	260
ICS-H-SE-4	4.7	VV10	14 J	1.4	15 J	0.15	20 J	2	19 U
ICS-I-SE-1	0.9	VV10	----		----		----		----
ICS-I-SE-2	2.6	VV10	----		----		----		----
ICS-I-SE-3	4.2	VV10	300	30	540	5.4	780	78	360
ICS-I-SE-4	5.9	XD56	42	4.2	45	0.45	80	8	19 U
ICS-I-SE-5	7.8	VV10	310	31	350	3.5	470	47	360
ICS-I-SE-6	9.5	VV10	----		----		----		----
ICS-J-SE-1	0.8	VV10	----		----		----		----
ICS-J-SE-2	2.6	VV10	----		----		----		----
ICS-J-SE-3	4.9	VV10	----		----		----		----
ICS-J-SE-4	6.8	XD56	19	1.9	23	0.23	34 J	3.4	19 U
ICS-J-SE-5	8.5	VV10	94	9.4	160	1.6	140	14	72
ICS-J-SE-6	10.4	VV10	80	8	78	0.78	120	12	64
ICS-K-SE-1	0.7	VV10	----		----		----		----
ICS-K-SE-2	2.2	VV10	----		----		----		----
ICS-K-SE-3	3.8	XD56	31	3.1	67	0.67	56	5.6	22
ICS-K-SE-4	5.5	VV10	54	5.4	79	0.79	90	9	38
ICS-K-SE-5	7	VV10	120	12	170	1.7	210	21	110
ICS-L-SE-1	0.7	VV10	----		----		----		----
ICS-L-SE-2	1.9	VV10	----		----		----		----
ICS-L-SE-3	3.5	VV10	91	9.1	120	1.2	160	16	93
ICS-L-SE-4	5	VV10	40	4	50	0.5	67	6.7	19 U
ICS-L-SE-5	6.7	VV10	----		----		----		----

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	ARI Delivery Group	Benzo(a)-anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo-fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)-pyrene µg/kg, dry
ICS-M-SE-1	0.6	VV10	-----		-----		-----		-----
ICS-M-SE-2	1.6	VV10	20 U		14 J	0.14	25 J	2.5	9.8 J
ICS-M-SE-3	2.7	VV10	19 U		19 U		38 U		19 U
ICS-DUP	G-SE3	VV01	-----		-----		-----		-----
ICS-DUP	K-SE2	VV10	-----		-----		-----		-----
No. Spls.			34		34		34		34
No. Detects			31		30		32		17
%Detects			91.2%		88.2%		94.1%		50.0%
Maximum			740		1800		930		480

Notes: *U = nondetected at the associated lower reporting limit.*

J = Estimated concentration

TEF -Toxicity Equivalency Factor

TEQ - Toxicity Equivalency Quotient

BaPEq. - Benzo(a)pyrene equivalent concentration

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Adjusted Conc. TEF=1.0	Indeno(1,2,3-cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)-anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	TEQ Sum BaPEq µg/kg, dry
ICS-A-SE-1	0.4		----		----		----
ICS-A-SE-2	1.3		----		----		----
ICS-A-SE-3	2.7		----		----		----
ICS-A-SE-4	3.9	53	23	2.3	20 U		69
ICS-A-SE-5	5.1		12 J	1.2	19 U		8.5
ICS-A-SE-6	6.3		20	2	20 U		11
ICS-A-SE-7	7.2		18 J	1.8	19 U		12
ICS-B-SE-1	1.1		----		----		----
ICS-B-SE-2	2.2		----		----		----
ICS-B-SE-3	3.3	480	120	12	57	57	717
ICS-B-SE-4	4.4	200	83	8.3	52 U		287
ICS-B-SE-5	5.5		20 U		20 U		8
ICS-B-SE-6	6.6		17 J	1.7	20 U		11
ICS-C-SE-1	0.5		----		----		----
ICS-C-SE-2	2.3		----		----		----
ICS-C-SE-3	3.3		18 U		18 U		5
ICS-C-SE-4	4.4	31	14 J	1.4	20 U		41
ICS-D-SE-1	0.7		----		----		----
ICS-D-SE-2	2.1		----		----		----
ICS-D-SE-3	3.8	48	27	2.7	10 J	10	77
ICS-D-SE-4	5.3		13 J	1.3	20 U		10
ICS-D-SE-5	6.7		18 J	1.8	19 U		13
ICS-F-SE-1	0.5		----		----		----
ICS-F-SE-2	1.7	220	300 U		300 U		293
ICS-F-SE-3	3.1		----		----		----
ICS-F-SE-3	3.1		----		----		----
ICS-F-SE-4	4.5		15 J	1.5	20 U		10
ICS-F-SE-5	5.8		----		----		----
ICS-F-SE-6	7		----		----		----
ICS-F-SE-7	8.3		14 J	1.4	20 U		5
ICS-F-SE-8	9.7		18 U		18 U		0
ICS-F-SE-9	10.9		----		----		----

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Adjusted Conc. TEF=1.0	Indeno(1,2,3-cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)-anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	TEQ Sum BaPEq µg/kg, dry
ICS-G-SE-1	0.6		----		----		----
ICS-G-SE-2	1.8		----		----		----
ICS-G-SE-3	3		----		----		----
ICS-G-SE-4	4.1		----		----		----
ICS-G-SE-5	5.1		140	14	110 U		195
ICS-G-SE-6	6.8	110	45	4.5	16 J	16	161
ICS-H-SE-1	0.4		----		----		----
ICS-H-SE-2	1.7		----		----		----
ICS-H-SE-3	3.3	260	68	6.8	26	26	382
ICS-H-SE-4	4.7		19 U		19 U		4
ICS-I-SE-1	0.9		----		----		----
ICS-I-SE-2	2.6		----		----		----
ICS-I-SE-3	4.2	360	180	18	63	63	554
ICS-I-SE-4	5.9		18 J	1.8	19 U		14
ICS-I-SE-5	7.8	360	170	17	73	73	532
ICS-I-SE-6	9.5		----		----		----
ICS-J-SE-1	0.8		----		----		----
ICS-J-SE-2	2.6		----		----		----
ICS-J-SE-3	4.9		----		----		----
ICS-J-SE-4	6.8		19 U		19 U		6
ICS-J-SE-5	8.5	72	36	3.6	11 J	11	112
ICS-J-SE-6	10.4	64	34	3.4	16 J	16	104
ICS-K-SE-1	0.7		----		----		----
ICS-K-SE-2	2.2		----		----		----
ICS-K-SE-3	3.8	22	19 U		19 U		31
ICS-K-SE-4	5.5	38	28	2.8	20 U		56
ICS-K-SE-5	7	110	49	4.9	17 J	17	167
ICS-L-SE-1	0.7		----		----		----
ICS-L-SE-2	1.9		----		----		----
ICS-L-SE-3	3.5	93	50	5	21	21	145
ICS-L-SE-4	5		21	2.1	19 U		13
ICS-L-SE-5	6.7		----		----		----

TABLE F.4b - BaPEq-TEQ Calculations -Embayment Subsurface Sediments - 2012 Data

ICS/NW Cooperage Site
Seattle, Washington

Core Location	Mid-Point Depth (feet)	Adjusted Conc. TEF=1.0	Indeno(1,2,3-cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)-anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	TEQ Sum BaPEq µg/kg, dry
ICS-M-SE-1	0.6		-----		-----		-----
ICS-M-SE-2	1.6	9.8	20 U		20 U		12
ICS-M-SE-3	2.7		19 U		19 U		nd
ICS-DUP	G-SE3		-----		-----		-----
ICS-DUP	K-SE2		-----		-----		-----
No. Spls.			34		34		34
No. Detects			25		10		33
%Detects			73.5%		29.4%		97.1%
Maximum			300		300		717

Notes: *U = nondetected at the associated lower reporting limit.*

J = Estimated concentration

TEF -Toxicity Equivalency Factor

TEQ - Toxicity Equivalency Quotient

BaPEq. - Benzo(a)pyrene equivalent concentration

TABLE F.5 - LDW-SC40 Core Sediment Data

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (feet)) Units	LDW-SC40 Feb-06 (a) (mg/kg)	LDW-SC40 Feb-06 (a) (mg/kg)	LDW-SC40 Feb-06 (a) (mg/kg)
Total Solids (%)	73.2	80.6	81.95
Total Organic Carbon (%)	0.747	0.328	0.211
Total Metals			
Antimony	<7	<6	<6
Arsenic	7	<6	<6
Cadmium	<0.3	<0.2	<0.2
Chromium	14.4	17	11.9
Cobalt	4.3	4.6	3.7
Copper	20.9	13.8	8.3
Lead	18	44	<2
Mercury	0.05	<0.05	<0.05
Molybdenum	1.0	0.9	<0.6
Nickel	10	15	8
Selenium	<7	<6	<6
Silver	<0.4	<0.4	<0.4
Thallium	<7	<6	<6
Vanadium	45.5	45.5	43.3
Zinc	47.4	27.4	24.5
Semivolatile Organic Compounds			
1,2,4-Trichlorobenzene	<0.0060	<0.0059	<0.0060
1,2-Dichlorobenzene	<0.0060	<0.0059	<0.0060
1,3-Dichlorobenzene	<0.020	<0.020	<0.020
1,4-Dichlorobenzene	<0.0060	<0.0059	<0.0060
1-Methylnaphthalene	<0.020	<0.020	<0.020
2,4-Dichlorophenol	<0.100	<0.099	<0.100
2,4-Dinitrophenol	<0.200	<0.200	<0.200
2,4-Dinitrotoluene	<0.100	<0.099	<0.100
2,6-Dinitrotoluene	<0.100	<0.099	<0.100
2,4-Dimethylphenol	<0.0060	<0.0059	<0.0060
2,4,5-Trichlorophenol	<0.100	<0.099	<0.100
2,4,6-Trichlorophenol	<0.100	<0.099	<0.100
2-Chloronaphthalene	<0.020	<0.020	<0.020
2-Chlorophenol	<0.020	<0.020	<0.020
2-Methylnaphthalene	<0.020	<0.020	<0.020
2-Methylphenol	<0.0060	<0.0059	<0.0060
2-Nitroaniline	<0.100	<0.099	<0.100
2-Nitrophenol	<0.100	<0.099	<0.100
3,3-Dichlorobenzidine	<0.100	<0.099	<0.100
3-Nitroaniline	<0.100	<0.099	<0.100
4,6-Dinitro-o-cresol	<0.200	<0.200	<0.200
4-Bromophenyl phenyl ether	<0.020	<0.020	<0.020
4-Chloro-3-methylphenol	<0.100	<0.099	<0.100
4-Chloroaniline	<0.100	<0.099	<0.100
4-Chlorophenyl phenyl ether	<0.020	<0.020	<0.020
4-Methylphenol	<0.020	<0.020	<0.020
4-Nitroaniline	<0.100	<0.099	<0.100
4-Nitrophenol	<0.100	<0.099	<0.100
Acenaphthene	<0.020	<0.020	<0.020
Acenaphthylene	<0.020	<0.020	<0.020
Aniline	<0.036	<0.020	<0.020
Anthracene	0.032	<0.020	<0.020
Benzo(a)anthracene	0.054	<0.020	<0.020
Benzo(a)pyrene	0.030	<0.020	<0.020
Benzo(b)fluoranthene	0.041	<0.020	<0.020
Benzo(ghi)perylene	0.018	<0.020	<0.020
Benzo(k)fluoranthene	0.044	<0.020	<0.020

TABLE F.5 - LDW-SC40 Core Sediment Data

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (feet) Units	LDW-SC40 Feb-06 (a) 1270303 200332 0 to 1.3 (mg/kg)	LDW-SC40 Feb-06 (a) 1270303 200332 1.3-2 (mg/kg)	LDW-SC40 Feb-06 (a) 1270303 200332 2-4 (mg/kg)
Total Benzofluoranthenes	0.085	<0.020	<0.020
Chrysene	0.085	<0.020	<0.020
Indeno(123-cd)pyrene	0.02	<0.020	<0.020
Dibenzo(ah)anthracene	<0.020	<0.020	<0.020
BaPEq-TEQ(b)	0.047	nd	nd
Benzoic Acid	<0.080	<0.071	<0.067
Benzyl Alcohol	<0.030	<0.030	<0.030
bis(2-chloroethoxy)methane	<0.020	<0.020	<0.020
bis(2-chlorethyl)ether	<0.020	<0.020	<0.020
bis(2-chloroisopropyl)ether	<0.020	<0.020	<0.020
Bis(2-ethylhexyl)phthalate	0.048	<0.020	<0.020
Butylbenzylphthalate	0.01	<0.0059	<0.0060
Dibenzofuran	<0.020	<0.020	<0.020
Diethylphthalate	<0.020	<0.020	<0.020
Dimethylphthalate	<0.020	<0.020	<0.020
Di-N-Butylphthalate	<0.026	<0.020	<0.020
Di-n-octyl phthalate	<0.020	<0.020	<0.020
Fluoranthene	0.32	<0.020	<0.020
Fluorene	<0.020	<0.020	<0.020
Hexachlorobenzene	<0.0010	<0.0010	<0.0010
Hexachlorobutadiene	<0.0010	<0.0010	<0.0010
Hexachlorocyclopentadiene	<0.100	<0.099	<0.100
Hexachloroethane	<0.020	<0.020	<0.020
Isophorone	<0.020	<0.020	<0.020
Naphthalene	<0.020	<0.020	<0.020
Nitrobenzene	<0.020	<0.020	<0.020
N-Nitrosodimethylamine	<0.030	<0.030	<0.030
N-Nitroso-di-n-propylamine	<0.030	<0.030	<0.030
N-Nitrosodiphenylamine	<0.011	<0.006	<0.006
Pentachlorophenol	<0.030	<0.030	<0.030
Phenanthrene	0.130	<0.020	<0.020
Phenol	<0.020	<0.020	<0.020
Pyrene	0.240	<0.020	<0.020
Pesticides/PCBs			
2,4'-DDD	<0.0020	<0.0020	<0.0020
2,4'-DDE	<0.0020	<0.0020	<0.0020
2,4'-DDT	<0.0020	<0.0020	<0.0020
4,4'-DDD	<0.0020	<0.0020	<0.0020
4,4'-DDE	<0.0047	<0.0020	<0.0020
4,4'-DDT	<0.0072	<0.0020	<0.0020
Total DDTs	<0.0072	<0.0020	<0.0020
Aldrin	<0.0010	<0.0010	<0.0010
alpha-BHC	<0.0010	<0.0010	<0.0010
alpha-Chlordane	<0.0010	<0.0010	<0.0010
alpha-Endosulfan	<0.0010	<0.0010	<0.0010
beta-BHC	<0.0010	<0.0010	<0.0010
beta-Endosulfan	<0.0020	<0.0020	<0.0020
delta-BHC	<0.0010	<0.0010	<0.0010
Total chlordane	<0.0020	<0.0020	<0.0020
Cis-Nonachlor	<0.0033	<0.0020	<0.0020
Dieldrin	<0.0020	<0.0020	<0.0020
Endosulfan sulfate	<0.0020	<0.0020	<0.0020
Endrin	<0.0020	<0.0020	<0.0020
Endrin aldehyde	<0.0020	<0.0020	<0.0020
Endrin ketone	<0.0020	<0.0020	<0.0020
gamma-BHC	<0.0010	<0.0010	<0.0010

TABLE F.5 - LDW-SC40 Core Sediment Data

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Coordinate X Coordinate Y Depth (feet)) Units	LDW-SC40 Feb-06 (a) (mg/kg)	LDW-SC40 Feb-06 (a) (mg/kg)	LDW-SC40 Feb-06 (a) (mg/kg)
gamma-chlordane	<0.0010	<0.0010	<0.0010
Heptachlor	<0.0018	<0.0010	<0.0010
Heptachlor epoxide	<0.0010	<0.0010	<0.0010
Lindane	-----	-----	-----
Methoxychlor	<0.010	<0.0099	<0.0098
Mirex	<0.0020	<0.0020	<0.0020
Oxychlordane	<0.0020	<0.0020	<0.0020
Toxaphene	<0.1000	<0.0990	<0.0980
Trans-Nonachlor	<0.0020	<0.0020	<0.0020
PCB 1016	<0.020	<0.0040	<0.0039
PCB 1221	<0.020	<0.0040	<0.0039
PCB 1232	<0.020	<0.0040	<0.0039
PCB 1242	<0.020	<0.0040	<0.0039
PCB 1248	0.061	<0.0040	<0.0039
PCB 1254	0.100	<0.0040	<0.0039
PCB 1260	<0.040	<0.0040	<0.0039
Total PCBs	0.16	<0.0040	<0.0039
PCDD/PCDF (ng/kg)			
1,2,3,4,6,7,8-HpCDD	186	12.9	<0.307
1,2,3,4,6,7,8-HpCDF	35.1	2.16	<0.0471
1,2,3,4,7,8,9-HpCDF	2.26	0.127	<0.0471
1,2,3,4,7,8-HxCDD	1.43	0.171	<0.0471
1,2,3,4,7,8-HxCDF	5.24	0.205	<0.0471
1,2,3,6,7,8-HxCDD	6.56	0.430	<0.0471
1,2,3,6,7,8-HxCDF	1.46	0.135	<0.0471
1,2,3,7,8,9-HxCDD	5.28	0.471	<0.0471
1,2,3,7,8,9-HxCDF	<0.113	<0.0467	<0.0471
1,2,3,7,8-PeCDD	1.01	0.0850	<0.0471
1,2,3,7,8-PeCDF	0.41	<0.0467	<0.0471
2,3,4,6,7,8-HxCDF	1.01	0.146	<0.0471
2,3,4,7,8-PeCDF	1.10	0.109	<0.0471
2,3,7,8-TCDD	0.398	<0.0467	0.302
2,3,7,8-TCDF	0.451	<0.0467	<0.0471
OCDD	1830	100	2.92
OCDF	99.8	3.51	0.0875
2,3,7,8-TCDD-TEQ (c)	6.71	0.485	0.355

Notes:

- (a) - LDW RI (2007)
 (b) - BaPEq - Benzo(a)pyrene equivalent Conc.
 (c) - 2,3,7,8-TCDD Equivalent Conc.

APPENDIX G
GROUNDWATER ANALYTICAL DATA TABLES
1986/87/91 (Hart Crowser), 2007 (SAIC), 2012 (DOF), 2014 (DOF), 2015 (DOF),
2016 (DOF) AND DOUGLAS PROPERTY TO 2014 (GEOENGINEERS) SAMPLE ANALYSES
ICS/NWC – UPLAND SAMPLE LOCATIONS

REMEDIAL INVESTION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025

- **TABLE G.1** – EARLY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS – 1986 to 2007 (Main Site)
- **TABLE G.2** – PUSH-PROBE AND MONITORING WELL GROUNDWATER ANALYTICAL RESULTS – 2012 TO 2016 (Main Site)
- **TABLE G.3** – OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA - 2015
- **TABLE G.4** – MONITORING WELL GROUNDWATER ANALYTICAL DATA – DOUGLAS PROPERTY – 2015/16 (WELLS MW-A, MW-B AND MW-C)
- **TABLE G.5** – DOUGLAS PROPERTY GROUNDWATER ANALYTICAL DATA – COLLECTED BY GEOENGINEERS – TO 2014

TABLE G.1 - Summary of Groundwater Quality Data - 1986 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source	HC-B-1 May-86 (a)	HC-B-1 May-07 (c)	HC-B-2 May-86 (a)	HC-B-2 Mar-87 (b)	HC-B-2 1991 (d)	HC-B-2 May-07 (c)	HC-B-3 May-86 (a)	SA-MW-1 May-07 (c)	SA-MW-2 May-07 (c)	SA-MW-3 May-07 (c)
Petroleum Hydrocarbons (mg/l)										
Gasoline Range Organics	-----	-----	-----	-----	-----	0.48	-----	6.3	-----	-----
Diesel Range Organics	-----	0.027	-----	-----	-----	0.064	-----	0.9	0.16	-----
Residual Range Organics	-----	0.019	-----	-----	-----	0.48	-----	0.52	0.28	-----
Dissolved Metals (ug/l)										
Anitmony	nd	-----	15	nd	-----	-----	nd	-----	-----	-----
Arsenic	nd	3.9	17	10	1.4	4.7	nd	25.7	4.2	0.98
Beryllium	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
Cadmium	6	<20	2	nd	-----	<20	2	0.23	<20	0.03
Chromium	3	2.6	7	5	-----	2.2	14	43	1.4	0.74
Copper	6	3	6	nd	-----	0.22	4	36.4	12.3	4.9
Lead	nd	0.065	27	nd	-----	0.04	nd	36.5	0.25	0.10
Mercury	nd	0.03	nd	nd	-----	<0.20	nd	0.12	0.03	0.03
Nickel	26	-----	22	15	-----	-----	9	-----	-----	-----
Silver	4	<0.10	3	nd	-----	<0.10	10	0.22	0.06	<0.10
Zinc	110	1.23	19	38	-----	0.45	10	25.1	7.6	13.2
Total Metals (ug/l)										
Anitmony	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Arsenic	-----	9	-----	-----	-----	4.8	-----	3	5.1	1.2
Beryllium	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cadmium	-----	2.5	-----	-----	-----	0.01	-----	0.47	0.11	0.02
Chromium	-----	21.4	-----	-----	-----	2.0	-----	75.1	6.6	0.75
Copper	-----	23.1	-----	-----	-----	0.72	-----	70.6	11.3	3.5
Lead	-----	40.6	-----	-----	-----	0.30	-----	77.5	26.2	0.07
Mercury	-----	0.38	-----	-----	-----	0.03	-----	0.28	0.12	0.03
Nickel	-----	-----	-----	-----	5.4	-----	-----	-----	-----	-----
Silver	-----	<0.10	-----	-----	-----	<0.10	-----	0.38	0.15	<0.10
Zinc	-----	94.6	-----	-----	29	1.7	-----	46.2	34.4	13.8
Volatile Organic Compounds (ug/l)										
Vinyl chloride	nd	-----	110	250	25	-----	nd	-----	-----	-----
Methylene chloride	TR	-----	11	TR	-----	-----	8	-----	-----	-----
Acetone	16	-----	56	120	-----	-----	21	-----	-----	-----
Chloroform	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
1,1-Dichloroethylene	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
1,1-Dichloroethane	nd	-----	TR	TR	9.2	-----	nd	-----	-----	-----
trans 1,2-dichloroethylene	nd	-----	190	33	20	-----	nd	-----	-----	-----
1,1,1-Trichloroethane	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
Trichloroethylene	nd	-----	TR	TR	-----	-----	nd	-----	-----	-----
Tetrachloroethylene	nd	-----	nd	TR	-----	-----	nd	-----	-----	-----
Benzene	nd	-----	17	16	13	-----	nd	-----	-----	-----
4-Methyl-2-pentanone	nd	-----	11	TR	-----	-----	nd	-----	-----	-----
Toluene	nd	-----	270	290	140	-----	nd	-----	-----	-----
Ethylbenzene	nd	-----	460	430	510	-----	nd	-----	-----	-----
Total Xylene	TR	-----	150	TR	300	-----	nd	-----	-----	-----
Semivolatile Organic Compounds (ug/l)										
1,2,4-Trichlorobenzene	-----	<0.20	-----	-----	-----	0.34	-----	2.5	<0.20	<0.20
1,2-Dichlorobenzene	nd	0.03	nd	-----	-----	1.9	nd	4.5	0.15	<0.20
1,4-Dichlorobenzene	-----	0.03	-----	-----	-----	5.9	-----	2.2	0.48	<0.20
2,4-Dimethylphenol	nd	<2	320	nd	100	<20	28	11	<2	<2
2-Methylnaphthalene	nd	<0.20	nd	nd	7.4	0.76	10	99	0.17	<0.20
2-Methylphenol	nd	<0.48	26	11	-----	<4.8	nd	11	<0.48	<0.48
4-Methylphenol	nd	0.06	70	50	-----	4.8	nd	7.9	<0.48	<0.48
Acenaphthene	nd	<0.20	nd	nd	-----	0.76	10	1.5	0.22	<0.20
Acenaphthylene	nd	<0.20	nd	nd	-----	0.37	nd	0.86	<0.20	<0.20
Anthracene	nd	0.06	nd	nd	-----	1.1	nd	0.97	0.18	0.088
Benzo(a)anthracene	-----	<0.20	-----	-----	-----	0.43	-----	0.94	0.04	<0.20
Benzo(a)pyrene	-----	<0.20	-----	-----	-----	0.34	-----	0.85	0.03	<0.20
Benzo(b)fluoranthene	-----	<0.20	-----	-----	-----	0.30	-----	0.74	0.03	<0.20
Benzo(ghi)perylene	-----	<0.20	-----	-----	-----	0.29	-----	0.7	<0.20	<0.20

TABLE G.1 - Summary of Groundwater Quality Data - 1986 to 2007

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source	HC-B-1 May-86 (a)	HC-B-1 May-07 (c)	HC-B-2 May-86 (a)	HC-B-2 Mar-87 (b)	HC-B-2 1991 (d)	HC-B-2 May-07 (c)	HC-B-3 May-86 (a)	SA-MW-1 May-07 (c)	SA-MW-2 May-07 (c)	SA-MW-3 May-07 (c)
Benzo(k)fluoranthene	-----	<0.20	-----	-----	-----	0.28	-----	0.62	<0.20	<0.20
Benzoic Acid	-----	<4.8	-----	-----	-----	<48	-----	<100	7.2	2.4
Benzyl Alcohol	-----	<4.8	-----	-----	-----	<48	-----	<96	4.8	4.8
Bis(2-ethylhexyl)phthalate	TR	<0.96	TR	nd	-----	<9.6	TR	20	0.84	0.96
Butylbenzylphthalate	nd	<0.20	nd	nd	-----	<2	nd	<3.9	0.08	<0.20
Chrysene	-----	<0.20	-----	-----	-----	0.35	-----	0.88	0.03	<0.20
Dibenzo(ah)anthracene	-----	<0.20	-----	-----	-----	<2	-----	<3.9	<0.20	<0.20
Dibenzofuran	nd	<0.20	nd	nd	-----	0.47	nd	1.1	0.08	<0.20
Diethylphthalate	-----	<0.20	-----	-----	-----	1.4	-----	<3.9	0.07	<0.20
Dimethylphthalate	-----	<0.20	-----	-----	-----	<2	-----	<3.9	<0.20	<0.20
Di-N-Butylphthalate	-----	<0.20	-----	-----	-----	0.59	-----	<3.9	0.09	0.045
Di-n-octyl phthalate	nd	<0.20	nd	nd	-----	0.42	nd	1	<0.20	<0.20
Fluoranthene	nd	<0.20	nd	nd	-----	0.53	nd	0.86	0.13	<0.20
Fluorene	nd	<0.20	nd	nd	-----	0.66	nd	1.6	0.18	<0.20
Hexachlorobenzene	-----	<0.20	-----	-----	-----	0.30	-----	0.66	<0.20	<0.20
Hexachlorobutadiene	-----	<0.20	-----	-----	-----	<2	-----	<3.9	<0.20	<0.20
Indeno(123-cd)pyrene	-----	<0.20	-----	-----	-----	0.28	-----	0.63	<0.20	<0.20
Naphthalene	TR	<0.20	18	28	37	<2	120	36	1.1	<0.20
N-Nitrosodiphenylamine	-----	<0.20	-----	-----	-----	1.2	-----	3	<0.20	<0.20
Pentachlorophenol	nd	<2.0	nd	nd	-----	0.80	nd	23	0.16	<2
Phenanthrene	nd	<0.20	nd	nd	-----	0.46	nd	1.9	0.27	<0.20
Phenol	nd	<0.48	18	nd	-----	<0.48	nd	0.97	<0.48	<0.48
Pyrene	nd	<0.20	nd	nd	-----	0.48	nd	1	0.12	<0.20
Dibutylphthalate	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
4-Chloro-m-cresol	nd	-----	130	49	-----	-----	nd	-----	-----	-----
Pesticides/PCBs (ug/l)										
2,4'-DDD	-----	<0.0011	-----	-----	-----	<0.022	-----	<0.005	0.051	<0.0005
2,4'-DDE	-----	<0.0005	-----	-----	-----	<0.010	-----	0.020	<0.013	0.00034
2,4'-DDT	-----	0.0010	-----	-----	-----	<0.010	-----	0.046	0.052	<0.0005
4,4'-DDD	nd	0.0015	nd	37	-----	<0.010	nd	<0.005	0.026	<0.0005
4,4'-DDE	nd	0.0018	nd	54	-----	<0.041	nd	0.067	0.080	<0.0006
4,4'-DDT	nd	0.0014	nd	32	-----	<0.010	nd	<0.041	<0.040	0.0013
Aldrin	-----	0.0009	-----	-----	-----	0.020	-----	<0.005	<0.010	<0.0005
Chlordane	-----	<0.013	-----	-----	-----	<0.220	-----	0.270	<0.200	<0.0096
cis-Chlordane	-----	0.0005	-----	-----	-----	0.026	-----	<0.009	<0.010	<0.0005
Dieldrin	nd	<0.002	nd	nd	-----	<0.010	nd	<0.022	<0.010	<0.0005
gamma-Chlordane	-----	<0.0015	-----	-----	-----	0.013	-----	0.025	<0.022	<0.0005
Heptachlor	-----	<0.0005	-----	-----	-----	<0.010	-----	<0.011	<0.010	<0.0005
Lindane	-----	0.0014	-----	-----	-----	0.012	-----	0.019	<0.010	0.00038
Endrin	nd	-----	nd	nd	-----	-----	nd	-----	-----	-----
PCB 1016	-----	<0.020	-----	-----	-----	<0.200	-----	<0.200	<0.200	<0.0200
PCB 1221	-----	<0.039	-----	-----	-----	<0.390	-----	<0.390	<0.390	<0.0390
PCB 1232	-----	<0.020	-----	-----	-----	<0.200	-----	<0.200	<0.200	<0.0240
PCB 1242	-----	0.13	-----	-----	-----	1.7	-----	2.9	0.75	<0.0200
PCB 1248	nd	<0.0200	nd	nd	-----	<0.2	nd	<0.200	<0.200	<0.0200
PCB 1254	-----	0.035	-----	-----	-----	0.140	-----	1.10	0.470	<0.0200
PCB 1260	nd	0.014	nd	nd	-----	0.069	nd	0.540	0.420	<0.0200
Other Compounds (ug/l)										
Total Cyanide	18	-----	70	300	41	-----	nd	-----	-----	-----
Total Phenol	nd	-----	180	120	-----	-----	9	-----	-----	-----

Notes: nd - Not detected
 TR - Trace
 (a) - Hart Crowser 1986
 (b) - Hart Crowser 1987
 (c) - SAIC July 2007
 (d) - By Hart Crowser

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Screen Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
Push-Probes	SLs											90	90
P11	11/17/14	6-10	6.8	13.2	741	-----	-----	-----	22.8	12.1	2.9	0.5 U	0.5 U
P12	11/17/14	5-9	6.8	14.8	1510	-----	-----	-----	40.1	73.9	1.0 U	1 U	1 U
P13	11/13/14	10-15	6.8	15.1	1138	-----	-----	-----	73	58.3	0.7	0.5 U	0.5 U
P14	11/14/14	10-15	6.7	12.7	1575	-----	-----	-----	44.2	514	1.2	0.2 U	0.2 U
P15	11/14/14	3-8	6.6	13.6	1847	-----	-----	-----	9.8	251	11.4	0.8	1.0
P16	12/10/14	9-14	7.0	14.1	1943	-----	-----	-----	575	643	2.5	0.8	0.4
P18A	12/16/14	25-30	7.0	12.6	2690	-----	-----	-----	275	840	0.5	0.2 U	0.4
P18B	12/16/14	45-50	6.9	13.0	8610	-----	-----	-----	51.9	8220	4.2	1 U	1 U
P20	11/12/14	10-15	6.8	11.9	1142	-----	-----	-----	77	16	143	0.2 U	0.2 U
P21A	12/8/14	25-30	6.9	13.4	1163	-----	-----	-----	190	71.5	0.6	0.2 U	0.2 U
P21B	12/8/14	45-50	6.8	13.0	10960	-----	-----	-----	119	6490	184	2 U	2 U
P23	11/12/14	10-15	6.8	10.4	728	-----	-----	-----	122	34.6	47.2	0.5	0.5
P26	11/13/14	10-15	7.0	12.9	13910	-----	-----	-----	255	5620	589	1 U	1 U
P27A	11/11/14	15-20	7.2	12.0	10060	-----	-----	-----	74.8	3790	489	0.5 U	0.5 U
P27B	11/11/14	45-50	7.2	10.9	12050	-----	-----	-----	372	5170	3.5	0.5 U	3.5
P28	12/15/14	25-30	6.8	13.4	5250	-----	-----	-----	229	2850	205	0.5 U	0.5 U
P29	12/10/14	29-34	6.8	14.0	3070	-----	-----	-----	401	1470	136	0.5 U	0.5 U
P30	12/9/14	25-30	7.4	13.9	6030	-----	-----	-----	182	2930	201	1 U	1 U
P31	12/9/14	25-30	6.9	13.4	4010	-----	-----	-----	65	1460	0.5	0.5 U	2 U
P32A	12/15/14	25-30	6.6	12.2	2560	-----	-----	-----	312	1950	83.8	0.2 U	0.2 U
P32B	12/15/14	35-40	6.8	12.6	4590	-----	-----	-----	183	891	0.7	0.5 U	0.5 U
P33A	12/8/14	26-30	6.7	12.1	710	-----	-----	-----	586	25.0	0.6	0.2 U	0.2 U
P33B	12/8/14	36-40	7.2	12.6	2150	-----	-----	-----	440	280	2.4	-----	-----
Monitoring Wells													
DOF-MW-1	11/8/12	12-17	7.0	12.9	6551	0.28	-84.6	10	13.4	2210	323	2 U	2 U
DOF-MW-1	11/11/15		7.5	14.3	10393	0.2	-106.4	3.8	4.4	3670	434	-----	-----
DOF-MW-1	3/22/16		6.5	11.7	9530	0.4	-38.4	6.8	121	-----	-----	-----	-----
DOF-MW-1	9/26/16		6.5	16.4	3908	1.7	-28.3	4.2	7.2	-----	-----	-----	-----
DOF-MW-2	11/8/12	15-20	6.5	15.7	1940	0.06	-34.4	6	9.8	179	1.0	0.2 U	0.2 U
DOF-MW-2	11/11/15		7.5	16.5	2077	0.03	-22.7	4	5.8	198	0.5	-----	-----
DOF-MW-2	3/22/16		6.6	16	2000	0.2	-36.9	6.9	5.7	-----	-----	-----	-----
DOF-MW-2	9/26/16		6.6	18.5	1863	0.1	-12.3	5.5	4	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Screen Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
DOF-MW-3	11/8/12	17-22	6.5	14.5	1623	0.01	-35.2	4.6	10.5	217	0.8	0.2 U	0.2 U
DOF-MW-3	11/20/15		7.2	15.4	2225	0.08	-31	3.4	10	270	0.4	-----	-----
DOF-MW-3	3/24/16		6.5	15	2230	0.1	-69.9	6.2	4.9	-----	-----	-----	-----
DOF-MW-3	9/26/16		6.5	18	2345	0.2	-27.2	6.5	2.5	-----	-----	-----	-----
DOF-MW-4	11/8/12	17-22	6.3	15	1455	0	-39.9	5.8	10.3	103	1.1	0.2 U	0.2 U
DOF-MW-4	11/11/15		7.3	16	1531	0.01	-31.1	3.8	6.5	118	0.4	-----	-----
DOF-MW-4	3/29/16		6.3	16.3	1699	0.2	2.3	5.5	4.5	-----	-----	-----	-----
DOF-MW-4	9/26/16		6.4	17.9	1644	1.2	-13.9	4.5	2.7	-----	-----	-----	-----
DOF-MW-5	11/8/12	17-22	6.5	13.4	828	0.03	-48.3	3.2	11.2	61.9	1.0	0.2 U	0.2 U
DOF-MW-5	11/20/15		7.2	14.1	1156	0.11	-56.8	3.8	3.5	207	0.3	-----	-----
DOF-MW-5	3/29/16		6.3	14.4	1198	0	1.6	7	4.3	-----	-----	-----	-----
DOF-MW-5	9/26/16		6.3	16.2	1246	2.1	-10.2	5.8	4.8	-----	-----	-----	-----
DOF-MW-6	11/9/12	13-18	6.9	14	1255	0.12	-48.5	5	22.3	356	0.1 U	0.2 U	0.2 U
DOF-MW-6	11/19/15		7.8	14.5	1296	0.6	-59.3	4.8	13.2	270	5.5	-----	-----
DOF-MW-6	3/24/16		6.4	13.1	1312	0.2	38.8	5	16.3	-----	-----	-----	-----
DOF-MW-6	9/27/16		6.5	16.4	1538	-----	3.1	6.5	4.3	-----	-----	-----	-----
DOF-MW-7	11/9/12	13-18	6.2	13.9	2095	0.04	-95.7	6.2	5.9	470	2.5	0.2 U	0.2 U
DOF-MW-7	11/23/15		6.5	14.8	1806	0.4	-83.9	3.2	3	378	0.1	-----	-----
DOF-MW-7	3/25/16		6.1	13.7	1896	0.2	3.8	6.2	2.8	-----	-----	-----	-----
DOF-MW-7	9/27/16		6.2	16.2	2263	-----	-2.9	6	11.4	-----	-----	-----	-----
DOF-MW-8	11/9/12	13-18	6.4	15.7	1090	0.05	-98.1	7	48.8	46.0	1.5	0.2 U	0.5
DOF-MW-8	11/20/15		6.8	15.7	1095	0.05	-78	3.6	15.6	39.7	0.5	-----	-----
DOF-MW-8	3/22/16		6.4	14.4	1061	0.2	-67.9	7	16.1	-----	-----	-----	-----
DOF-MW-8	9/30/16		6.4	17.6	1143	0.1	33.4	7	25.7	-----	-----	-----	-----
HC-B1	11/13/12	16-21	8.0	12.5	10097	0.93	-201	0	5.1	3730	4.8	1 U	1 U
HC-B1	11/19/15		8.3	14	7553	0.03	-278.8	0	5.9	3770	4.8	-----	-----
HC-B1	3/24/16		7.7	12.5	10594	0.1	-274	0	4.6	-----	-----	-----	-----
HC-B1	9/30/16		7.5	16.7	14543	0	-16.7	0	6.8	-----	-----	-----	-----
HC-B2(R)	11/11/15	4.5-9.5	7.4	15.5	414	1	-22.5	5	15.9	-----	-----	-----	-----
HC-B2(R)	3/23/16		6.1	10.5	157	1.6	55.9	0	8.1	-----	-----	-----	-----
HC-B2R	9/30/16		ISV	ISV	ISV	ISV	ISV	ISV	ISV	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Screen Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
SA-MW1	11/23/15	4-24	7.6	16	3394	0.03	-233.7	0	16.8	554	19.3	----	----
SA-MW1	3/24/16		8.7	12.8	2929	0.1	-114.4	0	15.4	----	----	----	----
SA-MW1	9/30/16		8.6	16.5	3351	0	-60	0.5	5	----	----	----	----
SA-MW2	11/9/12	2-24	6.7	13.1	7021	0.04	-7.8	0.8	5.1	2280	36.1	0.2	0.2
SA-MW2	11/20/15		6.5	15.3	4486	0.09	-154.8	0	5.2	3110	132		
SA-MW2	3/29/16		6.4	12.5	1174	0.6	-90.7	5.5	5.3	----	----		
SA-MW2	9/30/16		6.4	18	13728	0	-157	0	5.7	----	----	----	----
SA-MW3	11/13/12	2-24	5.9	13.6	10760	-----	129	1.8	37.1	4050	576	1 U	1 U
SA-MW3	11/19/15		7.9	14	6471	2.2	-100.1	3.3	64.4	2220	334	----	----
SA-MW3	3/28/16		6.8	9.9	2248	4.5	47.3	0.5	20.6	----	----	----	----
SA-MW3	9/27/16		6.5	16.3	5104	4.4	17.3	0	31	----	----	----	----
MW-Ap	11/18/15	4.5-9.5	7.6	15	515	0.1	-56.6	4.4	22	----	----	----	----
MW-Ap	3/25/16		5.9	11.1	112	3.3	117.1	0	10.1	----	----	----	----
MW-Ap	10/1/16		6.1	18	352	ISV	23.3	ISV	ISV	----	----	----	----
MW-Bp	11/18/15	5.5-10.5	7.5	15.4	443	2	-9.7	5.8	15.4	----	----	----	----
MW-Bp	3/25/16		5.8	12.9	421	2.6	150.1	0	4.8	----	----	----	----
MW-Bp	10/1/16		6.4	17.9	418	ISV	-13.6	5.5	43	----	----	----	----
MW-Cp	11/18/15	3.5-8.5	7.7	17.3	834	0.13	-42.3	5.4	9	----	----	----	----
MW-Cp	3/25/16		6.4	12.7	756	0.8	-51.1	3.2	15	----	----	----	----
MW-Cp	10/1/16		6.3	21.7	910	ISV	-48.5	5	13	----	----	----	----
MW-Dp	11/18/15	5-10	7.4	16.6	296	1.21	-14.5	3.8	27.3	----	----	----	----
MW-Dp	3/28/16		6.4	12.3	620	0.3	59.4	1	54.4	----	----	----	----
MW-Dp	10/1/16		ISV	ISV	ISV	ISV	ISV	ISV	ISV	----	----	----	----
MW-Du	11/18/15	11-21	7.6	14.7	876	0.15	-85.5	5.6	16.3	116	4.7	----	----
MW-Du	3/28/16		6.4	13.9	854	0.3	-32.8	4.8	16.6	----	----	----	----
MW-Du	10/1/16		6.4	16.7	950	0.1	-42.2	5.5	5.6	----	----	----	----
MW-Eu	11/19/15	4.5-14.5	8.3	15.8	18219	0.1	-114.5	3.6	11.1	4850	564	----	----
MW-Eu	3/24/16		6.8	12.2	18745	0.3	-163.4	6.5	17.5	----	----	----	----
MW-Eu	9/30/16		6.8	18.8	7714	0.1	-3.6	5.2	19	----	----	----	----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Screen Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
MW-Fu	11/11/15	4.5-14.5	7.3	13.9	962	0.04	-26.3	4.2	1.3	78.4	59.7	----	----
MW-Fu	3/23/16		6.4	11.2	755	0.8	34.4	1	13	----	----	----	----
MW-Fu	9/28/16	4.5-14.5	6.5	15.7	1037	2.5	24.1	4.2	52	----	----	----	----
MW-FL	11/10/15	19.5-29.5	7.3	12.4	4880	0.05	-142.1	5	13	1490	21.6	----	----
MW-FL	3/23/16		6.6	12.5	5081	0.1	-72.7	6	4	----	----	----	----
MW-FL	9/28/16		6.6	14.5	5298	0.1	-8	3	6	----	----	----	----
MW-Gu	11/10/15	4.5-14.5	7.1	13.8	1345	0.05	-129.1	4.4	20.5	192	15.6	----	----
MW-Gu	3/23/16		6.5	11.6	1902	0	-64.3	3.5	11.1	----	----	----	----
MW-Gu	9/28/16		6.4	15.8	1766	0.2	-3.1	4	6.3	----	----	----	----
MW-GL	11/10/15	19.6-29.6	7.3	12.4	9193	0.03	-117.2	4.2	27	3690	273	----	----
MW-GL	3/23/16		6.7	12.5	9091	0	-54.6	4.8	1.1	----	----	----	----
MW-GL	9/28/16		6.5	14.4	10119	0.1	5.5	6.8	2.7	----	----	----	----
MW-HL	11/18/15	19.6-29.6	7.5	13.3	5966	0.07	-62.6	4.2	6	2310	230	----	----
MW-HL	3/29/16		6.3	13.5	5788	0	-0.7	6.2	10.4	----	----	----	----
MW-HL	9/27/16		6.3	15.4	6457	0.1	12.5	6	4.2	----	----	----	----
MW-IL	11/20/15	24.5-34.5	7	13	8888	0.07	-90.2	5.2	10.6	2950	31.2	----	----
MW-IL	3/28/16		6.4	12.8	5961	0	-23	5.2	9.3	----	----	----	----
MW-IL	9/27/16		6.3	15.4	7282	2	-14.2	7	3.3	----	----	----	----
MW-Ju	11/20/15	5-15	7	15.7	2915	0.06	-131.9	5.8	43	666	80.5	----	----
MW-Ju	3/28/16		6.3	10.8	1193	0.1	10.7	5.5	6	----	----	----	----
MW-Ju	9/27/16		6.3	19.3	7862	3.7	-4	6	22	----	----	----	----
MW-Ku	11/10/15	4.5-14.5	6.5	15.3	272	0.8	-17.4	0.8	14.9	17.4	11.1	----	----
MW-Ku	3/22/16		6.4	11	364	0.7	17.5	0	12.2	----	----	----	----
MW-Ku	9/28/16		6.5	16	1383	0.2	6.3	2.8	12.7	----	----	----	----
MW-KL	11/10/15	19.7-29.7	7.5	13.6	3618	0.4	-198	3.4	22.8	1180	85.2	----	----
MW-KL	3/22/16		6.8	13	6039	0.7	-50.9	4.8	2.2	----	----	----	----
MW-KL	9/28/16		6.7	14.7	9168	0.1	31	5	2.7	----	----	----	----
Seep 1	5/4/07	0	6.5	19.9	6350	-	-	-	34	-	-	-	-
Seep 1	7/5/12	0	6.5	13	6609	2.9	-11.8	1.4	6.7	2430	321	1 U	-
Seep 2	5/7/07	0	6.4	12.7	8530	-	-	-	159	-	-	-	-
Seep 2	7/5/12	0	7.0	13.7	6202	7.5	-6.5	1.0	7.2	2220	303	1 U	-

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Screen Depth (feet)	Field Parameters							Chloride	Sulfate	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
Number of Samples									59	59	35	33	
Number of Detects									59	57	4	7	
Percent Detected									100.0%	96.6%	11.4%	21.2%	
Highest Conc.									8220	589	0.80	4	

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

(1) - Referenced to Ag/AgCl electrode

nd - Not detected

ISV - Insufficient volume

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
Push-Probes	SLs	8	8	4.4	4.4	1.2	1.2	-----	-----	0.2	0.2	50
P11	11/17/14	28.6	28.0	0.5 U	0.5 U	0.2 U	0.2 U	-----	15,400	3	3	10 U
P12	11/17/14	28	27	1 U	1 U	0.5 U	0.5 U	-----	27,800	22	20	10 U
P13	11/13/14	11.1	11.4	0.2 U	0.2 U	0.2 U	0.2 U	-----	16,000	8	8	10 U
P14	11/14/14	0.4	0.8	0.5	0.5	0.1 U	0.1 U	-----	48,000	2 U	5	10 U
P15	11/14/14	12.3	12.6	0.5 U	0.5 U	0.1 U	0.1 U	-----	13,300	10	10	12 U
P16	12/10/14	2.4	5.4	0.2 U	0.3	0.1 U	0.1 U	-----	56,400	1 U	17	10 U
P18A	12/16/14	2	5	0.2 U	0.5	0.1 U	0.2	-----	71,500	5	45	10 U
P18B	12/16/14	2 U	3	1 U	1 U	0.5 U	0.5 U	-----	587,000	2 U	11	14 U
P20	11/12/14	1.6	3.6	0.2 U	0.2 U	0.1 U	0.1 U	-----	201,000	0.5 U	6	10 U
P21A	12/8/14	1.0	1.2	0.2 U	0.2 U	0.1 U	0.1 U	-----	30,400	3	11	11 U
P21B	12/8/14	2 U	3	2 U	2 U	1 U	1 U	-----	643,000	5 U	30	34 U
P23	11/12/14	3.3	4.1	0.2 U	0.2 U	0.1 U	0.1 U	-----	67,400	0.5 U	2.1	10 U
P26	11/13/14	15	14	1 U	1 U	0.5 U	0.5 U	-----	184,000	2 U	3	10 U
P27A	11/11/14	3	3	0.5 U	0.5 U	0.2 U	0.2 U	-----	69,600	1	8	10 U
P27B	11/11/14	2	11	0.5 U	0.6	0.2 U	1.2	-----	553,000	1 U	57	10 U
P28	12/15/14	1 U	3	0.5 U	0.8	0.2 U	0.2 U	-----	135,000	2	32	11 U
P29	12/10/14	2	12	0.5 U	0.8	0.2 U	0.3	-----	123,000	3	81	22 U
P30	12/9/14	5	8	1 U	1 U	0.5 U	0.5 U	-----	111,000	36	38	10 U
P31	12/9/14	1 U	1 U	0.5 U	0.5 U	0.2 U	1 U	-----	62,800	5 U	6	23 U
P32A	12/15/14	0.5 U	5.1	0.3	0.7	0.1 U	0.1	-----	66,700	7.3	121	10 U
P32B	12/15/14	2	2	0.8	0.6	0.2 U	0.2 U	-----	65,500	2	22	20 U
P33A	12/8/14	0.3	0.8	0.2 U	0.2 U	0.1 U	0.1 U	-----	29,600	2 U	10	10 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	53,900	-----	-----	-----
Monitoring Wells												
DOF-MW-1	11/8/12	2	2	2 U	2 U	1 U	1 U	-----	130,000	5 U	5 U	-----
DOF-MW-1	11/11/15	4	6	-----	-----	1 U	0.2 J	-----	135,000	5	24	-----
DOF-MW-1	3/22/16	4	9	-----	-----	0.5 U	0.2 J	-----	135,000	7	26	-----
DOF-MW-1	9/26/16	1.7	1.9	-----	-----	0.20 U	0.50 U	-----	-----	3.8	4.5	-----
DOF-MW-2	11/8/12	2.6	4.3	0.3	0.3	0.1 U	0.1 U	-----	15,300	47.2	68.3	-----
DOF-MW-2	11/11/15	3.9	4.2	-----	-----	0.01 J	0.01 J	-----	14,100	66.9	65.7	-----
DOF-MW-2	3/22/16	4.1	4	-----	-----	0.2 U	0.01 J	-----	12,700	69	76	-----
DOF-MW-2	9/26/16	3.8	3.6	-----	-----	0.20 U	0.20 U	-----	-----	62	69	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
DOF-MW-3	11/8/12	2.0	3.1	0.2 U	0.2	0.1 U	0.1 U	-----	16,700	28.3	37.1	-----
DOF-MW-3	11/20/15	5.3	5.1	-----	-----	0.2 U	0.2 U	-----	23,600	62	75	-----
DOF-MW-3	3/24/16	6.0	6	-----	-----	0.04 J	0.02 J	-----	21,400	75	82	-----
DOF-MW-3	9/26/16	5.5	5.8	-----	-----	0.20 U	0.20 U	-----	-----	74	84	-----
DOF-MW-4	11/8/12	2	3.6	1 U	0.3	0.1 U	0.1 U	-----	16,000	46.0	55.5	-----
DOF-MW-4	11/11/15	2.9	3	-----	-----	0.1 U	0.01 J	-----	13,900	48.8	46.4	-----
DOF-MW-4	3/29/16	2.8	3	-----	-----	0.01 J _B	0.01 J	-----	12,500	67	64	-----
DOF-MW-4	9/26/16	3.3	2.9	-----	-----	0.20 U	0.20 U	-----	-----	59	64	-----
DOF-MW-5	11/8/12	0.5 U	0.7	0.5 U	0.2 U	0.1 U	0.1 U	-----	7,070	10.9	13.6	-----
DOF-MW-5	11/20/15	0.5	0.5	-----	-----	0.1 U	0.1 U	-----	10,800	8.9	11	-----
DOF-MW-5	3/29/16	0.5	0.6	-----	-----	0.02 J _B	0.02 J	-----	12,100	12	12	-----
DOF-MW-5	9/26/16	0.60	0.68	-----	-----	0.20 U	0.20 U	-----	-----	12	14	-----
DOF-MW-6	11/9/12	0.8	1.3	0.2 U	0.2 U	0.1 U	0.1 U	-----	31,400	7.7	17	-----
DOF-MW-6	11/19/15	0.6	0.4	-----	-----	0.1 U	0.01 J	-----	21,500	7.6	9	-----
DOF-MW-6	3/24/16	0.4 J	0.5	-----	-----	0.02 J	0.02 J	-----	22,100	8	10	-----
DOF-MW-6	9/27/16	0.45	0.41	-----	-----	0.10 U	0.10 U	-----	-----	7.8	7.0	-----
DOF-MW-7	11/9/12	1.6	1.4	0.5 U	0.2 U	0.1 U	0.1 U	-----	36,500	10	14	-----
DOF-MW-7	11/23/15	1.0	0.9	-----	-----	0.1 U	0.1 U	-----	15,900	6.1	7	-----
DOF-MW-7	3/25/16	1.1	1.2	-----	-----	0.2 U	0.1 U	-----	18,200	7	6.3	-----
DOF-MW-7	9/27/16	0.96	0.98	-----	-----	0.10 U	0.10 U	-----	-----	4.8	4.6	-----
DOF-MW-8	11/9/12	6	5.6	0.5 U	0.2 U	0.1 U	0.1 U	-----	32,400	2	5	-----
DOF-MW-8	11/20/15	8.8	9.9	-----	-----	0.1 U	0.1 U	-----	28,300	1.7	3	-----
DOF-MW-8	3/22/16	10.1	9	-----	-----	0.02 J	0.01 J	-----	30,300	4	2.6	-----
DOF-MW-8	9/30/16	9.5	9.6	-----	-----	0.10 U	0.10 U	-----	-----	1.4	2.3	-----
HC-B1	11/13/12	4	4	1 U	1 U	0.5 U	0.5 U	-----	126,000	6	6	-----
HC-B1	11/19/15	0.45 J	0.3 J	-----	-----	0.05 J	1 U	-----	134,000	2.8	3 J	-----
HC-B1	3/24/16	0.8 J	0.8 J	-----	-----	0.05 J	0.05 J	-----	217,000	4	6	-----
HC-B1	9/30/16	0.64 J	0.5 J	-----	-----	1.0 U	2.0 U	-----	-----	2.4	2.3	-----
HC-B2(R)	11/11/15	2.7	2.6	-----	-----	0.03 J	0.04 J	-----	63,700	0.5 J	0.3 J	-----
HC-B2(R)	3/23/16	0.1 J	0.5	-----	-----	0.1 J	0.1	-----	35,700	0.2 J	1.4	-----
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
SA-MW1	11/23/15	3.6	4.1	----	----	0.1 U	0.02 J	----	37,400	13.5	20	----
SA-MW1	3/24/16	2.3	2	----	----	0.2 U	0.2 U	----	19,300	13	15	----
SA-MW1	9/30/16	4.2	4.1	----	----	0.10 U	0.10 U	----	----	25	29	----
SA-MW2	11/9/12	0.5	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	----	85,700	2.5	5	----
SA-MW2	11/20/15	1	2			0.05 J	0.5 U	----	117,000	3	3	----
SA-MW2	3/29/16	3.7	4			0.01 J _B	0.02 J	----	46,600	5	6	----
SA-MW2	9/30/16	1.3 J	1.5	----	----	1.0 U	0.04 J	----	----	2.5	3.1	----
SA-MW3	11/13/12	4	3	1 U	1 U	0.5 U	0.5 U	----	142,000	4	4	----
SA-MW3	11/19/15	0.3	0.7 J	----	----	0.2 J	0.2 J	----	46,700	0.7	1 J	----
SA-MW3	3/28/16	0.4 J	0.7	----	----	0.02 J	0.04 J		9,240	1	2	
SA-MW3	9/27/16	0.41	0.62	----	----	0.09 J	0.12	----	----	3.3	1.7	----
MW-Ap	11/18/15	----	----	----	----	----	----	----	----	----	----	----
MW-Ap	3/25/16	----	----	----	----	----	----	----	----	----	----	----
MW-Ap	10/1/16	----	----	----	----	----	----	----	----	----	----	----
MW-Bp	11/18/15	----	----	----	----	----	----	----	----	----	----	----
MW-Bp	3/25/16	----	----	----	----	----	----	----	----	----	----	----
MW-Bp	10/1/16	----	----	----	----	----	----	----	----	----	----	----
MW-Cp	11/18/15	----	----	----	----	----	----	----	----	----	----	----
MW-Cp	3/25/16	----	----	----	----	----	----	----	----	----	----	----
MW-Cp	10/1/16	----	----	----	----	----	----	----	----	----	----	----
MW-Dp	11/18/15	----	----	----	----	----	----	----	----	----	----	----
MW-Dp	3/28/16	----	----	----	----	----	----	----	----	----	----	----
MW-Dp	10/1/16	----	----	----	----	----	----	----	----	----	----	----
MW-Du	11/18/15	1.4	1.6	----	----	0.01 J	0.1 U	----	15,500	8.3	10	----
MW-Du	3/28/16	1.8	2	----	----	0.02 J	0.01 J	----	16,100	10	13	----
MW-Du	10/1/16	1.8	2.1	----	----	0.10 U	0.10 U	----	----	11	12	----
MW-Eu	11/19/15	2	3	----	----	1 U	0.05 J	----	241,000	1.6	13	----
MW-Eu	3/24/16	3	3	----	----	0.1 J	0.05 J	----	269,000	4 J	9	----
MW-Eu	9/30/16	2.8	2.4	----	----	1.0 U	1.0 U	----	----	2.3	2.1	----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
MW-Fu	11/11/15	0.7	0.7	----	----	0.03 J	0.02 J	----	136,000	0.25 J	0.2 J	----
MW-Fu	3/23/16	0.2 J	0.2 J	----	----	0.02 J	0.02 J	----	85,600	0.2 J _B	0.2 J _B	----
MW-Fu	9/28/16	0.36	0.36	----	----	0.06 J	0.04 J	----	----	0.35 J _B	0.37 J _B	----
MW-FL	11/10/15	1.0	1.3	----	----	0.2 U	0.01 J	----	54,700	19	21	----
MW-FL	3/23/16	0.9 J	1 J	----	----	0.5 U	0.05 J	----	60,600	20	21	----
MW-FL	9/28/16	0.75	0.75	----	----	0.20 U	0.10 U	----	----	14	12	----
MW-Gu	11/10/15	0.8	0.9	----	----	0.1 U	0.01 J	----	61,900	1.2	2	----
MW-Gu	3/23/16	1.8	1.8	----	----	0.2 U	0.01 J	----	124,000	3	3.3	----
MW-Gu	9/28/16	0.71	0.55	----	----	0.10 U	0.10 U	----	----	0.85	0.80	----
MW-GL	11/10/15	0.6	0.7	----	----	0.5 U	0.01 J	----	107,000	1.4	2	----
MW-GL	3/23/16	0.8 J	1 J	----	----	0.05 J	0.05 J	----	110,000	3	4	----
MW-GL	9/28/16	1.0 J	0.6 J	----	----	1.0 U	1.0 U	----	----	2.5 J	0.90	----
MW-HL	11/18/15	0.25 J	0.3 J	----	----	0.5 U	0.2 U	----	72,800	2	2 J	----
MW-HL	3/29/16	0.2 J	0.4 J	----	----	0.2 U	0.5 U	----	63,200	2 J	3	----
MW-HL	9/27/16	0.16 J	0.19 J	----	----	0.10 U	0.10 U	----	----	1.6 J	1.0	----
MW-IL	11/20/15	0.4 J	0.4 J	----	----	1 U	0.5 U	----	139,000	3	4	----
MW-IL	3/28/16	0.7 J	0.8 J	----	----	0.5 U	0.05 J	----	83,400	5	6	----
MW-IL	9/27/16	0.33	0.31	----	----	0.10 U	0.10 U	----	----	3.2	1.9	----
MW-Ju	11/20/15	2.0	2.2	----	----	0.01 J	0.02 J	----	45,000	2.5	3	----
MW-Ju	3/28/16	3.3	3	----	----	0.2 U	0.04 J	----	24,600	2	2	----
MW-Ju	9/27/16	1.2	2.5	----	----	0.10 U	0.12	----	----	1.6 J	3.4	----
MW-Ku	11/10/15	0.4	0.5	----	----	0.02 J	0.03 J	----	33,200	0.42	0.6	----
MW-Ku	3/22/16	0.5	0.7	----	----	0.07 J	0.07 J	----	36,800	0.5	0.9	----
MW-Ku	9/28/16	1.1	1.2	----	----	0.20 U	0.04 J	----	----	1.5	1.4	----
MW-KL	11/10/15	0.3	0.5	----	----	0.2 U	0.01 J	----	43,600	3	3	----
MW-KL	3/22/16	0.5 J	0.3 J	----	----	0.5 U	0.05 J	----	43,600	3	3	----
MW-KL	9/28/16	0.6 J	0.30	----	----	1.0 U	1.0 U	----	----	3.6 J	1.3	----
Seep 1	5/4/07	6.6	7.5	-	-	0.017 J	0.119	-	-	2.7	4.9	----
Seep 1	7/5/12	5	-	1 U	-	0.5 U	-	74,100	-	2 U	-	----
Seep 2	5/7/07	7.4	7.0	-	-	0.046	0.071	-	-	3.1	2.0	----
Seep 2	7/5/12	4	-	1 U	-	0.5 U	-	76,200	-	2	-	----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
Number of Samples		108	106	35	33	108	106	2	82	108	106	22
Number of Detects		102	104	3	10	27	47	2	82	95	105	0
Percent Detected		94.4%	98.1%	8.6%	30.3%	25.0%	44.3%	100.0%	100.0%	88.0%	99.1%	0.0%
Highest Conc.		29	28	0.80	0.80	0.20	1.2	76200	643000	75	121	<34

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

nd - Not detected

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
Push-Probes	SLs	3.1	3.1	8.1	8.1	-----	-----	25	25	8.2	8.2	1.9	1.9
P11	11/17/14	0.6	1.7	0.1 U	1.5	-----	20,000	20.0 U	20.0 U	1.6	1.7	0.5 U	0.5 U
P12	11/17/14	3	5	0.4	1.1	-----	18,800	20.0 U	20.0 U	5	6	1 U	1 U
P13	11/13/14	0.8	4.3	0.1	0.7	-----	13,600	20.0 U	20.0 U	3.5	3.5	0.5 U	0.5 U
P14	11/14/14	0.5 U	2.0	0.3	7.0	-----	18,100	20.0 U	20.0 U	1.5	1.8	0.2 U	0.2 U
P15	11/14/14	0.5 U	2.2	0.1	3.3	-----	2470	20.0 U	20.0 U	4.8	5.1	0.2 U	0.2 U
P16	12/10/14	0.5 U	24	0.1 U	13	-----	102,000	20.0 U	52	3.9	14	0.2 U	0.2 U
P18A	12/16/14	0.5	31	0.1 U	39	-----	73,000	20.0 U	211	4.4	18	0.2 U	0.3
P18B	12/16/14	2 U	7	0.5 U	7.9	-----	755,000	20.0 U	20.0 U	12	14	1 U	1 U
P20	11/12/14	1.0	14	0.1 U	1.6	-----	46,800	20.0 U	20.0 U	2.0	14	0.2 U	0.2 U
P21A	12/8/14	0.5 U	9.4	0.5 U	5	-----	44,700	20.0 U	33	4.1	8.3	0.2 U	0.2 U
P21B	12/8/14	5 U	18	1 U	9	-----	561,000	20.0 U	76	9	18	2 U	2 U
P23	11/12/14	0.5 U	4	0.1 U	0.6	-----	44,900	20.0 U	20.0 U	1.4	5	0.2 U	0.2 U
P26	11/13/14	3	4	0.5 U	0.6	-----	415,000	20.0 U	20.0 U	6	6	1 U	1 U
P27A	11/11/14	2	12	0.2 U	1.8	-----	173,000	20.0 U	20.0 U	2	7	0.5 U	0.5 U
P27B	11/11/14	2	116	0.2 U	197	-----	639,000	20.0 U	182	14	46	0.5 U	0.7
P28	12/15/14	1	14	0.2 U	1.6	-----	191,000	20.0 U	22.5	3	8	0.5 U	0.5 U
P29	12/10/14	1	66	0.4	62	-----	111,000	20.0 U	218	3	39	0.5 U	0.5 U
P30	12/9/14	27	30	5.0	5.7	-----	193,000	26	48	18	19	1 U	1 U
P31	12/9/14	1 U	1	0.2 U	1 U	-----	99,200	20.0 U	20.0 U	2	3	0.5 U	2 U
P32A	12/15/14	0.6	52.4	0.1 U	8.6	-----	131,000	20.0 U	35	2.0	23	0.2 U	0.2 U
P32B	12/15/14	1 U	21	0.2 U	2.8	-----	97,400	20.0 U	20.0 U	2	8	0.5 U	0.5 U
P33A	12/8/14	0.6	7.2	0.5 U	5.1	-----	43,700	20.0 U	22	3.8	7.8	0.2 U	0.2 U
P33B	12/8/14	-----	-----	-----	-----	-----	41,400	-----	-----	-----	-----	-----	-----
Monitoring Wells													
DOF-MW-1	11/8/12	5 U	4	1 U	2	-----	170,000	0.1 U	0.1 U	8	8	2 U	2 U
DOF-MW-1	11/11/15	1.1 J	22	1	20	-----	284,000	9.5 J	77	2	12	2 U	0.05 J
DOF-MW-1	3/22/16	0.5 J	24	0.2 J	15	-----	266,000	4 J	58	6	17	0.05 J	0.1 J
DOF-MW-1	9/26/16	1 U	2.2 J	0.20 U	0.62	-----	-----	20 U	20 U	7.6	8.6	0.40 U	2.0 U
DOF-MW-2	11/8/12	5.2	23	0.3	1.1	-----	22,100	0.1 U	0.1 U	1.7	2.1	1 U	1 U
DOF-MW-2	11/11/15	15	15	1.0	1.0	-----	20,300	14 J	15 J	1.5	1.8	0.2 J	0.2 J
DOF-MW-2	3/22/16	15	16	1.1	1.2	-----	18,100	12 J	14 J	1	1.4	0.2 J	0.2 J
DOF-MW-2	9/26/16	15	16	1.1	1.0	-----	-----	20 U	20 U	1.5	1.5 J _B	0.14 J	0.14 J

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
DOF-MW-3	11/8/12	1.7	5.3	0.1 U	0.7	-----	40,500	0.1 U	0.1 U	1.4	1.4	1 U	1 U
DOF-MW-3	11/20/15	9	10	0.7	0.7	-----	56,300	13 J	14 J	2	2	0.1 J	0.1 J
DOF-MW-3	3/24/16	11	11	0.8	1.8	-----	51,000	15 J	15 J	2	2	0.2 J	0.1 J
DOF-MW-3	9/26/16	11	11	0.94	0.88	-----	-----	20 U	20 U	1.7	2.0 J	0.14 J	0.13 J
DOF-MW-4	11/8/12	7.4	15	0.4	0.9	-----	24,800	0.1 U	0.1 U	1.5	1.7	1 U	1 U
DOF-MW-4	11/11/15	15	16	1.0	0.9	-----	20,400	12 J	14 J	1.3	1.3	0.1 J	0.1 J
DOF-MW-4	3/29/16	14	16	0.9	0.9	-----	18,300	10 J	22	1.3	1.3	0.1 J	0.1 J
DOF-MW-4	9/26/16	19	18	1.2	1.1	-----	-----	20 U	20 U	1.4	1.2 J _B	0.12 J	0.13 J
DOF-MW-5	11/8/12	2.1	7.0	0.1	0.3	-----	10,900	0.1 U	0.1 U	0.8	1.0	0.5 U	1 U
DOF-MW-5	11/20/15	2.7	3.7	0.2	0.2	-----	17,800	20 U	3.6 J	0.47 J	0.6	0.02 J	0.2 J
DOF-MW-5	3/29/16	2.8	3	4.5	0.2 J	-----	19,500	3 J	20 U	0.5 J	0.4 J	0.03 J	0.02 J
DOF-MW-5	9/26/16	4.1	4.1	0.30	0.29	-----	-----	20 U	20 U	0.5 J	0.4 J _B	0.4 U	1.0 U
DOF-MW-6	11/9/12	1 U	6.6	0.1	1.4	-----	37,800	0.1 U	0.1 U	1.7	2.3	0.2 U	0.2 U
DOF-MW-6	11/19/15	1.9	2.5	0.1	0.2	-----	23,600	3.3 J	3.8 J	0.8	0.8	0.02 J	0.01 J
DOF-MW-6	3/24/16	2	3	0.1 J	0.3	-----	27,000	20 U	20 U	0.9 J	1	0.02 J	0.02 J
DOF-MW-6	9/27/16	1.7	1.7	0.15	0.17	-----	-----	20 U	65	1.0	1.0 J _B	0.02 J	0.02 J
DOF-MW-7	11/9/12	1.8	3.6	0.1 U	0.4	-----	28,200	0.1 U	0.1 U	2	2.4	0.2 U	0.2 U
DOF-MW-7	11/23/15	0.25	0.3 J	0.1	0.02 J	-----	4,070	20 U	4.5 J	1.4	1.5	0.02 J	0.01 J
DOF-MW-7	3/25/16	0.1 J _B	0.1 J _B	0.02 J _B	0.04 J _B	-----	4,310	20 U	20 U	1	1.4	0.02 J	0.01 J
DOF-MW-7	9/27/16	5 U	0.50 U	0.10 U	0.15	-----	-----	20 U	20 U	1.6 J	1.4 J _B	0.20 U	0.20 U
DOF-MW-8	11/9/12	0.6	3.4	0.5	13.5	-----	35,100	0.1 U	0.1 U	7	7.6	0.2 U	0.2 U
DOF-MW-8	11/20/15	0.26 J	1.0	0.2	2.8	-----	30,300	20 U	15 J	4.5	5.2	0.01 J	0.01 J
DOF-MW-8	3/22/16	0.2 J	0.8	0.04 J	2.7	-----	33,000	20 U	11 J	5	5	0.02 J	0.01 J
DOF-MW-8	9/30/16	0.5 U	1.1	0.10 U	3.1	-----	-----	20 U	20 U	4.7	5.1	0.20 U	0.20 U
HC-B1	11/13/12	2 U	2 U	0.5 U	0.5 U	-----	205,000	0.1 U	0.1 U	6	7	1 U	1 U
HC-B1	11/19/15	0.3 J	5 U	0.06 J	0.04 J	-----	230,000	20 U	20 U	0.3 J	0.3 J	1 U	2 U
HC-B1	3/24/16	0.3 J	0.5 J	0.2 J	0.3 J	-----	366,000	3 J	20 U	0.4 J	0.4 J	1 U	1 U
HC-B1	9/30/16	5 U	10 U	1 U	2 U	-----	-----	20 U	20 U	0.5 J	2.4 J	2.0 U	4.0 U
HC-B2(R)	11/11/15	0.4 J	0.4 J	0.03 J	0.2	-----	7,910	20 U	3.1 J _B	2.3	2.3	0.2 U	0.2 U
HC-B2(R)	3/23/16	2.7	3.6	0.02 J	5.9	-----	3,100	3 J	20 J	2.3	2.5	0.01 J	0.03 J
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
SA-MW1	11/23/15	1.8	3.3	1.0	2.0	-----	31,700	16.6 J	51.5	10	10	0.1 J	0.2 J
SA-MW1	3/24/16	1.0 J	3	0.7	1.8	-----	17,400	6 J	15 J	2	3	0.1 J	0.1 J
SA-MW1	9/30/16	1.5	2.7	1.6	2.4	-----	-----	20 U	20 U	3.2	3.4	0.32	0.28
SA-MW2	11/9/12	2 U	1.0	0.1 U	0.6	-----	156,000	0.1 U	0.1 U	4.7	4.1	0.2 U	0.2 U
SA-MW2	11/20/15	0.4 J	1 J	0.1 J	0.6	-----	189,000	20 U	4.1 J	3	4	2 U	1 U
SA-MW2	3/29/16	0.3 J	0.7 J	0.1	0.8	-----	31,100	20 U	6 J	2.7	3	0.01 J	0.02 J
SA-MW2	9/30/16	5 U	0.54	1 U	0.96	-----	-----	20 U	20 U	1.5 J	1.8	2.0 U	2.0 U
SA-MW3	11/13/12	4	4	0.5 U	0.5 U	-----	312,000	0.1 U	0.1 U	11	10	1 U	1 U
SA-MW3	11/19/15	4.3	5	0.01 J	0.05 J	-----	103,000	6.8 J	7.3 J	2.0	3	1 U	0.05 J
SA-MW3	3/28/16	4	5	0.08 J	0.2 J	-----	20,900	9 J	10 J	0.8 J	0.9 J	0.02 J	0.04 J
SA-MW3	9/27/16	9.2	7.4	0.50 U	0.12	-----	-----	20 U	36	2.6	2.6	1.0 U	0.03 J
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	3.1	4	0.7	1.0	-----	13,000	5.9 J	6.6 J	1.7	2.1	0.02 J	0.02 J
MW-Du	3/28/16	3	4	0.3	1.2	-----	12,600	4 J _B	17 J	0.8 J	1.0	0.02 J	0.03 J
MW-Du	10/1/16	4.1	4.7	0.29	0.62	-----	-----	20 U	20 U	0.74	1.27 J _B	0.02 J	0.02 J
MW-Eu	11/19/15	0.5 J	8	1.0	23.4	-----	370,000	4.4 J	48.7	3	8	2 U	0.05 J
MW-Eu	3/24/16	0.4 J	2 J	0.1 J	9.4	-----	531,000	5 J	15 J	2 J	3	0.1 J	0.05 J
MW-Eu	9/30/16	5 U	5 U	1 U	1 U	-----	-----	20 U	20 U	0.8 J	1.4 J _B	2.0 U	2.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
MW-Fu	11/11/15	2.2	2.2	0.01 J _B	0.01 J	-----	24,100	5.0 J	20.0 U	3.0	3	0.2 U	0.2 U
MW-Fu	3/23/16	2.1	1.9	0.01 J _B	0.01 J	-----	14,300	20 U	20 U	1.3	1.3	0.01 J	0.2 U
MW-Fu	9/28/16	3.3	3.1	0.10 U	0.10 U	-----	-----	20 U	20 U	3.4	3.3	0.20 U	0.20 U
MW-FL	11/10/15	0.8	2.1	0.09 J	0.4	-----	103,000	2.7 J	6.4 J	1.0	3.1	0.05 J	0.07 J
MW-FL	3/23/16	0.9 J	4	0.1 J	0.3 J	-----	122,000	4 J	5 J	1 J	1 J	0.05 J	0.05 J
MW-FL	9/28/16	1.0 U	0.75	0.20 U	0.08 J	-----	-----	20 U	49	0.82 J	1.4 J _B	0.05 J	0.04 J
MW-Gu	11/10/15	0.17 J	0.6	0.07 J	0.2	-----	98,400	20.0 U	5.9 J	0.7	1.8	0.2 U	0.01 J
MW-Gu	3/23/16	0.8 J	1.3	0.3	0.5	-----	126,000	3 J	20 U	1	1.3	0.02 J	0.01 J
MW-Gu	9/28/16	10 U	1.5	0.10 U	0.14	-----	-----	20 U	20 U	10 U	1.1 J _B	0.20 U	0.20 U
MW-GL	11/10/15	0.18 J	1.0	0.03 J	0.1	-----	231,000	20.0 U	2.7 J _B	0.52 J	0.9	1 U	0.01 J
MW-GL	3/23/16	0.3 J	0.4 J	0.05 J	0.2 J	-----	252,000	20 U	20 U	0.4 J	0.4 J	1 U	1 U
MW-GL	9/28/16	5 U	10 U	1.0 U	1.0 U	-----	-----	20 U	20 U	5.0 U	10 U	2.0 U	2.0 U
MW-HL	11/18/15	0.35 J	0.4 J	1.0	1.1	-----	130,000	7.0 J	6.7 J	0.28 J	0.7 J	1 U	1 U
MW-HL	3/29/16	0.3 J	0.7 J	0.04 J	0.3 J	-----	119,000	20 U	10 J	0.2 J	0.4 J	0.4 U	1 U
MW-HL	9/27/16	2.5 U	2.4	0.50 U	0.09 J	-----	-----	20 U	20 U	2.5 U	0.23 J _B	1.0 U	0.20 U
MW-IL	11/20/15	0.4 J	0.8 J	0.1 J	0.3 J	-----	220,000	20.0 U	5.1 J	0.5 J	0.5 J	2 U	1 U
MW-IL	3/28/16	0.3 J	0.6 J	0.1 J	0.5 J	-----	122,000	13 J	37	1 J	1 J	1 U	1 U
MW-IL	9/27/16	2.5 U	0.50 U	0.50 U	0.07 J	-----	-----	20 U	140	0.6 J	0.56 J _B	1.0 U	0.20 U
MW-Ju	11/20/15	1.2	2.0	2.4	2.8	-----	42,100	15 J	13 J	4.6	5	0.5 U	0.01 J
MW-Ju	3/28/16	1 J	3	1.3	4.4	-----	22,900	7 J	13 J	3 J	3	0.4 U	0.02 J
MW-Ju	9/27/16	2.5 U	5.0	0.50 U	9.8	-----	-----	20 U	59	1.0 J	2.9	1.0 U	0.02 J
MW-Ku	11/10/15	3.0	3.3	0.02 J _B	0.05 J	-----	9,330	20.0 U	20.0 U	3.6	3.6	0.2 U	0.2 U
MW-Ku	3/22/16	2.7	3	0.01 J	0.2	-----	6,890	20 U	20 U	3.1	3	0.2 U	0.2 U
MW-Ku	9/28/16	1.5	2.0	0.20 U	0.07 J	-----	-----	20 U	20 U	2.8	3.9	0.40 U	0.40 U
MW-KL	11/10/15	0.7	1.5	0.6	0.8	-----	112,000	3.6 J	5.8 J	0.6	1.0	0.01 J	0.01 J
MW-KL	3/22/16	0.20 J	0.40 J	0.05 J	0.20 J	-----	115,000	20 U	5 J	0.5 J	0.5 J	0.05 J	1 U
MW-KL	9/28/16	5 U	1.2	1.0 U	1.0 U	-----	-----	20 U	20 U	0.9 J	1.3 J _B	2.0 U	2.0 U
Seep 1	5/4/07	1.8	7.1	0.16	11.8	-	-	200 U	40 J	-	-	0.01 J	0.04
Seep 1	7/5/12	2 U	-	0.2 U	-	173,000	-	100 U	-	4	-	1 U	-
Seep 2	5/7/07	1.9	2.3	0.25	0.84	-	-	200 U	200 U	-	-	0.008 J	0.01 J
Seep 2	7/5/12	2 U	-	0.2 U	-	179,000	-	100 U	-	6	-	1 U	-

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
Number of Samples		108	106	108	106	2	81	108	106	106	104	108	104
Number of Detects		82	98	71	99	2	81	32	53	103	103	41	47
Percent Detected		75.9%	92.5%	65.7%	93.4%	100.0%	100.0%	29.6%	50.0%	97.2%	99.0%	38.0%	45.2%
Highest Conc.		27	116	5.0	197	179000	755000	26	218	18	46	0.20	0.70

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

nd - Not detected

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	-----	81	81	-----	0.8	0.5	0.5	150	-----	0.18	19000
P11	11/17/14	70,200	4	5	120	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U
P12	11/17/14	314,000	10 U	10 U	150	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	0.6	0.9
P13	11/13/14	186,000	9	10	96	0.25 U	0.12	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U
P14	11/14/14	124,000	6	12	190	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	2.1	0.20 U
P15	11/14/14	431,000	4 U	7	43	1.8	0.17	0.20 U	2.5 U	5.0 U	8.8	15
P16	12/10/14	419,000	4 U	37	560	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.44	0.20 U
P18A	12/16/14	730,000	4 U	80	480	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.23
P18B	12/16/14	4,080,000	20 U	20 U	4600	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P20	11/12/14	34,800	4 U	20	690	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P21A	12/8/14	195,000	6	18	260	0.25 U	2.2	0.84	0.50 U	1.0 U	0.72 Jq	4.7
P21B	12/8/14	2,730,000	40 U	40	3900	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P23	11/12/14	22,200	5	10	350	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P26	11/13/14	3,200,000	20 U	20 U	2200	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P27A	11/11/14	2,460,000	10 U	20	890	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P27B	11/11/14	2,000,000	30	320	4000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P28	12/15/14	1,700,000	10 U	20	1100	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P29	12/10/14	750,000	10 U	130	760	0.25 U	0.26	0.70	0.50 U	1.0 U	0.20 U	0.20 U
P30	12/9/14	1,840,000	40	40	1100	0.25 U	2.0	1.0	0.50 U	1.0 U	0.20 U	0.20 U
P31	12/9/14	983,000	10 U	90	570	0.25 U	0.51	0.32	0.50 U	1.0 U	0.20 U	0.20 U
P32A	12/15/14	510,000	6	59	710	0.25 U	0.12	0.20 U	0.50 U	1.0 U	0.42	0.12 J
P32B	12/15/14	1,360,000	10 U	40	560	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
P33A	12/8/14	54,000	8	29	250	0.25 U	0.36	0.20 U	0.50 U	1.0 U	0.20 U	3.6
P33B	12/8/14	561,000	-----	-----	310	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells												
DOF-MW-1	11/8/12	-----	40 U	40 U	1000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-1	11/11/15	2,030,000	4.5 J	40	1500	0.04 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-1	3/22/16	2,120,000	3 J _B	60	1433	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	-----	2 J _B	20 U	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	-----	4 U	7	130	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.19	0.20 U
DOF-MW-2	11/11/15	484,000	3.8 J	5	120	0.04 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	454,000	4 J _B	3 J	106	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.08 J	0.20 U
DOF-MW-2	9/26/16	-----	4 J	4 J	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	-----	4 U	4	210	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.15	0.20 U
DOF-MW-3	11/20/15	425,000	3.3 J	3 J	290	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.21	0.20 U
DOF-MW-3	3/24/16	399,000	4 J _B	5 J	264	0.20 U	0.10 U	0.20 U	1.0 U	2.0 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	-----	5 J	3 J	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.19 J	0.20 U
DOF-MW-4	11/8/12	-----	5	5	140	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.17	0.20 U
DOF-MW-4	11/11/15	369,000	3.3 J	3 J	120	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-4	3/29/16	323,000	3 J	3 J	107	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	-----	5 J	5 J	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.14 J	0.20 U
DOF-MW-5	11/8/12	-----	4 U	4 U	63	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	235,000	1.1 J	1 J	100	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	231,000	1.3(a)	1.0(a)	111	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	-----	3 J	8 U	-----	0.10 U	0.10 U	0.20 U	0.11 J	1.0 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	-----	4 U	4 U	230	0.22	0.10 U	0.20 U	0.50 U	1.0 U	0.33	0.65
DOF-MW-6	11/19/15	241,000	48	52	150	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.12 J	0.22
DOF-MW-6	3/24/16	252,000	228 (b)	430(b)	166	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.36 J _Q
DOF-MW-6	9/27/16	-----	29	31	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.26	0.39
DOF-MW-7	11/9/12	-----	4 U	4 U	210	0.5	0.41	0.20 U	0.50 U	1.0 U	2.1	4.8
DOF-MW-7	11/23/15	369,000	0.96 J	0.5 J	57	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.43	3.4
DOF-MW-7	3/25/16	385,000	0.6 J	4 U	63	0.09 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	8.4 J _Q
DOF-MW-7	9/27/16	-----	4 U	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.48	3.0
DOF-MW-8	11/9/12	-----	4 U	11	230	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.89	3.3
DOF-MW-8	11/20/15	121,000	0.6 J	3 J	200	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.86	3.9
DOF-MW-8	3/22/16	129,000	1 J _B	1 J	212	0.10	0.10 U	0.20 U	0.50 U	1.0 U	0.47	7.1
DOF-MW-8	9/30/16	-----	1 J _B	3 J	-----	0.12	0.10 U	0.20 U	0.50 U	1.0 U	1.0	3.8
HC-B1	11/13/12	-----	20 U	20 U	1200	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
HC-B1	11/19/15	2,080,000	1.1 J	40 U	1300	0.03 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
HC-B1	3/24/16	2,660,000	20 U	5 J	2050	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
HC-B1	9/30/16	-----	40 U	80 U	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
HC-B2(R)	11/11/15	6,900	9	10	190	0.03 J _B	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
HC-B2(R)	3/23/16	3,520	16	19	102	0.10 U	0.10 U	0.20 U	0.10 J	1.0 U	0.20 U	0.20 U
HC-B2R	9/30/16	-----	-----	-----	-----	0.10 U	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	751,000	2.3 J	5	220	1.4	0.47 (MS)	0.30	0.50 U	1.0 U	2.5	0.96
SA-MW1	3/24/16	828,000	4 J _B	5 J	120	2.8	0.81 (MS)	1.2	0.50 U	1.0 U	19	1.5 J _Q
SA-MW1	9/30/16	-----	6.9	8.6	-----	2.5	0.69	0.94	0.50 U	1.0 U	6.2	2.9
SA-MW2	11/9/12	-----	4 U	4 U	860	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
SA-MW2	11/20/15	1,600,000	1.6 J	2 J	1100	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
SA-MW2	3/29/16	329,000	0.6 J _B	4 J	245	0.24	0.15	0.20 U	0.12 J	1.0 U	0.20 U	5.6 J _Q
SA-MW2	9/30/16	-----	40 U	3 J	-----	0.10 U	0.10 U	0.20 U	0.22 J _B	1.0 U	0.20 U	0.20 U
SA-MW3	11/13/12	-----	30		1600	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
SA-MW3	11/19/15	1,540,000	7	12 J	540	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
SA-MW3	3/28/16	520,000	9 J	4 J	109	0.10 U	0.10 U	0.20 U	0.19 J	1.0 U	0.20 U	0.20 U
SA-MW3	9/27/16	-----	5.9	6.4	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ap	3/25/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Bp	3/25/16	-----	-----	-----	-----	-----	-----	-----	0.21 J	1.0 U	0.20 U	0.20 U
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Cp	3/25/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.07 J	0.20 U
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.61	0.20 U
MW-Dp	3/28/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20 U	0.20 U
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	0.50 U	1.0 U	0.20	0.20 U
MW-Du	11/18/15	156,000	5	6	92	0.04 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Du	3/28/16	153,000	3 J	2 J	92	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.35 J _Q
MW-Du	10/1/16	-----	1 J _B	5.2	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Eu	11/19/15	2,730,000	3.4 J	27 J	2100	0.06 J	0.67 (MS)	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Eu	3/24/16	3,360,000	40 U	16 J	2860	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Eu	9/30/16	-----	40 U	40 U	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	55,200	1.4 J	2 J	440	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Fu	3/23/16	20,700	1 J	0.7 J	273	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Fu	9/28/16	-----	2 J _B	2 J _B	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-FL	11/10/15	1,060,000	0.96 J	2 J	560	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.15 J
MW-FL	3/23/16	1,100,000	1 J	7 J	654	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.06 J	0.40
MW-FL	9/28/16	-----	8 U	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.14 J	1.0 U	0.06 J	0.17 J
MW-Gu	11/10/15	61,300	1.9 J	3 J	560	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Gu	3/23/16	123,000	1 J	2 J	829	0.10 U	0.10 U	0.20 U	0.12 J _B	1.0 U	0.20 U	0.20 U
MW-Gu	9/28/16	-----	1 J _B	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.12 J	1.0 U	0.20 U	0.20 U
MW-GL	11/10/15	1,910,000	3.1 J	1 J	1200	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-GL	3/23/16	2,020,000	20 U	6 J	1313	0.10 U	0.10 U	0.20 U	0.11 J _B	1.0 U	0.20 U	0.20 U
MW-GL	9/28/16	-----	40 U	40 U	-----	0.10 U	0.10 U	0.20 U	0.11 J	1.0 U	0.20 U	0.20 U
MW-HL	11/18/15	1,200,000	2.6 J	3 J	720	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-HL	3/29/16	1,020,000	3 J	6 J	648	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-HL	9/27/16	-----	1 J _B	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.07 J	0.20 U
MW-IL	11/20/15	1,720,000	1.6 J	1 J	1300	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-IL	3/28/16	1,110,000	11 J	11 J	711	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-IL	9/27/16	-----	1 J _B	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.10 J	1.0 U	0.12 J	0.24
MW-Ju	11/20/15	460,000	2.6 J	3 J	290	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.06 J	0.20 U
MW-Ju	3/28/16	268,000	19	30	156	0.10 U	0.10 U	0.32	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ju	9/27/16	-----	1 J _B	48	-----	0.10 U	0.11	0.63	0.50 U	1.0 U	0.09 J	0.20 U
MW-Ku	11/10/15	25,300	2.7 J	3 J	120	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ku	3/22/16	37,000	10	11	120	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-Ku	9/28/16	-----	5	3 J	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-KL	11/10/15	1,060,000	1.8 J	18	570	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
MW-KL	3/22/16	1,180,000	20 U	3 J	583	0.10 U	0.10 U	0.20 U	0.10 J _B	1.0 U	0.07 J	0.20 U
MW-KL	9/28/16	-----	17 J	1 J _B	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.07 J	0.20 U
Seep 1	5/4/07	-----	6.3	32	-----	-	-	-	-	-	-	-
Seep 1	7/5/12	-----	20 U	-	900	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
Seep 2	5/7/07	-----	23.2	27	-----	-	-	-	-	-	-	-
Seep 2	7/5/12	-----	210	-	930	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
Number of Samples		71	108	105	84	107	105	105	119	119	119	119
Number of Detects		71	75	89	84	31	14	8	13	0	27	28
Percent Detected		100.0%	69.4%	84.8%	100.0%	29.0%	13.3%	7.6%	10.9%	0.0%	22.7%	23.5%
Highest Conc.		4080000	210	320	4600	2.8	2.2	1.2	0.21	<1.0	19	15

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

(a) - The initial dissolved zinc concentration (244 ug/l) was determined to have been effected by
laboratory contamination (DMD validation report 6/30/18). The result listed is for a reanalysis of the
extracted sample.

(b) - Likely is biased high by laboratory contamination

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	100	7200	400	130	11	1000	16	1.2	4.2
P11	11/17/14	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65	1.0 U	1.0 U
P12	11/17/14	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P13	11/13/14	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P14	11/14/14	1.20 Jb	15	0.20 U	0.20 U	1.5	1.1	23	0.20 U	0.14
P15	11/14/14	5.0 U	25 U	1.0 U	1.0 U	69	6.0	11	1.0 U	1.0 U
P16	12/10/14	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 U
P18A	12/16/14	1.0 U	4.1 J	0.16	0.20 U	0.20 U	0.1	0.1	0.20 U	0.20 U
P18B	12/16/14	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P20	11/12/14	0.85 Jb	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41	0.20 U	0.20 U
P21A	12/8/14	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.42	0.20 U	0.20 U
P21B	12/8/14	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P23	11/12/14	0.94 Jb	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12	0.20 U	0.20 U
P26	11/13/14	0.78 Jb	5.0 U	0.1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27A	11/11/14	0.53 Jb	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27B	11/11/14	0.66 Jb	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P28	12/15/14	1.0 U	4.0 J	0.18	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P29	12/10/14	1.0 U	5.0 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U	0.20 U
P30	12/9/14	1.0 U	5.0 U	0.20 U	0.20 U	0.90	0.25	0.20 U	0.20 U	0.20 U
P31	12/9/14	1.0 U	5.0 U	0.20 U	0.20 U	0.30	0.20 U	0.20 U	0.20 U	0.20 U
P32A	12/15/14	1.0 U	6.2	0.30	0.20 U	0.31	0.15 J	0.52	0.20 U	0.20 U
P32B	12/15/14	1.0 U	2.9 J	0.20 U	0.20 U	0.20 U	0.20 U	0.38	0.20 U	0.20 U
P33A	12/8/14	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P33B	12/8/14	----	----	----	----	----	----	----	----	----
Monitoring Wells										
DOF-MW-1	11/8/12	1.0 U	5.0 U	0.20 U	0.20 U	0.1	0.20 U	0.20 U	0.15	0.20 U
DOF-MW-1	11/11/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.05 J	0.03 J	0.20 U
DOF-MW-1	3/22/16	1.0 U	2.2 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	0.73 J_B	3.3 J_B	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/11/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	9/26/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	11/20/15	1.0 U	3.7 J	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U
DOF-MW-3	3/24/16	2.0 U	7.9 J	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	1.0 U	8.5	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U
DOF-MW-4	11/8/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/11/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	3/29/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/8/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	0.52 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	1.0 U	5.0 U	1.6	0.20 U	0.14	0.34	0.22	0.20 U	0.20 U
DOF-MW-6	11/19/15	1.0 U	5.0 U	0.20 U	0.20 U	0.64	0.20 U	0.18 J	0.20 U	0.20 U
DOF-MW-6	3/24/16	1.0 U	2.8 J	0.20 U	0.20 U	0.24	0.13 J	0.11 J	0.20 U	0.20 U
DOF-MW-6	9/27/16	1.0 U	5.0 U	0.20 U	0.20 U	0.28	0.27	0.12 J	0.20 U	0.20 U
DOF-MW-7	11/9/12	0.59	5.0 U	0.61	0.20 U	1.2	0.36	25	0.16	0.20 U
DOF-MW-7	11/23/15	1.0 U	5.0 U	0.20 U	0.20 U	0.39	0.55	0.22 J_M	0.20 U	0.20 U
DOF-MW-7	3/25/16	1.0 U	5.0 U	0.04 J	0.20 U	0.39	0.65	0.23	0.20 U	0.20 U
DOF-MW-7	9/27/16	0.72 J_B	5.0 U	0.06 J_B	0.20 U	0.64	0.45	0.31	0.20 U	0.20 U
DOF-MW-8	11/9/12	1.0 U	5.0 U	0.74	0.20 U	0.45	0.40	0.42	0.20 U	0.20 U
DOF-MW-8	11/20/15	1.0 U	3.2 J	0.20 U	0.20 U	0.14 J	0.43	0.45	0.20 U	0.11 J
DOF-MW-8	3/22/16	1.0 U	4.3 J	0.20 U	0.20 U	0.14 J	0.41	0.38	0.20 U	0.09 J
DOF-MW-8	9/30/16	0.72 J_B	2.8 J_B	0.07 J_B	0.20 U	0.12 J	0.39	0.43	0.20 U	0.20 U
HC-B1	11/13/12	1.0 U	3.7 J	0.20 U	0.20 U	0.20 U	0.20 U	0.16	0.20 U	0.20 U
HC-B1	11/19/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U
HC-B1	3/24/16	1.0 U	5.0 U	0.20 U	0.20 U	0.09 J	0.20 U	0.12 J	0.20 U	0.20 U
HC-B1	9/30/16	1.0 U	5.0 U	0.05 J_B	0.20 U	0.08 J	0.20 U	0.15 J	0.20 U	0.20 U
HC-B2(R)	11/11/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2(R)	3/23/16	1.0 U	2.1 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2R	9/30/16	3.6 J_B	2.4 J_B	0.10 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform	1,2-Dichloro- ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	1.0 U	12	0.13 J	0.20 U	5.9	4.4	1.5	0.20 U	0.20 U
SA-MW1	3/24/16	1.0 U	18	0.09 J	0.24	8.6	27	9.6	0.20 U	0.20 U
SA-MW1	9/30/16	0.59 J_B	5.5 J_B	0.17 J	0.07 J	11	4.4	2.8	0.20 U	0.20 U
SA-MW2	11/9/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	11/20/15	1.0 U	5.0 U	0.10 J	0.20 U	0.07 J	0.20 U	0.11 J	0.20 U	0.20 U
SA-MW2	3/29/16	1.0 U	110	0.18 J	0.20 U	0.07 J	0.20 U	0.49	0.20 U	0.20 U
SA-MW2	9/30/16	1.0 U	5.0 U	0.14 J_B	0.20 U	0.10 J	0.20 U	0.17 J	0.20 U	0.20 U
SA-MW3	11/13/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	11/19/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	3/28/16	1.0 U	2.4 J	0.20 U	0.20 U	0.25	0.20 U	0.09 J	0.20 U	0.20 U
SA-MW3	9/27/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	11/18/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U
MW-Ap	3/25/16	1.0 U	2.5 J	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	0.03 J	0.20 U
MW-Ap	10/1/16	1.0 U	5.0 U	0.20 U	0.20 U	0.25	0.20 U	0.08 J	0.20 U	0.20 U
MW-Bp	11/18/15	1.0 U	8.8	0.20 U	0.20 U	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	3/25/16	1.0 U	3.2 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J	0.20 U
MW-Bp	10/1/16	1.0 U	2.4 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J_B	0.20 U
MW-Cp	11/18/15	1.0 U	5.0 U	0.20 U	0.20 U	0.31	0.20 U	0.14 J	0.20 U	0.24
MW-Cp	3/25/16	1.0 U	4.9 J	0.11 J	0.20 U	0.42	0.20 U	0.10 J	0.20 U	0.44
MW-Cp	10/1/16	1.0 U	2.3 J_B	0.04 J_B	0.20 U	0.30	0.20 U	0.08 J	0.20 U	0.20 U
MW-Dp	11/18/15	1.0 U	2.8 J	0.20 U	0.20 U	0.30	0.25	0.39	0.20 U	0.20 U
MW-Dp	3/28/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	10/1/16	1.0 U	5.3 J_B	0.07 J_B	0.20 U	0.15 J	0.32	1.4	0.20 U	0.20 U
MW-Du	11/18/15	1.0 U	2.4 J	0.20 U	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U	0.20 U
MW-Du	3/28/16	1.0 U	5.0 U	0.20 U	0.20 U	0.18 J	0.05 J	0.21	0.20 U	0.20 U
MW-Du	10/1/16	1.0 U	5.0 U	0.04 J_B	0.20 U	0.20 U	0.08 J	0.20 U	0.20 U	0.20 U
MW-Eu	11/19/15	1.0 U	3.0 J	0.20 U	0.20 U	0.21	0.20 U	0.19 J	0.20 U	0.20 U
MW-Eu	3/24/16	1.0 U	4.8 J	0.10 J	0.20 U	0.12 J	0.20 U	0.21	0.20 U	0.20 U
MW-Eu	9/30/16	1.0 U	5.0 U	0.08 J_B	0.20 U	0.11 J	0.20 U	0.20 J	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	3/23/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	9/28/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	11/10/15	1.0 U	5.0 U	0.20 U	0.20 U	0.08 J	0.20 U	0.23	0.20 U	0.20 U
MW-FL	3/23/16	1.0 U	2.2 J	0.20 U	0.20 U	0.08 J	0.20 U	0.25	0.20 U	0.20 U
MW-FL	9/28/16	0.49 J_B	5.0 U	0.20 U	0.20 U	0.08 J	0.20 U	0.26	0.20 U	0.20 U
MW-Gu	11/10/15	1.0 U	5.0 U	0.27	0.20 U	0.20 U	0.20 U	0.38	0.20 U	0.20 U
MW-Gu	3/23/16	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.20 U	0.20 U
MW-Gu	9/28/16	1.0 U	5.0 U	0.08 J_B	0.20 U	0.20 U	0.20 U	0.42	0.20 U	0.20 U
MW-GL	11/10/15	1.0 U	5.0 U	0.20 U	0.20 U	0.10 J	0.20 U	0.64	0.20 U	0.20 U
MW-GL	3/23/16	1.0 U	2.2 J	0.20 U	0.20 U	0.11 J	0.20 U	0.85	0.20 U	0.20 U
MW-GL	9/28/16	0.53 J_B	5.0 U	0.20 U	0.20 U	0.10 J	0.20 U	0.85	0.20 U	0.20 U
MW-HL	11/18/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	3/29/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U
MW-HL	9/27/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U
MW-IL	11/20/15	1.0 U	5.0 U	0.05 J	0.20 U	0.12 J	0.20 U	0.26	0.20 U	0.20 U
MW-IL	3/28/16	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	9/27/16	0.56 J_B	5.0 U	0.20 U	0.20 U	0.20	0.20 U	0.26	0.20 U	0.20 U
MW-Ju	11/20/15	1.0 U	5.0 U	0.20 U	0.20 U	0.07 J	0.20 U	0.32	0.20 U	0.20 U
MW-Ju	3/28/16	1.0 U	3.3 J	0.20 U	0.20 U	0.20 U	0.20 U	0.70	0.07 J	0.20 U
MW-Ju	9/27/16	1.0 U	5.0 U	0.20 U	0.20 U	0.13 J	0.20 U	0.23	0.20 U	0.20 U
MW-Ku	11/10/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	3/22/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U
MW-Ku	9/28/16	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U
MW-KL	11/10/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.14 J	1.7	0.20 U	0.20 U
MW-KL	3/22/16	1.0 U	5.0 U	0.20 U	0.20 U	0.08 J	0.12 J	4.0	0.20 U	0.20 U
MW-KL	9/28/16	1.0 U	5.0 U	0.05 J_B	0.20 U	0.07 J	0.08 J	3.4	0.20 U	0.20 U
Seep 1	5/4/07	-	-	-	-	-	-	-	-	-
Seep 1	7/5/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 2	5/7/07	-	-	-	-	-	-	-	-	-
Seep 2	7/5/12	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	119	119	119	119	119
Number of Detects		16	39	28	2	53	27	68	7	5
Percent Detected		13.4%	32.8%	23.5%	1.7%	44.5%	22.7%	57.1%	5.9%	4.2%
Highest Conc.		1.2	110	2	0.24	69	27	25	0.16	0.44

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

MS - Mineral spirits

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	1700000	5500	0.35	-----	1	2	0.7	1.8	0.9
P11	11/17/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P12	11/17/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P13	11/13/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P14	11/14/14	3.9	0.20 U	0.20 U	0.20 U	0.19	0.20 U	0.60	0.20 U	0.20 U
P15	11/14/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U
P16	12/10/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P18A	12/16/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P18B	12/16/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P20	11/12/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U
P21A	12/8/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P21B	12/8/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P23	11/12/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P26	11/13/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27A	11/11/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27B	11/11/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P28	12/15/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P29	12/10/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P30	12/9/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P31	12/9/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P32A	12/15/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P32B	12/15/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P33A	12/8/14	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells										
DOF-MW-1	11/8/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	11/11/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	3/22/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/11/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	9/26/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	3/24/16	10 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/8/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/11/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	3/29/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/8/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/19/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	3/24/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	11/9/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.79	0.20 U	0.20 U
DOF-MW-7	11/23/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	3/25/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U
DOF-MW-8	11/9/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	3/22/16	5.0 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	9/30/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	11/13/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	11/19/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	3/24/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	9/30/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2(R)	11/11/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2(R)	3/23/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2R	9/30/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	5.0 U	0.20 U	0.20 U	0.20 U	0.51	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW1	3/24/16	2.0 J	0.20 U	0.20 U	0.20 U	0.66	0.20 U	0.93	0.20 U	0.20 U
SA-MW1	9/30/16	0.20 U	0.20 U	0.20 U	0.20 U	0.77	0.20 U	0.26	0.20 U	0.20 U
SA-MW2	11/9/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.08 J	0.20 U	0.20 U
SA-MW2	3/29/16	4.9 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	9/30/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U
SA-MW3	11/13/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	11/19/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	3/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 J	0.20 U	0.20 U
SA-MW3	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	3/25/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.20 U	0.20 U
MW-Ap	10/1/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	3/25/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U
MW-Bp	10/1/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	3/25/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	10/1/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	3/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	10/1/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.20 U	0.20 U
MW-Du	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	3/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	10/1/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	11/19/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	3/24/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	9/30/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	3/23/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	11/10/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	3/23/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	11/10/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	3/23/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	11/10/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	3/23/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	11/18/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	3/29/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	3/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ju	11/20/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U
MW-Ju	3/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.35	0.20 U	0.20 U
MW-Ju	9/27/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	11/10/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	3/22/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	11/10/15	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	3/22/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	9/28/16	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 1	5/4/07	-	-	-	-	-	-	-	-	-
Seep 1	7/5/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 2	5/7/07	-	-	-	-	-	-	-	-	-
Seep 2	7/5/12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	119	119	119	119	119
Number of Detects		3	0	0	0	5	0	15	0	0
Percent Detected		2.5%	0.0%	0.0%	0.0%	4.2%	0.0%	12.6%	0.0%	0.0%
Highest Conc.		3.9	<0.2	<0.2	<0.2	0.77	<0.2	2.3	<0.2	<0.2

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloro-ethene	1,1,2,2-Tetra-chloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	1.6	2	12	-----	40	2.9	0.3	130	200	31	8200
P11	11/17/14	2.0	1.0 U	1.0 U	25 U	25 U	1.0 U	1.0 U	1.8	1.0 U	15	1.0 U
P12	11/17/14	48	1.0 U	1.0 U	25 U	25 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U
P13	11/13/14	1.0 U	1.0 U	1.0 U	25 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P14	11/14/14	3.1	0.20 U	0.20 U	6.2	5.0 U	0.20 U	0.20 U	7.8	0.20 U	0.72	0.20 U
P15	11/14/14	8.2	1.0 U	1.0 U	25 U	25 U	1.0 U	1.0 U	22	1.0 U	87	1.0 U
P16	12/10/14	0.54	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P18A	12/16/14	8.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.52	0.20 U	0.23	0.20 U
P18B	12/16/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.15	0.20 U	0.20 U	0.20 U
P20	11/12/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P21A	12/8/14	0.61	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P21B	12/8/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P23	11/12/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P26	11/13/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27A	11/11/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27B	11/11/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P28	12/15/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.15	0.20 U	0.20 U	0.20 U
P29	12/10/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.49	0.20 U	1.3	0.20 U
P30	12/9/14	2.4	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	4.2	0.56	2.6	0.20 U
P31	12/9/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P32A	12/15/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.74	0.20 U	0.54	0.20 U
P32B	12/15/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.33	0.20 U	0.30	0.20 U
P33A	12/8/14	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells												
DOF-MW-1	11/8/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	11/11/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	3/22/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/11/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	9/26/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloro-ethene	1,1,2,2-Tetra-chloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	11/20/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.07 J	0.20 U	0.05 J	0.20 U	0.20 U	0.20 U
DOF-MW-3	3/24/16	0.40 U	0.40 U	0.40 U	10 U	10 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/8/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/11/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	3/29/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/8/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	3.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.5	13	2.7	0.20 U
DOF-MW-6	11/19/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.75	0.20 U	0.20 U
DOF-MW-6	3/24/16	0.16 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.09 J	2.4	0.20 U	0.20 U
DOF-MW-6	9/27/16	0.59	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32 J_B	7.0	0.17 J	0.20 U
DOF-MW-7	11/9/12	1.7	0.20 U	0.20 U	5.0 U	5.0 U	0.43	0.20 U	28	0.14	21	1.7
DOF-MW-7	11/23/15	2.4	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.53	0.20 U
DOF-MW-7	3/25/16	2.3	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.63	0.20 U	0.31	0.20 U
DOF-MW-7	9/27/16	1.9	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.35 J_B	0.07 J	0.14 J	0.20 U
DOF-MW-8	11/9/12	61	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	2.6	0.81	2.0	0.20 U
DOF-MW-8	11/20/15	70	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.89	1.1	0.20	0.20 U
DOF-MW-8	3/22/16	68	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.84	0.97	0.17 J	0.20 U
DOF-MW-8	9/30/16	60	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.87	0.84	0.15 J	0.20 U
HC-B1	11/13/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	11/19/15	0.05 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	3/24/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	9/30/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.07 J_B	0.20 U	0.10 J	0.20 U
HC-B2(R)	11/11/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.08 J	0.20 U	0.06 J	0.20 U	0.04 J	0.20 U
HC-B2(R)	3/23/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2R	9/30/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.14 J	0.20 U	0.38 J_B	0.20 U	0.09 J	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloro-ethene	1,1,2,2-Tetra-chloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	6.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	54	2.3 J_M	240	2.6
SA-MW1	3/24/16	8.6	0.20 U	0.20 U	2.0 J	5.0 U	0.20 U	0.20 U	480	2.6	360	19
SA-MW1	9/30/16	12	0.20 U	0.20 U	1.3 J	5.0 U	0.20 U	0.20 U	290	2.2	420	8.7
SA-MW2	11/9/12	0.15 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20	0.20 U
SA-MW2	11/20/15	0.64	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.83	0.20 U	4.8	0.12 J
SA-MW2	3/29/16	0.77	0.20 U	0.20 U	27	1.6 J	0.20 U	0.20 U	1.1	0.20 U	5.6	0.14 J
SA-MW2	9/30/16	0.44	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.35 J_B	0.05 J	0.93	0.20 U
SA-MW3	11/13/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	11/19/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	3/28/16	0.06 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	9/27/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.06 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	11/18/15	0.61	0.20 U	0.20 U	5.0 U	5.0 U	0.24	0.20 U	0.60	0.76	0.20 U	0.20 U
MW-Ap	3/25/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.4	0.20 U	0.07 J	0.20 U	0.05 J	0.20 U
MW-Ap	10/1/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	11/18/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.49	0.20 U	0.18 J	0.20 U	0.20 U	0.20 U
MW-Bp	3/25/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.9	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U
MW-Bp	10/1/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.6	0.20 U	0.05 J_B	0.20 U	0.20 U	0.20 U
MW-Cp	11/18/15	0.98	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.75	0.20 U	0.40	0.20 U
MW-Cp	3/25/16	1.8	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	2.0	0.20 U	0.69	0.08 J
MW-Cp	10/1/16	1.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.16 J	0.20 U
MW-Dp	11/18/15	0.29	0.20 U	0.20 U	5.0 U	5.0 U	0.69	0.20 U	0.59	1.1	0.20 U	0.20 U
MW-Dp	3/28/16	6.2	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	42	0.20 U	9.3	0.20 U
MW-Dp	10/1/16	0.82	0.20 U	0.20 U	5.0 U	5.0 U	9.0	0.20 U	0.18 J_B	9.4	0.20 U	0.20 U
MW-Du	11/18/15	0.21	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.14 J	2.5	0.20 U	0.20 U
MW-Du	3/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	10/1/16	0.22	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 J_B	4.5	0.20 U	0.20 U
MW-Eu	11/19/15	2.4	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32	0.20 U	0.43	0.20 U
MW-Eu	3/24/16	0.66	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.47	0.20 U	0.59	0.20 U
MW-Eu	9/30/16	0.57	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.25 J_B	0.20 U	0.71	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloro-ethene	1,1,2,2-Tetra-chloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	3/23/16	0.03 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	11/10/15	0.03 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	3/23/16	0.06 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	11/10/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U
MW-Gu	3/23/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	11/10/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.27	0.20 U	0.20 U
MW-GL	3/23/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 U
MW-GL	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U
MW-HL	11/18/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	3/29/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	9/27/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	11/20/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U
MW-IL	3/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	9/27/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ju	11/20/15	0.13 J	0.20 U	0.20 U	5.0 U	5.0 U	0.12 J	0.20 U	0.05 J	0.20 U	0.16 J	0.20 U
MW-Ju	3/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	6.1	0.20 U	0.20 U	0.35	0.20 U	0.20 U
MW-Ju	9/27/16	0.05 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J_B	0.20 U	0.05 J	0.20 U
MW-Ku	11/10/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	3/22/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	11/10/15	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U
MW-KL	3/22/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	9/28/16	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 1	5/4/07	-	-	-	-	-	-	-	-	-	-	-
Seep 1	7/5/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 2	5/7/07	-	-	-	-	-	-	-	-	-	-	-
Seep 2	7/5/12	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloro-ethene	1,1,2,2-Tetra-chloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	119	119	119	119	119	119	119
Number of Detects		45	0	0	4	1	14	0	52	25	38	7
Percent Detected		37.8%	0.0%	0.0%	3.4%	0.8%	11.8%	0.0%	43.7%	21.0%	31.9%	5.9%
Highest Conc.		70	<0.2	<0.2	27	1.6	9.0	<0.2	480	13	420	19

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	179601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	120	-----	1600	430	4.6	2	4.9	1.1	-----	-----
P11	11/17/14	1.0 U	1.0 U	4.2	1.2	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
P12	11/17/14	1.0 U	1.0 U	1.4 J	1.0 U	0.5	1.0 U	1.0 U	25 U	1.0 U	1.0 U
P13	11/13/14	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
P14	11/14/14	0.20 U	0.20 U	2.0	1.0	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P15	11/14/14	1.0 U	1.0 U	150	39	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
P16	12/10/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P18A	12/16/14	0.20 U	0.20 U	1.6	0.60	0.15	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P18B	12/16/14	0.20 U	0.20 U	0.40	0.17 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P20	11/12/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P21A	12/8/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P21B	12/8/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P23	11/12/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	1.4	5.0 U	0.20 U	0.20 U
P26	11/13/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P27A	11/11/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P27B	11/11/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P28	12/15/14	0.20 U	0.20 U	0.24	0.1	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P29	12/10/14	0.20 U	0.20 U	0.73	0.26	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P30	12/9/14	0.20 U	0.20 U	6.4	2.6	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P31	12/9/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P32A	12/15/14	0.20 U	0.20 U	1.7	0.64	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P32B	12/15/14	0.20 U	0.20 U	0.91	0.34	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P33A	12/8/14	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-1	11/11/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-1	3/22/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-2	11/11/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-2	9/26/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	179601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-3	11/20/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-3	3/24/16	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.40 U	10 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-4	11/8/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-4	11/11/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.21
DOF-MW-4	3/29/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-5	11/8/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	0.20 U	0.20 U	1.8	1.5	0.67	3.6	22	5.0 U	0.20 U	0.20 U
DOF-MW-6	11/19/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.12 J	0.37	5.0 U	0.20 U	0.20 U
DOF-MW-6	3/24/16	0.20 U	0.20 U	0.40 U	0.04 J	0.05 J	0.22	0.43	5.0 U	0.20 U	0.20 U
DOF-MW-6	9/27/16	0.20 U	0.20 U	0.21 J _B	0.29	0.11 J	0.34	0.57	5.0 U	0.20 U	0.20 U
DOF-MW-7	11/9/12	0.20 U	0.20 U	51	18	0.36	0.20 U	0.12	5.0 U	0.20 U	0.20 U
DOF-MW-7	11/23/15	0.20 U	0.20 U	4.6	0.90	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-7	3/25/16	0.20 U	0.20 U	2.9	0.66	0.12 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-7	9/27/16	0.06 J	0.20 U	0.54	0.11 J	0.11 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-8	11/9/12	0.20 U	0.20 U	7.6	1.3	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-8	11/20/15	0.20 U	0.20 U	2.8	0.70	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-8	3/22/16	0.20 U	0.20 U	2.1	0.61	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DOF-MW-8	9/30/16	0.20 U	0.20 U	1.8	0.58	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
HC-B1	11/13/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
HC-B1	11/19/15	0.20 U	0.20 U	0.40 U	0.20 U	0.05 J	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
HC-B1	3/24/16	0.20 U	0.20 U	0.40 U	0.20 U	0.05 J	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
HC-B1	9/30/16	0.20 U	0.20 U	0.09 J _B	0.04 J _B	0.06 J	0.20 U	0.05 J	5.0 U	0.20 U	0.20 U
HC-B2(R)	11/11/15	0.20 U	0.20 U	0.12 J	0.05 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
HC-B2(R)	3/23/16	0.05 J	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
HC-B2R	9/30/16	0.20 U	0.20 U	0.08 J _B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	179601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.20 U	0.20 U	110	44	7.2	4.7	13	5.0 U	0.20 U	0.20 U
SA-MW1	3/24/16	0.20 U	0.20 U	140	64	8.4	5.2	14	5.0 U	0.20 U	0.20 U
SA-MW1	9/30/16	0.20 U	0.20 U	160	82	8.0	4.6	12	5.0 U	0.20 U	0.20 U
SA-MW2	11/9/12	0.20 U	0.20 U	0.25	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
SA-MW2	11/20/15	0.20 U	0.20 U	3.4	4.3	0.45	0.20 U	0.05 J	5.0 U	0.20 U	0.20 U
SA-MW2	3/29/16	0.20 U	0.20 U	4.3	5.2	0.61	0.20 U	0.07 J	5.0 U	0.20 U	0.20 U
SA-MW2	9/30/16	0.20 U	0.20 U	0.70	0.21	0.24	0.05 J	0.14 J	5.0 U	0.20 U	0.20 U
SA-MW3	11/13/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
SA-MW3	11/19/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
SA-MW3	3/28/16	0.20 U	0.20 U	0.06 J_B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
SA-MW3	9/27/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ap	11/18/15	0.20 U	0.20 U	0.81	0.67	0.11 J	0.22	0.69	5.0 U	0.20 U	0.20 U
MW-Ap	3/25/16	0.11 J	0.30	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ap	10/1/16	0.07 J	0.13 J	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Bp	11/18/15	0.20 U	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Bp	3/25/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Bp	10/1/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Cp	11/18/15	0.20 U	0.20 U	0.64	0.41	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Cp	3/25/16	0.20 U	0.20 U	1.5	0.77	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Cp	10/1/16	0.20 U	0.20 U	1.0	0.30	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Dp	11/18/15	0.20 U	0.20 U	0.12 J	0.20 U	0.13 J	0.25	0.83	5.0 U	0.20 U	0.20 U
MW-Dp	3/28/16	0.20 U	0.20 U	31	13	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Dp	10/1/16	0.20 U	0.20 U	0.16 J_B	0.04 J_B	0.26	0.94	3.6	5.0 U	0.20 U	0.20 U
MW-Du	11/18/15	0.20 U	0.20 U	0.20 J	0.14 J	0.17 J	0.65	2.6	5.0 U	0.20 U	0.20 U
MW-Du	3/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Du	10/1/16	0.20 U	0.20 U	0.13 J_B	0.08 J_B	0.16 J	0.65	2.5	5.0 U	0.20 U	0.20 U
MW-Eu	11/19/15	0.20 U	0.20 U	0.41	0.24	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Eu	3/24/16	0.20 U	0.20 U	0.35 J	0.18 J	0.20	0.20 U	0.07 J	5.0 U	0.20 U	0.20 U
MW-Eu	9/30/16	0.20 U	0.20 U	0.27 J	0.25	0.21	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	179601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Fu	3/23/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Fu	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-FL	11/10/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-FL	3/23/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-FL	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Gu	11/10/15	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Gu	3/23/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Gu	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-GL	11/10/15	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-GL	3/23/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-GL	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-HL	11/18/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-HL	3/29/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-HL	9/27/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-IL	11/20/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-IL	3/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-IL	9/27/16	0.04 J	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ju	11/20/15	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ju	3/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.06 J	0.27	5.0 U	0.20 U	0.20 U
MW-Ju	9/27/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ku	11/10/15	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ku	3/22/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-Ku	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-KL	11/10/15	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-KL	3/22/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
MW-KL	9/28/16	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Seep 1	5/4/07	-	-	-	-	0.23 U	-	1.3	-	-	-
Seep 1	7/5/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Seep 2	5/7/07	-	-	-	-	0.02 U	-	0.02 U	-	-	-
Seep 2	7/5/12	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	179601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	121	119	121	119	119	119
Number of Detects		5	2	49	40	25	14	23	0	0	1
Percent Detected		4.2%	1.7%	41.2%	33.6%	20.7%	11.8%	19.0%	0.0%	0.0%	0.8%
Highest Conc.		<0.2	0.30	160	82	8.4	5.2	22	<5.0	<0.2	0.21

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	Bromochloro methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	80	7.4	0.5	-----	80	240	-----	-----	-----	-----
P11	11/17/14	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U
P12	11/17/14	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P13	11/13/14	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
P14	11/14/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P15	11/14/14	1.0 U	1.0 U	2.5 U	5.0 U	12	36	1.0 U	1.0 U	1.0 U	1.0 U
P16	12/10/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P18A	12/16/14	0.20 U	0.20 U	0.50 U	1.0 U	0.13	0.58	0.20 U	0.20 U	0.20 U	0.20 U
P18B	12/16/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.16	0.20 U	0.20 U	0.20 U	0.20 U
P20	11/12/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P21A	12/8/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P21B	12/8/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P23	11/12/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P26	11/13/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27A	11/11/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P27B	11/11/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P28	12/15/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P29	12/10/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.59	0.20 U	0.20 U	0.20 U	0.20 U
P30	12/9/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.95	0.20 U	0.20 U	0.20 U	0.20 U
P31	12/9/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P32A	12/15/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.23	0.20 U	0.20 U	0.20 U	0.20 U
P32B	12/15/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.13	0.20 U	0.20 U	0.20 U	0.20 U
P33A	12/8/14	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	11/11/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	3/22/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-1	9/26/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/8/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	11/11/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	3/22/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-2	9/26/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	Bromochloro methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-3	3/24/16	0.40 U	0.40 U	1.0 U	2.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
DOF-MW-3	9/26/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/8/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	11/11/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	3/29/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-4	9/26/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/8/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	3/29/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-5	9/26/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/9/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	1.5	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	11/19/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	3/24/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-6	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.06 J	0.19 J	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	11/9/12	0.20 U	0.20 U	0.50 U	1.0 U	1.8	5.2	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	11/23/15	0.20 U	0.20 U	0.50 U	1.0 U	0.52	0.73	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	3/25/16	0.20 U	0.20 U	0.50 U	1.0 U	0.48	0.64	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-7	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.17 J	0.06 J_B	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	11/9/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.29	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	3/22/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DOF-MW-8	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	11/13/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	11/19/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	3/24/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B1	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2(R)	11/11/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2(R)	3/23/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
HC-B2R	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	Bromochloro methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.20 U	0.20 U	0.50 U	1.0 U	7.5	48	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW1	3/24/16	0.20 U	0.20 U	0.50 U	1.0 U	7.0	53	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW1	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	7.9	39	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	11/9/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.16	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.69	3.5	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	3/29/16	0.20 U	0.20 U	0.50 U	1.0 U	1.2	5.5	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW2	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	0.30	0.75	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	11/13/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	11/19/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	3/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U
SA-MW3	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.19 J_B	0.18 J_B	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	3/25/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ap	10/1/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.14 J_B	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	3/25/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.05 J	0.20 U	0.20 U	0.20 U	0.20 U
MW-Bp	10/1/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.26 J_B	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	3/25/16	0.20 U	0.20 U	0.50 U	1.0 U	0.15 J	0.59	0.20 U	0.20 U	0.20 U	0.20 U
MW-Cp	10/1/16	0.20 U	0.20 U	0.50 U	1.0 U	0.05 J	0.45	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	3/28/16	0.20 U	0.20 U	0.50 U	1.0 U	4.8	16	0.20 U	0.20 U	0.20 U	0.20 U
MW-Dp	10/1/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	3/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Du	10/1/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	11/19/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	3/24/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U
MW-Eu	9/30/16	0.20 U	0.20 U	0.50 U	1.0 U	0.04 J	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	Bromochloro methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	3/23/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Fu	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	11/10/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	3/23/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-FL	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	11/10/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	3/23/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Gu	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	11/10/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	3/23/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-GL	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	11/18/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	3/29/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-HL	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	3/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-IL	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ju	11/20/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ju	3/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ju	9/27/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	11/10/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	3/22/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-Ku	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	11/10/15	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	3/22/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MW-KL	9/28/16	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Seep 1	5/4/07	-	-	-	-	-	-	-	-	-	-
Seep 1	7/5/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	----	0.20 U	0.20 U	0.20 U
Seep 2	5/7/07	-	-	-	-	-	-	-	-	-	-
Seep 2	7/5/12	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	----	0.20 U	0.20 U	0.20 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2-Dibromo- ethane	Bromochloro- methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	119	119	118	119	119	119
Number of Detects		0	0	0	0	18	38	0	0	0	0
Percent Detected		0.0%	0.0%	0.0%	0.0%	15.1%	31.9%	0.0%	0.0%	0.0%	0.0%
Highest Conc.		<0.2	<0.2	<0.5	<1.0	12	53	<0.2	<0.2	<0.2	<0.2

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	sec-Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro- benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	800	800	64	160	-----	800	800	-----	400	0.5
P11	11/17/14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
P12	11/17/14	1.4	0.55	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
P13	11/13/14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U
P14	11/14/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P15	11/14/14	2.4	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2	1.0 U	2.5 U
P16	12/10/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P18A	12/16/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P18B	12/16/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P20	11/12/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P21A	12/8/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P21B	12/8/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P23	11/12/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P26	11/13/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12
P27A	11/11/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P27B	11/11/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P28	12/15/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P29	12/10/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P30	12/9/14	0.60	0.36	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P31	12/9/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P32A	12/15/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P32B	12/15/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P33A	12/8/14	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-1	11/11/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-1	3/22/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-1	9/26/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-2	11/8/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-2	11/11/15	0.03 J	0.08 J	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J	0.20 U	0.03 J	0.50 U
DOF-MW-2	3/22/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-2	9/26/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	sec-Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro- benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-3	11/20/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-3	3/24/16	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U
DOF-MW-3	9/26/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-4	11/8/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-4	11/11/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-4	3/29/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-4	9/26/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-5	11/8/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-5	11/20/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-5	3/29/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-5	9/26/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-6	11/9/12	0.33	0.37	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.28	0.23 Jb	0.27
DOF-MW-6	11/19/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-6	3/24/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-6	9/27/16	0.05 J	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J	0.20 U	0.20 U	0.50 U
DOF-MW-7	11/9/12	0.50	0.53	0.20 U	0.20 U	0.20 U	0.20 U	0.23	0.35	0.23 Jb	1.3
DOF-MW-7	11/23/15	0.48	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.13 J	0.20 U	0.50 U
DOF-MW-7	3/25/16	0.45	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.16 J	0.05 J	0.50 U
DOF-MW-7	9/27/16	0.34	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J	0.04 J	0.03 J	0.50 U
DOF-MW-8	11/9/12	0.45	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-8	11/20/15	0.56	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J	0.20 U	0.50 U
DOF-MW-8	3/22/16	0.47	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DOF-MW-8	9/30/16	0.40	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B1	11/13/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B1	11/19/15	0.20 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B1	3/24/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B1	9/30/16	0.20 U	0.20 U	0.20 U	0.03 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B2(R)	11/11/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B2(R)	3/23/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
HC-B2R	9/30/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	sec-Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro- benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	4.3	7.4	0.20 U	0.86 J_M	0.20 U	0.12 J	1.4	1.9	1.1 J_M	0.50 U
SA-MW1	3/24/16	4.9	8.6	0.20 U	0.20 U	0.03 J	0.12 J	1.7	2.0	1.3	0.33 J
SA-MW1	9/30/16	4.4	7.0	0.20 U	0.20 U	0.20 U	0.20 U	1.5	1.5	1.0	0.28 J
SA-MW2	11/9/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
SA-MW2	11/20/15	0.20	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.18 J	0.20 U	0.50 U
SA-MW2	3/29/16	0.28	0.45	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39	0.20 U	0.50 U
SA-MW2	9/30/16	0.12 J	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J	0.15 J	0.20 U	0.50 U
SA-MW3	11/13/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
SA-MW3	11/19/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
SA-MW3	3/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
SA-MW3	9/27/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ap	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ap	3/25/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ap	10/1/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Bp	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Bp	3/25/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Bp	10/1/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Cp	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Cp	3/25/16	0.24	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U	0.11 J	0.06 J	0.03 J	0.50 U
MW-Cp	10/1/16	0.24	0.09 J	0.20 U	0.20 U	0.20 U	0.03 J	0.11 J	0.08 J	0.20 U	0.50 U
MW-Dp	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Dp	3/28/16	0.92	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.16 J	0.66	0.50 U
MW-Dp	10/1/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Du	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Du	3/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Du	10/1/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Eu	11/19/15	0.29	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.11 J	0.20	0.20 U	0.50 U
MW-Eu	3/24/16	0.15 J	0.10 J	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.05 J	0.03 J	0.50 U
MW-Eu	9/30/16	0.10 J	0.05 J	0.20 U	0.20 U	0.20 U	0.03 J	0.05 J	0.07 J	0.03 J	0.50 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	sec-Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro- benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Fu	3/23/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Fu	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-FL	11/10/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-FL	3/23/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-FL	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Gu	11/10/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Gu	3/23/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Gu	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-GL	11/10/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-GL	3/23/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-GL	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-HL	11/18/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-HL	3/29/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-HL	9/27/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-IL	11/20/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-IL	3/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-IL	9/27/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ju	11/20/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.05 J	0.20 U	0.50 U
MW-Ju	3/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ju	9/27/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ku	11/10/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ku	3/22/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-Ku	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-KL	11/10/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-KL	3/22/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
MW-KL	9/28/16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
Seep 1	5/4/07	-	-	-	-	-	-	-	-	-	0.23 U
Seep 1	7/5/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U
Seep 2	5/7/07	-	-	-	-	-	-	-	-	-	0.02 U
Seep 2	7/5/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	<i>sec</i> -Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro- benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	119	119	119	119	119	119	119	119	121
Number of Detects		26	21	0	3	1	6	16	19	12	5
Percent Detected		21.8%	17.6%	0.0%	2.5%	0.8%	5.0%	13.4%	16.0%	10.1%	4.1%
Highest Conc.		4.9	8.60	<0.2	0.86	0.03	0.12	1.7	5.2	1.3	1.3

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	-----	370	17	800	27	800	0.2	0.2	100
P11	11/17/14	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P12	11/17/14	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P13	11/13/14	2.5 U	8.3	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P14	11/14/14	0.50 U	20	1.0 U	2.0 U	4.1	150	1.0 U	2.0 U	1.0 U
P15	11/14/14	2.5 U	2.5	1.0 U	2.0 U	36	32	1.0 U	2.0 U	1.0 U
P16	12/10/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P18A	12/16/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P18B	12/16/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P20	11/12/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P21A	12/8/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P21B	12/8/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P23	11/12/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P26	11/13/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P27A	11/11/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P27B	11/11/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P28	12/15/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P29	12/10/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P30	12/9/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P31	12/9/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P32A	12/15/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	0.8	1.0 U	2.0 U	1.0 U
P32B	12/15/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P33A	12/8/14	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells										
DOF-MW-1	11/8/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-1	11/11/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-1	3/22/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-1	9/26/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-2	11/8/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-2	11/11/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-2	3/22/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-2	9/26/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-3	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-3	3/24/16	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-3	9/26/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-4	11/8/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-4	11/11/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-4	3/29/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-4	9/26/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-5	11/8/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-5	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-5	3/29/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-5	9/26/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-6	11/9/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-6	11/19/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-6	3/24/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-6	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-7	11/9/12	0.39	2.1	1.0 U	2.0 U	1.0 U	8.9	1.0 U	2.0 U	1.0 U
DOF-MW-7	11/23/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-7	3/25/16	0.50 U	0.1 J	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U	0.2 U
DOF-MW-7	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-8	11/9/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-8	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
DOF-MW-8	3/22/16	0.50 U	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DOF-MW-8	9/30/16	0.50 U	0.5	0.2 U	0.2 U	0.07 J	0.2	0.2 U	0.2 U	0.2 U
HC-B1	11/13/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
HC-B1	11/19/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
HC-B1	3/24/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HC-B1	9/30/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HC-B2(R)	11/11/15	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HC-B2R	9/30/16	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
SA-MW1	3/24/16	0.50 U	0.2 U	0.2 U	0.2 U	0.6	0.6	0.2 U	0.2 U	0.2 U
SA-MW1	9/30/16	0.50 U	0.5	0.2 U	0.2 U	1.2	1.5	0.2 U	0.2 U	0.2 U
SA-MW2	11/9/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
SA-MW2	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
SA-MW2	3/29/16	0.50 U	16	0.2 U	0.2 U	1.1	4.0	0.2 U	0.2 U	0.2 U
SA-MW2	9/30/16	0.50 U	0.2 U	0.2 U	0.2 U	0.05 J	0.2 J	0.2 U	0.2 U	0.2 U
SA-MW3	11/13/12	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
SA-MW3	11/19/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
SA-MW3	3/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
SA-MW3	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ap	11/18/15	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ap	10/1/16	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Bp	10/1/16	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	0.50 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2 U
MW-Cp	10/1/16	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Dp	10/1/16	0.50 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-Du	3/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Du	10/1/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Eu	11/19/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	0.8 J	1.0 U	2.0 U	1.0 U
MW-Eu	3/24/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Eu	9/30/16	0.50 U	0.2 U	0.2 U	0.2 U	0.03 J	0.2 U	0.2 U	0.2 U	0.2 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-Fu	3/23/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Fu	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-FL	11/10/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-FL	3/23/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-FL	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Gu	11/10/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-Gu	3/23/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Gu	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-GL	11/10/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-GL	3/23/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-GL	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-HL	11/18/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-HL	3/29/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-HL	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-IL	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-IL	3/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-IL	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ju	11/20/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-Ju	3/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ju	9/27/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ku	11/10/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-Ku	3/22/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ku	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-KL	11/10/15	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
MW-KL	3/22/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-KL	9/28/16	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Seep 1	5/4/07	-	0.56 U	-	-	0.56 U	0.56 U	-	-	-
Seep 1	7/5/12	0.50 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-----	1.0 U	1.0 U
Seep 2	5/7/07	-	0.49 U	-	-	0.49 U	0.49 U	-	-	-
Seep 2	7/5/12	0.50 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	-----	1.0 U	1.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		119	111	109	109	111	111	107	109	109
Number of Detects		1	4	0	0	8	12	0	0	0
Percent Detected		0.8%	3.6%	0.0%	0.0%	7.2%	10.8%	0.0%	0.0%	0.0%
Highest Conc.		0.39	20	<0.2	<0.2	36	150	<0.2	<0.2	<0.2

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	110	6.3	590	10	1.4	36	32	0.28	600
P11	11/17/14	1.0 U	3.0 U	20 U	3.0 U	0.57	3.0 U	1.0 U	0.25 U	5.0 U
P12	11/17/14	1.0 U	3.0 U	5.3 J	3.0 U	0.14	3.0 U	3.1	0.25 U	5.0 U
P13	11/13/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P14	11/14/14	1.0 U	4.2	18 J	3.0 U	0.14	3.0 U	1.0 U	0.25 U	5.0 U
P15	11/14/14	1.0 U	65	7.3 J	3.0 U	1.4	3.0 U	1.7	0.25 U	5.0 U
P16	12/10/14	1.0 U	3.0 U	7.0 J	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P18A	12/16/14	1.0 U	3.0 U	7.6 J	3.0 U	0.19	3.0 U	0.21	0.25 U	5.0 U
P18B	12/16/14	1.0 U	3.0 U	20 U	3.0 U	0.09	3.0 U	0.07	0.25 U	5.0 U
P20	11/12/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P21A	12/8/14	1.0 U	3.0 U	16 J	3.0 U	0.11	3.0 U	1.0 U	0.25 U	5.0 U
P21B	12/8/14	1.0 U	3.0 U	20 U	3.0 U	0.05	3.0 U	1.0 U	0.25 U	5.0 U
P23	11/12/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P26	11/13/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P27A	11/11/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P27B	11/11/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P28	12/15/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P29	12/10/14	1.0 U	3.0 U	20 U	3.0 U	0.15	3.0 U	2.2	0.25 U	5.0 U
P30	12/9/14	1.0 U	3.0 U	20 U	3.0 U	0.05	3.0 U	1.0 U	0.25 U	5.0 U
P31	12/9/14	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
P32A	12/15/14	1.0 U	3.0 U	20 U	3.0 U	0.09	3.0 U	2.0	0.25 U	5.0 U
P32B	12/15/14	1.0 U	3.0 U	20 U	3.0 U	0.06	3.0 U	1.3	0.25 U	5.0 U
P33A	12/8/14	1.0 U	3.0 U	20 U	3.0 U	0.05	3.0 U	1.0 U	0.25 U	5.0 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells										
DOF-MW-1	11/8/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-1	11/11/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-1	3/22/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-1	9/26/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-2	11/8/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-2	11/11/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-2	3/22/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-2	9/26/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-3	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-3	3/24/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-3	9/26/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-4	11/8/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-4	11/11/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-4	3/29/16	0.2 U	1.0 U	0.3 J	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-4	9/26/16	0.2 U	1.0 U	0.5 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-5	11/8/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-5	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-5	3/29/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-5	9/26/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-6	11/9/12	1.0 U	3.0 U	20 U	3.0 U	0.48	3.0 U	1.4	0.25 U	5.0 U
DOF-MW-6	11/19/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-6	3/24/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-6	9/27/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.018 J_{RB}	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-7	11/9/12	1.0 U	8.5	20 U	3.0 U	1.7	3.0 U	59	0.25 U	5.0 U
DOF-MW-7	11/23/15	1.0 U	3.0 U	20 U	3.0 U	2.8	3.0 U	3.7	0.25 U	5.0 U
DOF-MW-7	3/25/16	0.2 U	0.6 J	2.1	1.0 U	2.3	1.0 U	2.0	1.0 U	1.0 U
DOF-MW-7	9/27/16	0.2 U	0.3 J	2.0 U	1.0 U	0.076	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-8	11/9/12	1.0 U	3.0 U	20 U	3.0 U	0.10	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-8	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DOF-MW-8	3/22/16	0.2 U	1.0 U	2.0 U	1.0 U	0.03	1.0 U	0.2 U	1.0 U	1.0 U
DOF-MW-8	9/30/16	0.2 U	1.0 U	0.8 J_B	1.0 U	0.018 J_B	1.0 U	0.2 U	1.0 U	1.0 U
HC-B1	11/13/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
HC-B1	11/19/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
HC-B1	3/24/16	0.2 U	1.0 U	2.0 U	1.0 U	0.018	1.0 U	0.2 U	1.0 U	1.0 U
HC-B1	9/30/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 J_B	1.0 U	0.2 U	1.0 U	1.0 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	-----	-----	0.25 U	-----
HC-B2(R)	3/23/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	1.0 U	1.8 J	20 U	1.4 J	23	3.0 U	80	0.43	5.0 U
SA-MW1	3/24/16	0.2 U	1.7	2.0 U	2.2	25	1.0 U	46	1.0 U	1.0 U
SA-MW1	9/30/16	0.2 U	3.5	2.0 U	3.0	23	1.0 U	49	0.6 J	0.4 J
SA-MW2	11/9/12	1.0 U	3.0 U	20 U	3.0 U	0.06	3.0 U	1.0 U	0.25 U	5.0 U
SA-MW2	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.61	3.0 U	1.0 U	0.25 U	5.0 U
SA-MW2	3/29/16	0.2 U	0.71 J	2.0 U	1.0 U	0.10	1.0 U	0.2 U	1.0 U	1.0 U
SA-MW2	9/30/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.6	1.0 U	0.3	1.0 U	1.0 U
SA-MW3	11/13/12	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
SA-MW3	11/19/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
SA-MW3	3/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.1 J	1.0 U	0.2 U	1.0 U	1.0 U
SA-MW3	9/27/16	0.2 U	1.0 U	1.0 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ap	11/18/15	----	----	----	----	----	----	----	0.25 U	----
MW-Ap	3/25/16	0.2 U	1.0 U	2.0 U	1.0 U	0.2 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ap	10/1/16	----	----	----	----	----	----	----	----	----
MW-Bp	11/18/15	----	----	----	----	----	----	----	0.25 U	----
MW-Bp	3/25/16	0.2 U	1.0 U	2.0 U	1.0 U	0.04 J	1.0 U	0.2 U	1.0 U	1.0 U
MW-Bp	10/1/16	----	----	----	----	----	----	----	----	----
MW-Cp	11/18/15	----	----	----	----	----	----	----	0.25 U	----
MW-Cp	3/25/16	0.2 U	0.3 J	2.0 U	1.0 U	0.4	1.0 U	0.1 J	1.0 U	1.0 U
MW-Cp	10/1/16	----	----	----	----	----	----	----	----	----
MW-Dp	11/18/15	----	----	----	----	----	----	----	0.25 U	----
MW-Dp	3/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.2 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Dp	10/1/16	----	----	----	----	----	----	----	----	----
MW-Du	11/18/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-Du	3/28/16	0.2 U	1.0 U	0.3 J	1.0 U	0.016	1.0 U	0.2 U	1.0 U	1.0 U
MW-Du	10/1/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 J_B	1.0 U	0.2 U	1.0 U	1.0 U
MW-Eu	11/19/15	1.0 U	3.0 U	20 U	3.0 U	1.6	3.0 U	1.0 U	0.25 U	5.0 U
MW-Eu	3/24/16	0.2 U	1.0 U	2.0 U	1.0 U	0.4	1.0 U	0.2 U	1.0 U	1.0 U
MW-Eu	9/30/16	0.2 U	1.0 U	0.8 J_B	1.0 U	0.041	1.0 U	0.2 U	1.0 U	1.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-Fu	3/23/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Fu	9/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-FL	11/10/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-FL	3/23/16	0.2 U	1.0 U	2.0 U	1.0 U	0.039	1.0 U	0.2 U	1.0 U	1.0 U
MW-FL	9/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Gu	11/10/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-Gu	3/23/16	0.2 U	1.0 U	2.0 U	1.0 U	0.040	1.0 U	0.2 U	1.0 U	1.0 U
MW-Gu	9/28/16	0.2 U	1.0 U	0.6 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-GL	11/10/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-GL	3/23/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-GL	9/28/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-HL	11/18/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-HL	3/29/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-HL	9/27/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-IL	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-IL	3/28/16	0.2 U	1.0 U	0.4 J	1.0 U	0.04 J	1.0 U	0.2 U	1.0 U	1.0 U
MW-IL	9/27/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ju	11/20/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-Ju	3/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.015	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ju	9/27/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.023	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ku	11/10/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-Ku	3/22/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-Ku	9/28/16	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-KL	11/10/15	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
MW-KL	3/22/16	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
MW-KL	9/28/16	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
Seep 1	5/4/07	-	2.3 U	5.6 U	-	0.23 U	-	0.23 U	-	-
Seep 1	7/5/12	1.0 U	1.0 U	10 U	5.0 U	1.0 U	5.0 U	1.0 U	0.25 U	5.0 U
Seep 2	5/7/07	-	2 U	4.9 U	-	0.12 J	-	0.2 U	-	-
Seep 2	7/5/12	1.0 U	1.0 U	10 U	5.0 U	1.0 U	5.0 U	1.0 U	0.25 U	5.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		109	111	111	109	111	109	111	110	109
Number of Detects		0	10	24	3	45	0	16	2	1
Percent Detected		0.0%	9.0%	21.6%	2.8%	40.5%	0.0%	14.4%	1.8%	0.9%
Highest Conc.		<0.2	65	18	3.0	25	<1.0	80	0.43	<1.0

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene	2,4-Dinitro-toluene	Diethyl-phthalate	4-Chlorophenyl-phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	100	600	-----	5.3	16	300	0.18	93	-----
P11	11/17/14	1.0 U	1.0 U	0.10 U	0.15	0.09	3.0 U	3.0 U	1.0 U	1.0 U
P12	11/17/14	1.0 U	1.0 U	0.10 U	0.07	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P13	11/13/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P14	11/14/14	1.0 U	1.0 U	0.12	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P15	11/14/14	1.0 U	1.0 U	0.10 U	0.46	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P16	12/10/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P18A	12/16/14	1.0 U	1.0 U	0.10 U	0.06	0.05	3.0 U	3.0 U	1.0 U	1.0 U
P18B	12/16/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P20	11/12/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P21A	12/8/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P21B	12/8/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P23	11/12/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P26	11/13/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P27A	11/11/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P27B	11/11/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P28	12/15/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P29	12/10/14	1.0 U	1.0 U	0.10 U	0.09	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P30	12/9/14	1.0 U	1.0 U	0.10 U	0.07	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P31	12/9/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P32A	12/15/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P32B	12/15/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
P33A	12/8/14	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	0.8	1.0 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells										
DOF-MW-1	11/8/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-1	11/11/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-1	3/22/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-1	9/26/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U
DOF-MW-2	11/8/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-2	11/11/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-2	3/22/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-2	9/26/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro- naphthalene	Dimethyl- phthalate	Acenaph- thylene	Acenaphthene	Dibenzo- furan	2,6-Dinitro- toluene	2,4-Dinitro- toluene	Diethyl- phthalate	4-Chlorophenyl- phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-3	11/20/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-3	3/24/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-3	9/26/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U
DOF-MW-4	11/8/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-4	11/11/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-4	3/29/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-4	9/26/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U
DOF-MW-5	11/8/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-5	11/20/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-5	3/29/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-5	9/26/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-6	11/9/12	1.0 U	1.0 U	0.10 U	0.11	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-6	11/19/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-6	3/24/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-6	9/27/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U
DOF-MW-7	11/9/12	1.0 U	1.0 U	0.1	0.48	0.06	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-7	11/23/15	1.0 U	1.0 U	0.10 U	0.17	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-7	3/25/16	0.2 U	0.2 U	0.01 U	0.3	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-7	9/27/16	0.2 U	0.2 U	0.009 J	0.20	0.008 J	1.0 U	1.0 U	0.2 J	0.2 U
DOF-MW-8	11/9/12	1.0 U	1.0 U	0.07	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-8	11/20/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DOF-MW-8	3/22/16	0.2 U	0.2 U	0.01 U	0.012 J_Q	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
DOF-MW-8	9/30/16	0.2 U	0.2 U	0.010 J	0.014	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
HC-B1	11/13/12	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
HC-B1	11/19/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
HC-B1	3/24/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
HC-B1	9/30/16	0.2 U	0.2 U	0.010 U	0.005 J	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro- naphthalene	Dimethyl- phthalate	Acenaph- thylene	Acenaphthene	Dibenzo- furan	2,6-Dinitro- toluene	2,4-Dinitro- toluene	Diethyl- phthalate	4-Chlorophenyl- phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	1.0 U	1.0 U	0.09 J	1.0	0.42	3.0 U	3.0 U	1.0 U	1.0 U
SA-MW1	3/24/16	0.1 J	0.2 U	0.060	0.81	0.30	1.0 U	1.0 U	0.2 U	0.2 U
SA-MW1	9/30/16	0.2 U	0.2 U	0.10	0.8	0.30	1.0 U	1.0 U	0.2 U	0.2 U
SA-MW2	11/9/12	1.0 U	1.0 U	0.10 U	0.1	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
SA-MW2	11/20/15	1.0 U	1.0 U	0.10 U	0.11	0.06 J	3.0 U	3.0 U	1.0 U	1.0 U
SA-MW2	3/29/16	0.2 U	0.2 U	0.01 U	0.042	0.016	1.0 U	1.0 U	0.2 U	0.2 U
SA-MW2	9/30/16	0.2 U	0.2 U	0.015	0.4	0.021	1.0 U	1.0 U	0.2 U	0.2 U
SA-MW3	11/13/12	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
SA-MW3	11/19/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
SA-MW3	3/28/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
SA-MW3	9/27/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	0.2 U	0.2 U	0.2 U	0.2 J	0.1 J	1.0 U	1.0 U	0.2 U	0.2 U
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	1.0 U	1.0 U	0.10 U	2.3	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Du	3/28/16	0.2 U	0.2 U	0.01 U	2.9	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Du	10/1/16	0.2 U	0.2 U	0.006 J	3.4	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Eu	11/19/15	1.0 U	1.0 U	0.10 U	0.07 J	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Eu	3/24/16	0.2 U	0.2 U	0.01 U	0.12	0.018	1.0 U	1.0 U	0.1 J	0.2 U
MW-Eu	9/30/16	0.2 U	0.2 U	0.010 U	0.047	0.008 J	1.0 U	1.0 U	0.2 U	0.2 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene	2,4-Dinitro-toluene	Diethyl-phthalate	4-Chlorophenyl-phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Fu	3/23/16	0.2 U	0.2 U	0.01 U	0.029 J_Q	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Fu	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-FL	11/10/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-FL	3/23/16	0.2 U	0.2 U	0.01 U	0.023 J_Q	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-FL	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Gu	11/10/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Gu	3/23/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Gu	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-GL	11/10/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-GL	3/23/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-GL	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-HL	11/18/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-HL	3/29/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.1 J	0.2 U
MW-HL	9/27/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U
MW-IL	11/20/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-IL	3/28/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-IL	9/27/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U
MW-Ju	11/20/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Ju	3/28/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Ju	9/27/16	0.2 U	0.2 U	0.010 U	0.19	0.037	1.0 U	1.0 U	0.1 J	0.2 U
MW-Ku	11/10/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-Ku	3/22/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-Ku	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-KL	11/10/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
MW-KL	3/22/16	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U
MW-KL	9/28/16	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U
Seep 1	5/4/07	-	0.23 U	0.23 U	0.23 U	0.23 U	-	-	0.05 J	-
Seep 1	7/5/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Seep 2	5/7/07	-	0.01 J	0.2 U	0.2 U	0.2 U	-	-	0.03 J	-
Seep 2	7/5/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene	2,4-Dinitro-toluene	Diethyl-phthalate	4-Chlorophenyl-phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		109	111	111	111	111	109	109	111	109
Number of Detects		1	1	9	31	12	0	0	12	0
Percent Detected		0.9%	0.9%	8.1%	27.9%	10.8%	0.0%	0.0%	10.8%	0.0%
Highest Conc.		0.10	0.01	0.12	3.4	0.42	<1.0	<1.0	0.80	<0.2

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phen- anthrene	Carbazole	Anthracene	Di-n-butyl- phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	3.7	0.69	0.025	-----	-----	2.1	8	1.8	2
P11	11/17/14	0.18	1.0 U	0.36	0.29	1.0 U	0.10 U	1.0 U	0.06	0.10 U
P12	11/17/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P13	11/13/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P14	11/14/14	0.10 U	0.10 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P15	11/14/14	0.11	1.0 U	0.78	0.1	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P16	12/10/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P18A	12/16/14	0.08	1.0 U	0.25 U	0.28	1.0 U	0.06	1.0 U	0.20	0.18
P18B	12/16/14	0.10 U	1.0 U	0.25 U	0.09	1.0 U	0.10 U	1.0 U	0.07	0.06
P20	11/12/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P21A	12/8/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P21B	12/8/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P23	11/12/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P26	11/13/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P27A	11/11/14	0.10 U	1.0 U	0.42	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P27B	11/11/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P28	12/15/14	0.10 U	1.0 U	0.39	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P29	12/10/14	0.07	1.0 U	0.25 U	0.17	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P30	12/9/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P31	12/9/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P32A	12/15/14	0.07	1.0 U	7.5	0.20	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P32B	12/15/14	0.10 U	1.0 U	2.0	0.08	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P33A	12/8/14	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells										
DOF-MW-1	11/8/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-1	11/11/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-1	3/22/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-1	9/26/16	0.003 J	0.2 U	0.025 U	0.004 J	0.2 U	0.010 U	0.2 U	0.003 J	0.010 U
DOF-MW-2	11/8/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-2	11/11/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-2	3/22/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-2	9/26/16	0.010 U	0.2 U	0.025 U	0.009 J	0.2 U	0.007 J	0.2 U	0.007 J	0.004 J

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phen- anthrene	Carbazole	Anthracene	Di-n-butyl- phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-3	11/20/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-3	3/24/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-3	9/26/16	0.010 U	0.2 U	0.025 U	0.003 J	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
DOF-MW-4	11/8/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-4	11/11/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-4	3/29/16	0.01 U	0.2 U	0.015 J	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-4	9/26/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
DOF-MW-5	11/8/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-5	11/20/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-5	3/29/16	0.01 U	0.2 U	0.032	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-5	9/26/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
DOF-MW-6	11/9/12	0.22	1.0 U	0.25 U	0.12	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-6	11/19/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-6	3/24/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
DOF-MW-6	9/27/16	0.004 J	0.2 U	0.031	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
DOF-MW-7	11/9/12	0.40	1.0 U	240	0.48	1.0 U	0.07	1.0 U	0.09 J	0.08 J
DOF-MW-7	11/23/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-7	3/25/16	0.028	0.2 U	0.4 J	0.024	0.2 U	0.01 U	0.2 U	0.014	0.01 U
DOF-MW-7	9/27/16	0.020	0.2 U	0.025 U	0.007 J	0.2 U	0.003 J	0.2 U	0.011	0.007 J
DOF-MW-8	11/9/12	0.10 U	1.0 U	0.76	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-8	11/20/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DOF-MW-8	3/22/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.4	0.2 U	0.01 U	0.024 J_o
DOF-MW-8	9/30/16	0.013	0.2 U	0.025 U	0.015	0.2 U	0.009 J	0.2 U	0.012	0.014
HC-B1	11/13/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
HC-B1	11/19/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
HC-B1	3/24/16	0.01 U	0.2 U	0.25 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
HC-B1	9/30/16	0.010 U	0.2 U	0.025 U	0.004 J	0.2 U	0.004 J	0.2 U	0.008 J	0.010
HC-B2(R)	11/11/15	-----	-----	0.25 U	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phen- anthrene	Carbazole	Anthracene	Di-n-butyl- phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	1.0	1.9	0.25 U	1.4	1.0 U	0.10 J	1.0 U	0.11	0.09 J
SA-MW1	3/24/16	0.76	0.2 U	0.025 U	1.5	1.0	0.11	0.2 U	0.16	0.15 J_Q
SA-MW1	9/30/16	1.1	0.2 U	0.025 U	1.4	1.6	0.5	0.2 U	0.3	0.2
SA-MW2	11/9/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
SA-MW2	11/20/15	0.10 U	1.0 U	0.16 J	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
SA-MW2	3/29/16	0.01 U	0.2 U	0.3 J	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
SA-MW2	9/30/16	0.023	0.1 J	0.025 U	0.004 J	0.09 J	0.010 U	0.5	0.022	0.027
SA-MW3	11/13/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
SA-MW3	11/19/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
SA-MW3	3/28/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
SA-MW3	9/27/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-Ap	11/18/15	-----	-----	0.25 U	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	0.25 U	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	0.18 J	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	0.1 J	0.2 U	1.0 U	0.2	0.2	0.2	0.2	0.1 J	0.1 J
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	0.25 U	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-Du	3/28/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-Du	10/1/16	0.010 U	0.2 U	0.017 J	0.003 J	0.2 U	0.010 U	0.2 U	0.004 J	0.010 U
MW-Eu	11/19/15	0.10 U	1.0 U	0.25 U	0.09 J	1.0 U	0.10 U	1.0 U	0.05 J	0.10 U
MW-Eu	3/24/16	0.050	0.2 U	0.12 J_P	0.061	0.2 U	0.013	0.2 U	0.036	0.039
MW-Eu	9/30/16	0.018	0.2 U	0.025 U	0.011	0.2 U	0.005 J	0.2 U	0.009 J	0.009 J

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phen- anthrene	Carbazole	Anthracene	Di-n-butyl- phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-Fu	3/23/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.038	0.2 U	0.01 U	0.032 J_Q
MW-Fu	9/28/16	0.010 U	0.2 U	0.028	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-FL	11/10/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-FL	3/23/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.079	0.2 U	0.01 U	0.034 J_Q
MW-FL	9/28/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-Gu	11/10/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-Gu	3/23/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-Gu	9/28/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-GL	11/10/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-GL	3/23/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-GL	9/28/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-HL	11/18/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-HL	3/29/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-HL	9/27/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-IL	11/20/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-IL	3/28/16	0.01 U	0.2 U	0.025 U	0.01 U	0.05 J	0.01 U	0.2 U	0.01 U	0.01 U
MW-IL	9/27/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-Ju	11/20/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-Ju	3/28/16	0.01 U	0.2 U	0.025 U	0.014	0.2 U	0.01 U	0.2 U	0.016	0.016
MW-Ju	9/27/16	0.11	0.2 U	0.025 U	0.077	0.2 U	0.007 J	0.2 U	0.018	0.013
MW-Ku	11/10/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-Ku	3/22/16	0.01 U	0.2 U	0.035	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-Ku	9/28/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
MW-KL	11/10/15	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
MW-KL	3/22/16	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
MW-KL	9/28/16	0.010 U	0.2 U	0.025 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U
Seep 1	5/4/07	0.23 U	0.23 U	0.06 J	0.23 U	-	0.23 U	0.11 J	0.05 J	0.05 J
Seep 1	7/5/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
Seep 2	5/7/07	0.2 U	0.2 U	0.98 U	0.02 J	-	0.2 U	0.07 J	0.02 J	0.02 J
Seep 2	7/5/12	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi-phenylamine	Pentachloro-phenol	Phen-anthrene	Carbazole	Anthracene	Di-n-butyl-phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		111	111	111	111	109	111	111	111	111
Number of Detects		20	2	20	28	4	16	4	23	21
Percent Detected		18.0%	1.8%	18.0%	25.2%	3.7%	14.4%	3.6%	20.7%	18.9%
Highest Conc.		1.1	1.9	240	1.5	1.6	0.50	0.50	0.30	0.20

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	0.2	0.01	0.2	0.016	0.2	0.01	0.01	0.01	0.01	-----
P11	11/17/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P12	11/17/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P13	11/13/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P14	11/14/14	1.0 U	0.10 U	10	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P15	11/14/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P16	12/10/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P18A	12/16/14	1.0 U	0.08	3.0 U	0.09	1.0 U	0.08	0.07	0.10 U	0.10 U	0.05
P18B	12/16/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P20	11/12/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P21A	12/8/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P21B	12/8/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P23	11/12/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P26	11/13/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P27A	11/11/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P27B	11/11/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P28	12/15/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P29	12/10/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P30	12/9/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P31	12/9/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P32A	12/15/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P32B	12/15/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P33A	12/8/14	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-1	11/11/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-1	3/22/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-1	9/26/16	0.2 U	0.010 U	2.3	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-2	11/8/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-2	11/11/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-2	3/22/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-2	9/26/16	0.2 U	0.010 U	0.9	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-3	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-3	3/24/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-3	9/26/16	0.2 U	0.010 U	0.2	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-4	11/8/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-4	11/11/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-4	3/29/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-4	9/26/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-5	11/8/12	1.0 U	0.10 U	1.6 J	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-5	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-5	3/29/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-5	9/26/16	0.2 U	0.010 U	0.3	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-6	11/9/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-6	11/19/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-6	3/24/16	0.2 U	0.01 U	0.3 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-6	9/27/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-7	11/9/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-7	11/23/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-7	3/25/16	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-7	9/27/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-8	11/9/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-8	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
DOF-MW-8	3/22/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DOF-MW-8	9/30/16	0.2 U	0.009 J	0.2 U	0.010	0.2 U	0.018	0.009 J	0.009 J	0.007 J	0.009 J
HC-B1	11/13/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
HC-B1	11/19/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
HC-B1	3/24/16	0.2 U	0.01 U	0.1 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
HC-B1	9/30/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.2 U	0.01 U	0.4 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl- phthalate	Benzo(a)- anthracene	bis (2- Ethylhexyl)- phthalate	Chrysene	Di-n-octyl- phthalate	total Benzo- fluoranthenes	Benzo(a)- pyrene	Indeno(1,2,3- cd)pyrene	Dibenz(a,h)- anthracene	Benzo(g,h,i)- perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
SA-MW1	3/24/16	0.2 U	0.017	0.6	0.030	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
SA-MW1	9/30/16	0.2 U	0.020	0.2 U	0.034	0.2 U	0.015	0.007 J	0.004 J	0.010 U	0.007 J
SA-MW2	11/9/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
SA-MW2	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
SA-MW2	3/29/16	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
SA-MW2	9/30/16	0.2 U	0.010 U	0.4	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SA-MW3	11/13/12	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
SA-MW3	11/19/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
SA-MW3	3/28/16	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
SA-MW3	9/27/16	0.2 U	0.010 U	3.1	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	0.2 U	0.1 J	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Du	3/28/16	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Du	10/1/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Eu	11/19/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Eu	3/24/16	0.2 U	0.01 U	1.2	0.011	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Eu	9/30/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Fu	3/23/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Fu	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-FL	11/10/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-FL	3/23/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-FL	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Gu	11/10/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Gu	3/23/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Gu	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-GL	11/10/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-GL	3/23/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-GL	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-HL	11/18/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-HL	3/29/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-HL	9/27/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-IL	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-IL	3/28/16	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-IL	9/27/16	0.2 U	0.010 U	0.2 J _B	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ju	11/20/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Ju	3/28/16	0.2 U	0.01 U	0.4	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Ju	9/27/16	0.2 U	0.010 U	5.1	0.010 U	0.7	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ku	11/10/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-Ku	3/22/16	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-Ku	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-KL	11/10/15	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
MW-KL	3/22/16	0.2 U	0.01 U	0.5	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
MW-KL	9/28/16	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Seep 1	5/4/07	0.23 U	0.23 U	1.2 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Seep 1	7/5/12	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U
Seep 2	5/7/07	0.2 U	0.2 U	0.98 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Seep 2	7/5/12	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L		µg/L	µg/L	µg/L	µg/L
Number of Samples		111	111	111	111	111	111	111	111	111	111
Number of Detects		0	5	26	5	1	3	3	2	1	3
Percent Detected		0.0%	4.5%	23.4%	4.5%	0.9%	2.7%	2.7%	1.8%	0.9%	2.7%
Highest Conc.		<0.2	0.10	10	0.09	0.70	0.08	0.07	<0.01	<0.01	0.05

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	-----	-----	0.0006	0.0014	-----	0.13	0.0006	0.0006	0.0006	0.0006
P11	11/17/14	1.2	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P12	11/17/14	0.21	0.10 U	0.0025 U	0.0040 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.016 U	0.0025 U
P13	11/13/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P14	11/14/14	0.26	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P15	11/14/14	2.1	0.10 U	0.0042 U	0.0083 U	0.0025 U	0.0025 U	0.011 U	0.0037 U	0.0058 U	0.0068 U
P16	12/10/14	0.10 U	0.10 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
P18A	12/16/14	0.67	0.75	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0025 U	0.0025 U	0.0025 U
P18B	12/16/14	0.18	0.13	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P20	11/12/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P21A	12/8/14	0.11	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0077 U	0.0025 U
P21B	12/8/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P23	11/12/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0026 U	0.0025 U
P26	11/13/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P27A	11/11/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P27B	11/11/14	0.10 U	0.10 U	0.0025 U	0.0029 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P28	12/15/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P29	12/10/14	0.48	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.010 U	0.021 U	0.019 U	0.0025 U
P30	12/9/14	0.12	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.010 U
P31	12/9/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0034 U	0.0025 U	0.0025 U	0.0025 U
P32A	12/15/14	0.36	0.10 U	0.0025 U	0.0050 U	0.0025 U	0.0025 U	0.0046 U	0.054 U	0.0025 U	0.0025 U
P32B	12/15/14	0.14	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0038 U	0.0025 U
P33A	12/8/14	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-1	11/11/15	0.10 U	0.10 U	0.00062 U	0.0016 U	0.00062 U	0.00062 U	0.00062 U	0.00086 U	0.0017 U	0.00062 U
DOF-MW-1	3/22/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.013 U	0.0050 U
DOF-MW-1	9/26/16	0.010 U	0.010 U	0.00063 U	0.0025 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.013 U
DOF-MW-2	11/8/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-2	11/11/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-2	3/22/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-2	9/26/16	0.016	0.011	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-3	11/20/15	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-3	3/24/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-3	9/26/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
DOF-MW-4	11/8/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-4	11/11/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-4	3/29/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-4	9/26/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
DOF-MW-5	11/8/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-5	11/20/15	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-5	3/29/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-5	9/26/16	0.010 U	0.010 U	0.00063 U	0.0016 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
DOF-MW-6	11/9/12	0.93	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-6	11/19/15	0.10 U	0.10 U	0.00062 U	0.0017 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.00062 U
DOF-MW-6	3/24/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-6	9/27/16	0.022	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
DOF-MW-7	11/9/12	3.23	0.17	0.050 U	0.050 U	0.22 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-7	11/23/15	2.97	0.10 U	0.0016 U	0.00062 U	0.00062 U	0.0070 U	0.00062 U	0.00076 U	0.00062 U	0.00062 U
DOF-MW-7	3/25/16	2.7	0.014	0.00062 U	0.00062 U	0.0066 U	0.0090 U	0.00062 U	0.00062 U	0.00062 U	0.0016 U
DOF-MW-7	9/27/16	0.31	0.018	0.0013 U	0.00063 U	0.00063 U	0.0062 U	0.00063 U	0.00063 U	0.00063 U	0.0018 U
DOF-MW-8	11/9/12	0.17	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DOF-MW-8	11/20/15	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U	0.0011 U	0.00062 U	0.00082 U	0.00062 U	0.00062 U
DOF-MW-8	3/22/16	0.442	0.024	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
DOF-MW-8	9/30/16	0.079	0.097	0.00063 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.010 U	0.00063 U	0.00063 U
HC-B1	11/13/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HC-B1	11/19/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00071 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
HC-B1	3/24/16	0.018	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
HC-B1	9/30/16	0.023	0.018	0.00063 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	26.6	0.20	0.0013 U	0.011 U	0.0085 U	0.017 U	0.00062 U	0.0050 U	0.013 U	0.00062 U
SA-MW1	3/24/16	28	0.36	0.0018 U	0.013 U	0.012 U	0.017 U	0.0085 U	0.00062 U	0.029 U	0.00062 U
SA-MW1	9/30/16	27	0.59	0.010 U	0.020 U	0.00063 U	0.010 U	0.020 U	0.010 U	0.040 U	0.00063 U
SA-MW2	11/9/12	0.16	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
SA-MW2	11/20/15	0.72	0.20 U	0.0014 U	0.0034 U	0.00062 U	0.0017 U	0.0012 U	0.0012 U	0.0033 U	0.00062 U
SA-MW2	3/29/16	0.14	0.02 U	0.017 U	0.0088 U	0.0086 U	0.00062 U	0.0038 U	0.0028 U	0.026 U	0.00062 U
SA-MW2	9/30/16	1.0	0.049	0.00063 U	0.030 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
SA-MW3	11/13/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
SA-MW3	11/19/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
SA-MW3	3/28/16	0.1	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
SA-MW3	9/27/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	0.2 U	0.4 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	0.04	0.4 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	1.1	0.3	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	0.2 U	0.4 U	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	2.3	0.10 U	0.0013 U	0.00079 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00066 U	0.00062 U
MW-Du	3/28/16	2.9	0.02 U	0.0029 U	0.00062 U	0.0022 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Du	10/1/16	3.4	0.010 U	0.0029 U	0.0014 J_p	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-Eu	11/19/15	1.76	0.10 U	0.00073 U	0.0045 U	0.00062 U	0.00082 U	0.0015 U	0.00062 U	0.0040 U	0.00070 U
MW-Eu	3/24/16	0.64	0.086	0.00062 U	0.0021 U	0.00062 U	0.00062 U	0.0049 U	0.00062 U	0.017 U	0.00062 U
MW-Eu	9/30/16	0.13	0.018	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.010 U	0.00063 U	0.00063 U	0.00063 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Fu	3/23/16	0.067	0.032	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Fu	9/28/16	0.010 U	0.010 U	0.00063 U	0.0016	0.00063 U	0.0021	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-FL	11/10/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-FL	3/23/16	0.14	0.034	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-FL	9/28/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-Gu	11/10/15	0.10 U	0.10 U	0.00062 U	0.0016 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Gu	3/23/16	0.04	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Gu	9/28/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-GL	11/10/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-GL	3/23/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-GL	9/28/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-HL	11/18/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-HL	3/29/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-HL	9/27/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-IL	11/20/15	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00079 U	0.00062 U
MW-IL	3/28/16	0.04	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0011 U
MW-IL	9/27/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-Ju	11/20/15	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00074 U	0.0017 U	0.00062 U
MW-Ju	3/28/16	0.029	0.032	0.00062 U	0.00062 U	0.0057 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Ju	9/27/16	0.41	0.031	0.00063 U	0.0016 U	0.00063 U	0.00063 U	0.0016 U	0.00063 U	0.00063 U	0.00063 U
MW-Ku	11/10/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Ku	3/22/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-Ku	9/28/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
MW-KL	11/10/15	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-KL	3/22/16	0.01 U	0.02 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U
MW-KL	9/28/16	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
Seep 1	5/4/07	0.10	0.23 U	-	-	-	0.00053 U	-	0.00053 U	-	-
Seep 1	7/5/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Seep 2	5/7/07	0.18	0.2 U	-	-	-	0.0011 J	-	0.00049 U	-	-
Seep 2	7/5/12	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		109	109	105	105	105	107	105	107	105	105
Number of Detects		45	19	0	1	0	2	0	0	0	0
Percent Detected		41.3%	17.4%	0.0%	1.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%
Highest Conc.		28	0.75	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD
(M.8081)

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	0.0013	0.0013	0.002	0.0087	0.0013	10	0.0013	0.02	-----	0.035
P11	11/17/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P12	11/17/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P13	11/13/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P14	11/14/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P15	11/14/14	0.0050 U	0.011 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P16	12/10/14	0.14	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.25 U	0.050 U	0.050 U
P18A	12/16/14	0.0050 U	0.020 Jp	0.0050 U	0.0072 U	0.016 Jp	0.0050 U	0.019 U	0.025 U	0.0050 U	0.0050 U
P18B	12/16/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P20	11/12/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P21A	12/8/14	0.0050 U	0.029 Jp	0.0050 U	0.0050 U	0.040 Jp	0.0050 U	0.019 U	0.025 U	0.0050 U	0.0050 U
P21B	12/8/14	0.0050 U	0.010	0.0050 U	0.0050 U	0.016 Jp	0.0050 U	0.010 U	0.025 U	0.0050 U	0.0050 U
P23	11/12/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P26	11/13/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P27A	11/11/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P27B	11/11/14	0.036	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P28	12/15/14	0.017 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.038 U	0.025 U	0.031 U	0.0050 U
P29	12/10/14	0.014 U	0.030 Jp	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.045 U	0.025 U	0.028 U	0.0050 U
P30	12/9/14	0.0050 U	0.038 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.037 U	0.025 U	0.0050 U	0.0050 U
P31	12/9/14	0.012 U	0.033 Jp	0.0050 U	0.0050 U	0.039 Jp	0.0050 U	0.026 U	0.025 U	0.0050 U	0.0050 U
P32A	12/15/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.021 U	0.025 U	0.0050 U	0.0050 U
P32B	12/15/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
P33A	12/8/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.022 U	0.025 U	0.0050 U	0.0050 U
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-1	11/11/15	0.0018 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0022 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-1	3/22/16	0.021 U	0.0012 U	0.0045 U	0.0049 U	0.041 U	0.0012 U	0.021 U	0.0062 U	0.015 U	0.023 U
DOF-MW-1	9/26/16	0.0054 U	0.0024	0.0013 U	0.0013 U	0.0024 Jp	0.0013 U	0.014 U	0.0063 U	0.007 U	0.007 U
DOF-MW-2	11/8/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-2	11/11/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-2	3/22/16	0.0012 U	0.0012 U	0.0012 U	0.0017 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-2	9/26/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-3	11/20/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-3	3/24/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-3	9/26/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DOF-MW-4	11/8/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-4	11/11/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-4	3/29/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-4	9/26/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DOF-MW-5	11/8/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-5	11/20/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-5	3/29/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-5	9/26/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DOF-MW-6	11/9/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-6	11/19/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-6	3/24/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-6	9/27/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DOF-MW-7	11/9/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-7	11/23/15	0.0012 U	0.0012 U	0.0012 U	0.0035 U	0.0012 U	0.0014 U	0.0044 U	0.0062 U	0.0042 U	0.0012 U
DOF-MW-7	3/25/16	0.0012 U	0.0012 U	0.0012 U	0.0021 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-7	9/27/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DOF-MW-8	11/9/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
DOF-MW-8	11/20/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-8	3/22/16	0.0012 U	0.0012 U	0.0012 U	0.0023 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DOF-MW-8	9/30/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
HC-B1	11/13/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
HC-B1	11/19/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
HC-B1	3/24/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
HC-B1	9/30/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HC-B2(R)	3/23/16	0.0012 U	0.0012 J	0.0012 U	0.0012 U	0.0026 J_p	0.0012 U	0.0050	0.0062 U	0.0012 U	0.0012 U
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.0012 U	0.011 U	0.0036 U	0.034 U	0.0021 U	0.013 U	0.024 U	0.16 U	0.0089 U	0.0064 U
SA-MW1	3/24/16	0.0058 U	0.021 U	0.0025 U	0.024 U	0.0012 U	0.013 U	0.019 U	0.076 U	0.0012 U	0.0074 U
SA-MW1	9/30/16	0.010 U	0.058 J_p	0.010 U	0.50 U	0.010 U	0.055 U	0.070 U	0.30 U	0.0013 U	0.015 U
SA-MW2	11/9/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
SA-MW2	11/20/15	0.0012 U	0.0014 U	0.0012 U	0.0018 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0018 U	0.0012 U
SA-MW2	3/29/16	0.0012 U	0.0037 U	0.0012 U	0.0022 U	0.0035 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
SA-MW2	9/30/16	0.0013 U	0.010 U	0.0013 U	0.0013 U	0.0044	0.0013 U	0.010 U	0.0063 U	0.0013 U	0.0013 U
SA-MW3	11/13/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
SA-MW3	11/19/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
SA-MW3	3/28/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
SA-MW3	9/27/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	3/25/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	11/18/15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	3/28/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Dp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Du	11/18/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0012 U	0.0012 U
MW-Du	3/28/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Du	10/1/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-Eu	11/19/15	0.0012 U	0.013 J_p	0.0026 U	0.0012 U	0.0012 U	0.0012 U	0.022 U	0.0062 U	0.0012 U	0.0012 U
MW-Eu	3/24/16	0.0012 U	0.033 U	0.0039 U	0.0012 U	0.015 U	0.0012 U	0.015 U	0.067 U	0.012 U	0.019 U
MW-Eu	9/30/16	0.0013 U	0.020 U	0.0013 U	0.0013 U	0.010	0.0013 U	0.010 U	0.0063 U	0.0013 U	0.0013 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Methoxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Fu	3/23/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Fu	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-FL	11/10/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-FL	3/23/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-FL	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-Gu	11/10/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Gu	3/23/16	0.0012 U	0.0012 U	0.0012 U	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Gu	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-GL	11/10/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-GL	3/23/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-GL	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-HL	11/18/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0015 U	0.0062 U	0.0012 U	0.0012 U
MW-HL	3/29/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-HL	9/27/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-IL	11/20/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-IL	3/28/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-IL	9/27/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0017	0.0063 U	0.0013 U	0.0013 U
MW-Ju	11/20/15	0.0020 U	0.0020 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0015 U	0.0012 U
MW-Ju	3/28/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Ju	9/27/16	0.0013 U	0.0026 J_p	0.0013 U	0.061 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-Ku	11/10/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Ku	3/22/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-Ku	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
MW-KL	11/10/15	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-KL	3/22/16	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
MW-KL	9/28/16	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
Seep 1	5/4/07	-	0.016	-	-	0.013 J	-	0.09 J	-	-	-
Seep 1	7/5/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U
Seep 2	5/7/07	-	0.0022	-	-	0.00049 U	-	0.002 J	-	-	-
Seep 2	7/5/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.50 U	0.10 U	0.10 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Meth-oxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		105	107	105	105	107	105	107	105	105	105
Number of Detects		2	11	0	0	8	0	3	0	0	0
Percent Detected		1.9%	10.3%	0.0%	0.0%	7.5%	0.0%	2.8%	0.0%	0.0%	0.0%
Highest Conc.		0.14	0.03	<0.0012	<0.0012	0.04	<0.0012	0.005	<0.0006	<0.0012	<0.0012

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans-Chlordane	cis-Chlordane	Toxaphene	Hexachloro-benzene	Hexachloro-butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes	SLs	0.0006	0.0006	0.13	0.0013	0.01	-----	-----	-----	-----	-----
P11	11/17/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
P12	11/17/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.0060 J	0.010 U
P13	11/13/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.016	0.017
P14	11/14/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
P15	11/14/14	0.0098 U	0.0054 U	0.25 U	0.0058 U	0.0070 U	0.010 U	0.010 U	0.012 U	0.010 U	0.010 U
P16	12/10/14	0.025 U	0.025 U	2.5 U	0.050 U	0.050 U	0.010 U	0.010 U	0.065	0.074	0.020
P18A	12/16/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.34	0.18	0.070
P18B	12/16/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.060	0.034	0.016
P20	11/12/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
P21A	12/8/14	0.0025 U	0.0038 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.37	0.36	0.12
P21B	12/8/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.17	0.16	0.049
P23	11/12/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
P26	11/13/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.012 U	0.020
P27A	11/11/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
P27B	11/11/14	0.0087	0.010	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.015 U	0.025 U	0.016
P28	12/15/14	0.016	0.029 J	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.050 U	0.23	0.47
P29	12/10/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.89	0.54	0.33
P30	12/9/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.074	0.070	0.019
P31	12/9/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.13	0.14	0.078
P32A	12/15/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.23	0.13	0.073
P32B	12/15/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.094	0.063	0.045
P33A	12/8/14	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.015 U	0.12	0.18
P33B	12/8/14	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Monitoring Wells											
DOF-MW-1	11/8/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.12	0.16	0.14
DOF-MW-1	11/11/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.084	0.18	0.23
DOF-MW-1	3/22/16	0.0029 U	0.0072 U	0.063 U	0.0012 U	0.0056 U	0.010 U	0.010 U	0.15 U	0.66	0.85
DOF-MW-1	9/26/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.049	0.10 U	0.11
DOF-MW-2	11/8/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-2	11/11/15	0.00072 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-2	3/22/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-2	9/26/16	0.00063 U	0.00063 U	0.13 U	0.00186	0.50 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans-Chlordane	cis-Chlordane	Toxaphene	Hexachloro-benzene	Hexachloro-butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-3	11/20/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-3	3/24/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-3	9/26/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-4	11/8/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-4	11/11/15	0.00064 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-4	3/29/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-4	9/26/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0017 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-5	11/8/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-5	11/20/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-5	3/29/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-5	9/26/16	0.00063 U	0.00063 U	0.13 U	0.50 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-6	11/9/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.12 U	0.062 U	0.068
DOF-MW-6	11/19/15	0.0046	0.0046	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.030 U	0.025 U	0.008 J
DOF-MW-6	3/24/16	0.0032	0.0027	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.015 U	0.025 U	0.010 U
DOF-MW-6	9/27/16	0.0040	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.035 U	0.010 U	0.010 U	0.007 J
DOF-MW-7	11/9/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.10	0.010 U	0.028	0.012
DOF-MW-7	11/23/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.043	0.010 U	0.010 U	0.010 U
DOF-MW-7	3/25/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.057	0.010 U	0.010 U	0.010 U
DOF-MW-7	9/27/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.043	0.010 U	0.013	0.003 J
DOF-MW-8	11/9/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.033	0.029	0.017
DOF-MW-8	11/20/15	0.00062 U	0.00062 U	0.063 U	0.0014 U	0.0012 U	0.010 U	0.010 U	0.013	0.013	0.003 J
DOF-MW-8	3/22/16	0.00062 U	0.00062 U	0.063 U	0.0081 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
DOF-MW-8	9/30/16	0.00063 U	0.00063 U	0.13 U	0.010 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
HC-B1	11/13/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.052	0.010 U	0.012 U	0.010 U
HC-B1	11/19/15	0.0010 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.057	0.046	0.010 U	0.010 U
HC-B1	3/24/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.054	0.010 U	0.010 U	0.010 U
HC-B1	9/30/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.048	0.010 U	0.010 U	0.010 U
HC-B2(R)	11/11/15	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.015 U	0.015 U	0.010 U
HC-B2(R)	3/23/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020 U	0.050 U	0.028
HC-B2R	9/30/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans- Chlordane	cis-Chlordane	Toxaphene	Hexachloro- benzene	Hexachloro- butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.00062 U	0.0034 U	0.063 U	0.0012 U	0.0012 U	0.010 U	4.4	0.010 U	1.8	0.71
SA-MW1	3/24/16	0.0082 U	0.0098 U	0.063 U	0.012 U	0.017 U	0.010 U	1.7	0.010 U	0.58	0.25
SA-MW1	9/30/16	0.50 U	0.00063 U	0.13 U	0.017 U	0.010 U	0.010 U	2.1	0.010 U	0.69	0.48
SA-MW2	11/9/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.063	0.010 U	0.036	0.016
SA-MW2	11/20/15	0.00062 U	0.00062 U	0.063 U	0.0029 U	0.0012 U	0.010 U	0.010 U	0.054	0.042	0.011
SA-MW2	3/29/16	0.0017 U	0.00062 U	0.063 U	0.019 U	0.0058 U	0.010 U	0.010 U	0.078	0.089 J_p	0.024
SA-MW2	9/30/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.15	0.010 U	0.14	0.11
SA-MW3	11/13/12	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SA-MW3	11/19/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SA-MW3	3/28/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
SA-MW3	9/27/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ap	11/18/15	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ap	3/25/16	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ap	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Bp	11/18/15	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Bp	3/25/16	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Bp	10/1/16	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MW-Cp	11/18/15	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.054 J_p	0.018 J_p	0.010 U
MW-Cp	3/25/16	-----	-----	-----	-----	-----	0.010 U	0.041	0.010 U	0.020 U	0.010 U
MW-Cp	10/1/16	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.039	0.015 U	0.004 J
MW-Dp	11/18/15	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.025 U	0.010 U
MW-Dp	3/28/16	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.025 U	0.008 J
MW-Dp	10/1/16	-----	-----	-----	-----	-----	0.010 U	0.010 U	0.010 U	0.015 U	0.010
MW-Du	11/18/15	0.0023	0.0018	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.030 U	0.007 J
MW-Du	3/28/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.004 J
MW-Du	10/1/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.004 J
MW-Eu	11/19/15	0.00074 U	0.00062 U	0.063 U	0.0016 U	0.0024 U	0.010 U	0.20	0.010 U	0.050 U	0.036
MW-Eu	3/24/16	0.0021 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.19	0.010 U	0.12	0.077
MW-Eu	9/30/16	0.00063 U	0.00063 U	0.13 U	0.010 U	0.0013 U	0.010 U	0.17	0.010 U	0.050 U	0.049

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans-Chlordane	cis-Chlordane	Toxaphene	Hexachloro-benzene	Hexachloro-butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Fu	3/23/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Fu	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-FL	11/10/15	0.00068 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-FL	3/23/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-FL	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Gu	11/10/15	0.00094 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Gu	3/23/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Gu	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-GL	11/10/15	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-GL	3/23/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-GL	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-HL	11/18/15	0.0058	0.0086 J_p	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020 U	0.030 U	0.020
MW-HL	3/29/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-HL	9/27/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.003 J
MW-IL	11/20/15	0.0044	0.0058 J_p	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.015 U	0.006 J
MW-IL	3/28/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-IL	9/27/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ju	11/20/15	0.0016 U	0.0018 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.12	0.11	0.059
MW-Ju	3/28/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0054 U	0.010 U	0.010 U	0.010 U	0.010 U	0.006 J
MW-Ju	9/27/16	0.0021 J_p	0.00063 U	0.13 U	0.0082 U	0.0013 U	0.010 U	0.051 U	0.010 U	0.025 U	0.017
MW-Ku	11/10/15	0.00083 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ku	3/22/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-Ku	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-KL	11/10/15	0.00080 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-KL	3/22/16	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
MW-KL	9/28/16	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Seep 1	5/4/07	-	-	-	0.23 U	-	-	0.021 U	0.021 U	0.021 U	0.5
Seep 1	7/5/12	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U	0.010 U	0.010 U	0.025 U	0.075 U	0.010 U
Seep 2	5/7/07	-	0.0049 U	-	0.2 U	-	-	0.02 U	0.0094 J	0.017 J	0.02
Seep 2	7/5/12	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U	0.010 U	0.010 U	0.032 U	0.14	0.16

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans- Chlordane	cis-Chlordane	Toxaphene	Hexachloro- benzene	Hexachloro- butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Number of Samples		105	106	105	107	105	105	107	107	107	107
Number of Detects		9	7	0	1	0	0	17	22	33	52
Percent Detected		8.6%	6.6%	0.0%	0.9%	0.0%	0.0%	15.9%	20.6%	30.8%	48.6%
Highest Conc.		0.02	0.03	<0.063	0.002	<0.0012	<0.01	4.4	0.89	1.8	0.85

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD
(M.8081)

SLs - Screening Levels

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
Push-Probes	SLs	-----	-----	0.01
P11	11/17/14	0.010 U	0.010 U	0.010 U
P12	11/17/14	0.010 U	0.010 U	0.006
P13	11/13/14	0.010 U	0.010 U	0.033
P14	11/14/14	0.010 U	0.010 U	0.010 U
P15	11/14/14	0.010 U	0.010 U	0.012 U
P16	12/10/14	0.010 U	0.010 U	0.16
P18A	12/16/14	0.010 U	0.010 U	0.59
P18B	12/16/14	0.010 U	0.010 U	0.11
P20	11/12/14	0.010 U	0.010 U	0.010 U
P21A	12/8/14	0.010 U	0.010 U	0.85
P21B	12/8/14	0.010 U	0.010 U	0.38
P23	11/12/14	0.010 U	0.010 U	0.010 U
P26	11/13/14	0.010 U	0.010 U	0.020
P27A	11/11/14	0.010 U	0.010 U	0.010 U
P27B	11/11/14	0.010 U	0.010 U	0.016
P28	12/15/14	0.010 U	0.010 U	0.70
P29	12/10/14	0.010 U	0.010 U	1.8
P30	12/9/14	0.010 U	0.010 U	0.16
P31	12/9/14	0.010 U	0.010 U	0.35
P32A	12/15/14	0.010 U	0.010 U	0.43
P32B	12/15/14	0.010 U	0.010 U	0.20
P33A	12/8/14	0.010 U	0.010 U	0.30
P33B	12/8/14	-----	-----	-----
Monitoring Wells				
DOF-MW-1	11/8/12	0.010 U	0.010 U	0.42
DOF-MW-1	11/11/15	0.010 U	0.010 U	0.494
DOF-MW-1	3/22/16	0.010 U	0.010 U	1.51
DOF-MW-1	9/26/16	0.010 U	0.010 U	0.16
DOF-MW-2	11/8/12	0.010 U	0.010 U	0.010 U
DOF-MW-2	11/11/15	0.010 U	0.010 U	0.010 U
DOF-MW-2	3/22/16	0.010 U	0.010 U	0.010 U
DOF-MW-2	9/26/16	0.010 U	0.010 U	0.010 U

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
DOF-MW-3	11/8/12	0.010 U	0.010 U	0.010 U
DOF-MW-3	11/20/15	0.010 U	0.010 U	0.010 U
DOF-MW-3	3/24/16	0.010 U	0.010 U	0.010 U
DOF-MW-3	9/26/16	0.010 U	0.010 U	0.010 U
DOF-MW-4	11/8/12	0.010 U	0.010 U	0.010 U
DOF-MW-4	11/11/15	0.010 U	0.010 U	0.010 U
DOF-MW-4	3/29/16	0.010 U	0.010 U	0.010 U
DOF-MW-4	9/26/16	0.010 U	0.010 U	0.010 U
DOF-MW-5	11/8/12	0.010 U	0.010 U	0.010 U
DOF-MW-5	11/20/15	0.010 U	0.010 U	0.010 U
DOF-MW-5	3/29/16	0.010 U	0.010 U	0.010 U
DOF-MW-5	9/26/16	0.010 U	0.010 U	0.010 U
DOF-MW-6	11/9/12	0.010 U	0.010 U	0.068
DOF-MW-6	11/19/15	0.010 U	0.010 U	0.008
DOF-MW-6	3/24/16	0.010 U	0.010 U	0.025 U
DOF-MW-6	9/27/16	0.010 U	0.010 U	0.035 U
DOF-MW-7	11/9/12	0.010 U	0.010 U	0.14
DOF-MW-7	11/23/15	0.010 U	0.010 U	0.043
DOF-MW-7	3/25/16	0.010 U	0.010 U	0.057
DOF-MW-7	9/27/16	0.010 U	0.010 U	0.059
DOF-MW-8	11/9/12	0.010 U	0.010 U	0.079
DOF-MW-8	11/20/15	0.010 U	0.010 U	0.029
DOF-MW-8	3/22/16	0.010 U	0.010 U	0.010 U
DOF-MW-8	9/30/16	0.010 U	0.010 U	0.010 U
HC-B1	11/13/12	0.010 U	0.010 U	0.052
HC-B1	11/19/15	0.010 U	0.010 U	0.103
HC-B1	3/24/16	0.010 U	0.010 U	0.054
HC-B1	9/30/16	0.010 U	0.010 U	0.048
HC-B2(R)	11/11/15	0.010 U	0.010 U	0.015 U
HC-B2(R)	3/23/16	0.010 U	0.010 U	0.028
HC-B2R	9/30/16	----	-----	-----

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
SA-MW1	11/23/15	0.010 U	0.010 U	6.91
SA-MW1	3/24/16	0.010 U	0.010 U	2.53
SA-MW1	9/30/16	0.010 U	0.010 U	3.2
SA-MW2	11/9/12	0.010 U	0.010 U	0.115
SA-MW2	11/20/15	0.010 U	0.010 U	0.107
SA-MW2	3/29/16	0.010 U	0.010 U	0.191
SA-MW2	9/30/16	0.010 U	0.010 U	0.40
SA-MW3	11/13/12	0.010 U	0.010 U	0.010 U
SA-MW3	11/19/15	0.010 U	0.010 U	0.010 U
SA-MW3	3/28/16	0.010 U	0.010 U	0.010 U
SA-MW3	9/27/16	0.010 U	0.010 U	0.010 U
MW-Ap	11/18/15	0.010 U	0.010 U	0.010 U
MW-Ap	3/25/16	0.010 U	0.010 U	0.010 U
MW-Ap	10/1/16	-----	-----	-----
MW-Bp	11/18/15	0.010 U	0.010 U	0.010 U
MW-Bp	3/25/16	0.010 U	0.010 U	0.010 U
MW-Bp	10/1/16	-----	-----	-----
MW-Cp	11/18/15	0.010 U	0.010 U	0.072
MW-Cp	3/25/16	0.010 U	0.010 U	0.041
MW-Cp	10/1/16	0.010 U	0.010 U	0.043
MW-Dp	11/18/15	0.010 U	0.010 U	0.025 U
MW-Dp	3/28/16	0.010 U	0.010 U	0.008
MW-Dp	10/1/16	0.010 U	0.010 U	0.015 U
MW-Du	11/18/15	0.010 U	0.010 U	0.007
MW-Du	3/28/16	0.010 U	0.010 U	0.004
MW-Du	10/1/16	0.010 U	0.010 U	0.010 U
MW-Eu	11/19/15	0.010 U	0.010 U	0.236
MW-Eu	3/24/16	0.010 U	0.010 U	0.387
MW-Eu	9/30/16	0.010 U	0.010 U	0.21

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
MW-Fu	11/11/15	0.010 U	0.010 U	0.010 U
MW-Fu	3/23/16	0.010 U	0.010 U	0.010 U
MW-Fu	9/28/16	0.010 U	0.010 U	0.010 U
MW-FL	11/10/15	0.010 U	0.010 U	0.010 U
MW-FL	3/23/16	0.010 U	0.010 U	0.010 U
MW-FL	9/28/16	0.010 U	0.010 U	0.010 U
MW-Gu	11/10/15	0.010 U	0.010 U	0.010 U
MW-Gu	3/23/16	0.010 U	0.010 U	0.010 U
MW-Gu	9/28/16	0.010 U	0.010 U	0.010 U
MW-GL	11/10/15	0.010 U	0.010 U	0.010 U
MW-GL	3/23/16	0.010 U	0.010 U	0.010 U
MW-GL	9/28/16	0.010 U	0.010 U	0.010 U
MW-HL	11/18/15	0.010 U	0.010 U	0.020
MW-HL	3/29/16	0.010 U	0.010 U	0.010 U
MW-HL	9/27/16	0.010 U	0.010 U	0.010 U
MW-IL	11/20/15	0.010 U	0.010 U	0.006
MW-IL	3/28/16	0.010 U	0.010 U	0.010 U
MW-IL	9/27/16	0.010 U	0.010 U	0.010 U
MW-Ju	11/20/15	0.010 U	0.010 U	0.289
MW-Ju	3/28/16	0.010 U	0.010 U	0.006
MW-Ju	9/27/16	0.010 U	0.010 U	0.051 U
MW-Ku	11/10/15	0.010 U	0.010 U	0.010 U
MW-Ku	3/22/16	0.010 U	0.010 U	0.010 U
MW-Ku	9/28/16	0.010 U	0.010 U	0.010 U
MW-KL	11/10/15	0.010 U	0.010 U	0.010 U
MW-KL	3/22/16	0.010 U	0.010 U	0.010 U
MW-KL	9/28/16	0.010 U	0.010 U	0.010 U
Seep 1	5/4/07	-	-	0.5
Seep 1	7/5/12	0.010 U	0.010 U	0.075 U
Seep 2	5/7/07	-	-	0.026
Seep 2	7/5/12	0.010 U	0.010 U	0.30

**TABLE G.2 - PUSH PROBE and MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
2012-2016 (Main Site)**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
Number of Samples		105	105	107
Number of Detects		0	0	58
Percent Detected		0.0%	0.0%	54.2%
Highest Conc.		<0.01	<0.01	6.91

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD
(M.8081)

SLs - Screening Levels

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
Push-Probes													
ICS-P34-W-10-060915	6/9/2015	10-14	7.9	15.5	524	----	----	3.8	78	59.3	27.3	0.2 U	0.2 U
ICS-P34-W-20-060915	6/9/2015	20-24	7.5	17.3	3070	----	----	4.5	33	1950	55.3	0.5 U	0.5 U
ICS-P35-W-10-060915	6/9/2015	10-14	6.7	19.9	3220	----	----	67	6.6	2120	326	0.5 U	0.5 U
ICS-P35-W-20-060815	6/8/2015	20-24	6.8	16.9	1821	----	----	459	9	2440	272	0.5 U	0.5 U
ICS-P36-W-10-060815	6/8/2015	10-14	6.6	21	3180	----	----	115	6.9	1890	0.7	0.5 U	0.5 U
ICS-P36-W-20-060815	6/8/2015	20-14	6.5	17.5	4080	----	----	9.6	127	1830	0.6	0.5 U	0.5 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

(1) - Referenced to Ag/AgCl electrode

nd - Not detected

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
Push-Probes												Result Rejected Based on QA Review
ICS-P34-W-10-060915	6/9/2015	0.3	0.9	0.2 U	0.2 U	0.1 U	0.1 U	-----	11,100	0.8	1.8	
ICS-P34-W-20-060915	6/9/2015	0.5 U	0.6	0.5 U	0.5 U	0.2 U	0.2 U	-----	46,200	3	3	
ICS-P35-W-10-060915	6/9/2015	0.9	1.0	0.5 U	0.5 U	0.2 U	0.2 U	-----	160,000	1 U	1 U	
ICS-P35-W-20-060815	6/8/2015	2.0	10.8	0.5 U	0.6	0.2 U	0.2 U	-----	148,000	6	32	
ICS-P36-W-10-060815	6/8/2015	1.3	2.7	0.5 U	0.5 U	0.2 U	0.2 U	-----	264,000	2	5	
ICS-P36-W-20-060815	6/8/2015	0.5	3.0	0.5 U	0.5 U	0.2 U	0.2 U	-----	176,000	1 U	8	

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

nd - Not detected

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
Push-Probes													
ICS-P34-W-10-060915	6/9/2015	0.5 U	6.6	0.1 U	2.1	-----	25,600	20.0 U	20.0 U	0.9	1.3	0.2 U	0.2 U
ICS-P34-W-20-060915	6/9/2015	1 U	1 U	0.2 U	0.4	-----	96,100	20.0 U	20.0 U	1	1 U	0.5 U	0.5 U
ICS-P35-W-10-060915	6/9/2015	1 U	1 U	0.2 U	0.2 U	-----	141,000	20.0 U	20.0 U	2	2	0.5 U	0.5 U
ICS-P35-W-20-060815	6/8/2015	10	69	1.4	8.5	-----	308,000	20.0 U	64.6	11	33	0.5 U	0.5 U
ICS-P36-W-10-060815	6/8/2015	1 U	9	0.2 U	0.8	-----	210,000	20.0 U	20.0 U	2	5	0.5 U	0.5 U
ICS-P36-W-20-060815	6/8/2015	1 U	20	0.2 U	2.1	-----	153,000	20.0 U	20.0 U	2	8	0.5 U	0.5 U

Notes: U = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blankJ_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

nd - Not detected

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
Push-Probes												
ICS-P34-W-10-060915	6/9/2015	97,800	4 U	4	130,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	1,170,000	10 U	10 U	510,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	1,150,000	10 U	10 U	980,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	1,170,000	30	80	1,600,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	792,000	10 U	10 U	1,500,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	959,000	10 U	20	1,100,000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.27	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	1.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

MS - Mineral spirits

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri- chloroethane	Carbon tetrachloride	Bromo- dichloromethane	1,2-Dichloro- propane	cis -1,3-Dichloro- propene	Trichloro- ethene	Dibromo- chloromethane	1,1,2- Trichloro- ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloroethene	1,1,2,2-Tetrachloroethane	Toluene	Chloro-benzene	Ethyl-benzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes												
ICS-P34-W-10-060915	6/9/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	79601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2- Dibromo- ethane	Bromochloro- methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915	6/9/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915	6/9/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815	6/8/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815	6/8/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815	6/8/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	<i>sec</i> -Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
ICS-P34-W-20-060915	6/9/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
ICS-P35-W-10-060915	6/9/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
ICS-P35-W-20-060815	6/8/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
ICS-P36-W-10-060815	6/8/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
ICS-P36-W-20-060815	6/8/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
ICS-P34-W-20-060915	6/9/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
ICS-P35-W-10-060915	6/9/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
ICS-P35-W-20-060815	6/8/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
ICS-P36-W-10-060815	6/8/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U
ICS-P36-W-20-060815	6/8/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	1.0 U	3.0 U	20 U	3.0 U	0.05 J	3.0 U	1.0 U	0.25 U	5.0 U
ICS-P34-W-20-060915	6/9/2015	1.0 U	3.0 U	20 U	3.0 U	0.06 J	3.0 U	1.0 U	0.25 U	5.0 U
ICS-P35-W-10-060915	6/9/2015	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
ICS-P35-W-20-060815	6/8/2015	1.0 U	3.0 U	4.8 J	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
ICS-P36-W-10-060815	6/8/2015	1.0 U	3.0 U	5.5 J	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
ICS-P36-W-20-060815	6/8/2015	1.0 U	3.0 U	20 U	3.0 U	0.06 J	3.0 U	1.0 U	0.25 U	5.0 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene	2,4-Dinitro-toluene	Diethyl-phthalate	4-Chlorophenylphenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
ICS-P34-W-20-060915	6/9/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
ICS-P35-W-10-060915	6/9/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
ICS-P35-W-20-060815	6/8/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
ICS-P36-W-10-060815	6/8/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	2.2	1.0 U
ICS-P36-W-20-060815	6/8/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	4.4	1.0 U

Notes: U = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blankJ_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi-phenylamine	Pentachloro-phenol	Phen-anthrene	Carbazole	Anthracene	Di-n-butyl-phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes										
ICS-P34-W-10-060915	6/9/2015	0.10 U	1.0 U	0.34	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
ICS-P34-W-20-060915	6/9/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-P35-W-10-060915	6/9/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-P35-W-20-060815	6/8/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
ICS-P36-W-10-060815	6/8/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
ICS-P36-W-20-060815	6/8/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P34-W-20-060915	6/9/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P35-W-10-060915	6/9/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P35-W-20-060815	6/8/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P36-W-10-060815	6/8/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P36-W-20-060815	6/8/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Push-Probes												
ICS-P34-W-10-060915	6/9/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	
ICS-P34-W-20-060915	6/9/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	
ICS-P35-W-10-060915	6/9/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	
ICS-P35-W-20-060815	6/8/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	
ICS-P36-W-10-060815	6/8/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	
ICS-P36-W-20-060815	6/8/2015	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Meth- oxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	0.0050 U	0.013	0.0050 U	0.0050 U	0.010	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
ICS-P34-W-20-060915	6/9/2015	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
ICS-P35-W-10-060915	6/9/2015	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
ICS-P35-W-20-060815	6/8/2015	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
ICS-P36-W-10-060815	6/8/2015	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U
ICS-P36-W-20-060815	6/8/2015	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U	0.0050 U	0.0050 U

Notes: *U* = Nondetected at the associated lower reporting limit.*J* = Estimate associated with value less than the verifiable lower quantitation limit.*J_B* = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank*J_Q* = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	trans-Chlordane	cis-Chlordane	Toxaphene	Hexachloro-benzene	Hexachloro-butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Push-Probes											
ICS-P34-W-10-060915	6/9/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 J	0.010 J	0.0050 J
ICS-P34-W-20-060915	6/9/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.14	0.18 J _p	0.085
ICS-P35-W-10-060915	6/9/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P35-W-20-060815	6/8/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P36-W-10-060815	6/8/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P36-W-20-060815	6/8/2015	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Notes: U = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blankJ_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G.3 - OFF-SITE PUSH-PROBE GROUNDWATER ANALYTICAL DATA

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
Push-Probes				
ICS-P34-W-10-060915	6/9/2015	0.010 U	0.010 U	0.025
ICS-P34-W-20-060915	6/9/2015	0.010 U	0.010 U	0.41
ICS-P35-W-10-060915	6/9/2015	0.010 U	0.010 U	0.010 U
ICS-P35-W-20-060815	6/8/2015	0.010 U	0.010 U	0.010 U
ICS-P36-W-10-060815	6/8/2015	0.010 U	0.010 U	0.010 U
ICS-P36-W-20-060815	6/8/2015	0.010 U	0.010 U	0.010 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Depth (feet)	Field Parameters							Chloride mg/L	Sulfate mg/L	Antimony	
			pH	Temp.	Conductivity	DO	ORP (1)	Ferrous Fe	Turbidity			7440-36-0	
				C	uS/cm	mg/l	mV	mg/l	NTU			diss. µg/L	total µg/L
Monitoring Wells													
DMC-MW-A	11/24/2015	20-30	7.1	14	2793	0.44	-103	3.8	133	635	8.3	----	----
DMC-MW-A	3/30/2016	20-30	6.8	14.5	2961	0.4	-76.5	5	58.2	----	----	----	----
DMC-MW-A	9/29/2016	20-30	6.8	16	3704	0	2.7	7	18.7	----	----	----	----
DMC-MW-B	11/24/2015	23-33	7	14.4	6102	0	-122	2.6	22	2250	14.5	----	----
DMC-MW-B	3/30/2016	23-33	6.8	15	6381	0	-90.1	5.8	10.1	----	----	----	----
DMC-MW-B	9/29/2016	23-33	6.7	16.2	6981	0	17	5.2	5.7	----	----	----	----
DMC-MW-C	11/24/2015	19-29	7.2	13.5	11240	0	-113	4.8	24.2	3900	413	----	----
DMC-MW-C	3/30/2016	19-29	6.9	13.7	11710	0	-63.6	6.8	41.7	----	----	----	----
DMC-MW-C	9/29/2016	19-29	6.7	15.3	6917	0	42.5	4.8	12.3	----	----	----	----

Notes: *U* = Nondetected at the associated lower reporting limit.
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J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank
J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed
 (1) - Referenced to Ag/AgCl electrode
 nd - Not detected

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Arsenic		Beryllium		Cadmium		Calcium		Total Chromium		Hexavalent Chromium
		7440-38-2		7440-41-7		7440-43-9		7440-70-2		7440-47-3		
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
Monitoring Wells												
DMC-MW-A	11/24/2015	3.0	12.0	----	----	0.08 J	0.8	----	40,200	4.4	40	----
DMC-MW-A	3/30/2016	2.0	8.6	----	----	0.1 U	0.4	----	39,600	3	30	----
DMC-MW-A	9/29/2016	2.3	2.7	----	----	0.10 U	0.10 U	----	----	2.2	3.8	----
DMC-MW-B	11/24/2015	7.3	6	----	----	0.5 U	0.1 J	----	132,000	8	9	----
DMC-MW-B	3/30/2016	4.5	5	----	----	0.02 J	0.2 J	----	130,000	4	5	----
DMC-MW-B	9/29/2016	4.5	5.1	----	----	0.10 U	1.0 U	----	----	6.0	7.4	----
DMC-MW-C	11/24/2015	2	1	----	----	0.2 J	0.5 U	----	250,000	1.8 J	3	----
DMC-MW-C	3/30/2016	1 J	2	----	----	0.5 U	0.5 U	----	240,000	2 J	4	----
DMC-MW-C	9/29/2016	0.58	0.7 J	----	----	0.10 U	1.0 U	----	----	1.7 J	0.83	----

Notes: *U* = Nondetected at the associated lower reporting limit.
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J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed
 nd - Not detected

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Copper		Lead		Magnesium		Mercury		Nickel		Silver	
		7440-50-8		7439-92-1		7439-95-4		7439-97-6		7440-02-0		7440-22-4	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
Monitoring Wells													
DMC-MW-A	11/24/2015	2.6	41.4	19.2	306	----	63,900	16.5 J	187	1.4	20.2	0.02 J	0.2 J
DMC-MW-A	3/30/2016	0.3 J	26	0.08 J	206	----	66,700	20 U	190	0.3 J	12	0.01 J	0.1 J
DMC-MW-A	9/29/2016	0.5 U	1.6	0.10 U	11	----	----	20 U	20 U	0.28 J	1.2 J _B	0.20 U	0.20 U
DMC-MW-B	11/24/2015	2	4	14.4	32.8	----	154,000	15.3 J	32.7	1.0	2 J	0.05 J	0.05 J
DMC-MW-B	3/30/2016	0.5 J	2 J	0.1 J	12.6	----	148,000	7 J	14 J	0.7 J	2 J	0.4 U	1 U
DMC-MW-B	9/29/2016	0.5 U	5 U	0.54	12	----	----	20 U	23	0.72	1.4 J _B	0.02 J	2.0 U
DMC-MW-C	11/24/2015	2.4 J	2 J	2.0	1.6	----	333,000	16.4 J	13.6 J	1.5 J	0.9 J		1 U
DMC-MW-C	3/30/2016	1 J	3	0.2 J	2.4	----	319,000	5 J	27	0.3 J	1 J	1 U	0.05 J
DMC-MW-C	9/29/2016	0.5 U	5 U	0.10 U	1.0 U	----	----	20 U	20 U	0.21 J	5.0 U	0.20 U	2.0 U

Notes: U = Nondetected at the associated lower reporting limit.

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J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

nd - Not detected

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Sodium	Zinc		Hardness	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane
		7440-23-5	7440-66-6			Gasoline- range	Diesel-range	Lube- range	74-87-3	74-83-9	75-01-4	75-00-3
		total µg/L	diss. µg/L	total µg/L		mg-CaCO ₃ /L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L
Monitoring Wells												
DMC-MW-A	11/24/2015	475,000	12	188	360	0.35	0.75	1.2	0.50 U	1.0 U	0.13 J	0.20 U
DMC-MW-A	3/30/2016	473,000	4 U	240	374	0.26	0.76	1.1	0.14 J _B	1.0 U	0.13 J	0.20 U
DMC-MW-A	9/29/2016	-----	1 J _B	10	-----	0.50	1.2	2.1	0.50 U	1.0 U	0.20 U	0.20 U
DMC-MW-B	11/24/2015	1,170,000	10	30	960	0.38	0.46	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DMC-MW-B	3/30/2016	955,000	3 J	13 J	935	0.50	0.15	0.20 U	0.33 J _B	1.0 U	0.20 U	0.20 U
DMC-MW-B	9/29/2016	-----	1 J _B	10 J	-----	0.44	0.20	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DMC-MW-C	11/24/2015	2,120,000	5.2 J	4 J	2000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	2,290,000	15 J	8 J	1914	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	-----	1 J _B	40 U	-----	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U

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 laboratory background or method blank
 J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro-ethene	1,1-Dichloro-ethane	<i>trans</i> -1,2-Dichloroethene	<i>cis</i> -1,2-Dichloroethene	Chloroform	1,2-Dichloro-ethane
		75-09-2	67-64-1	75-15-0	75-35-4	75-34-3	156-60-5	156-59-2	67-66-3	107-06-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells										
DMC-MW-A	11/24/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-A	3/30/2016	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U
DMC-MW-A	9/29/2016	0.50 J_B	5.0 U	0.08 J_B	0.20 U	0.20 U	0.20 U	0.11 J	0.20 U	0.20 U
DMC-MW-B	11/24/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U
DMC-MW-B	3/30/2016	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.12 J	0.20 U
DMC-MW-B	9/29/2016	0.52 J_B	5.0 U	0.11 J_B	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U
DMC-MW-C	11/24/2015	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	0.63 J_B	5.0 U	0.05 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.14 J	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.
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J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed
 MS - Mineral sprits

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	2-Butanone	1,1,1-Tri-chloroethane	Carbon tetrachloride	Bromo-dichloromethane	1,2-Dichloro-propane	cis -1,3-Dichloro-propene	Trichloro-ethene	Dibromo-chloromethane	1,1,2-Trichloro-ethane
		78-93-3	71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6	124-48-1	79-00-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells										
DMC-MW-A	11/24/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-A	3/30/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-A	9/29/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	11/24/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	3/30/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	9/29/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	11/24/2015	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.
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J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank
J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Benzene	<i>trans</i> -1,3-Dichloropropene	Bromo-form	4-Methyl-2-pentanone	2-Hexanone	Tetrachloroethene	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Ethylbenzene	Styrene
		71-43-2	10061-02-6	75-25-2	108-10-1	591-78-6	127-18-4	79-34-5	108-88-3	108-90-7	100-41-4	100-42-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells												
DMC-MW-A	11/24/2015	31	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.26	0.20 U	0.99	0.20 U
DMC-MW-A	3/30/2016	29	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.25	0.20 U	0.15 J	0.20 U
DMC-MW-A	9/29/2016	36	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32 J _B	0.20 U	0.20 U	0.20 U
DMC-MW-B	11/24/2015	0.27	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.28	0.20 U	2.0	0.20 U
DMC-MW-B	3/30/2016	0.33	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.58	0.20 U	1.6	0.20 U
DMC-MW-B	9/29/2016	0.25	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.36 J _B	0.20 U	0.85	0.20 U
DMC-MW-C	11/24/2015	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.
J = Estimate associated with value less than the verifiable lower quantitation limit.
J_B = Estimate; associated value may be biased high due to contribution from laboratory background or method blank
J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Trichloro- fluoromethane	1,1,2-Trichloro- 1,2,2- trifluoroethane	<i>m</i> - & <i>p</i> - Xylenes	<i>o</i> -Xylene	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Acrolein	Bromoethane	1,1-Dichloro- propene
		75-69-4	76-13-1	79601-23-1	95-47-6	95-50-1	541-73-1	106-46-7	107-02-8	74-96-4	563-58-6
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	0.20 U	0.20 U	0.84	0.83	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-A	3/30/2016	0.20 U	0.20 U	0.55	0.27	0.20 U	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
DMC-MW-A	9/29/2016	0.20 U	0.20 U	0.86	0.74	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-B	11/24/2015	0.20 U	0.20 U	2.7	0.12 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-B	3/30/2016	0.20 U	0.20 U	6.1	1.7	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-B	9/29/2016	0.20 U	0.20 U	3.6	0.95	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-C	11/24/2015	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	0.20 U	0.20 U	0.05 J _B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Dibromo- methane	1,1,1,2-Tetra- chloroethane	1,2,3-Trichloro- propane	<i>trans</i> -1,4- Dichloro-2- butene	1,3,5- Trimethyl- benzene	1,2,4- Trimethyl- benzene	1,2- Dibromo- ethane	Bromochloro methane	2,2-Dichloro- propane	1,3-Dichloro- propane
		74-95-3	630-20-6	96-18-4	110-57-6	108-67-8	95-63-6	106-93-4	74-97-5	294-20-7	142-28-9
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.82	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-A	3/30/2016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.59	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-A	9/29/2016	0.20 U	0.20 U	0.50 U	1.0 U	0.05 J	0.75	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	11/24/2015	0.20 U	0.20 U	0.50 U	1.0 U	4.0	7.6	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	3/30/2016	0.20 U	0.20 U	0.50 U	1.0 U	4.8	12	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-B	9/29/2016	0.20 U	0.20 U	0.50 U	1.0 U	2.3	5.2	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	11/24/2015	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	3/30/2016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U
DMC-MW-C	9/29/2016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Isopropyl- benzene	n-Propyl- benzene	Bromo- benzene	2-Chloro- toluene	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	<i>sec</i> -Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,4-Trichloro benzene
		98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6	104-51-8	120-82-1
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	2.3	0.96	0.20 U	0.20 U	0.20 U	0.20 U	0.63	0.60	0.59	0.50 U
DMC-MW-A	3/30/2016	1.7	0.62	0.20 U	0.20 U	0.20 U	0.07 J	0.41	0.22	0.37 J _Q	0.50 U
DMC-MW-A	9/29/2016	2.4	1.0	0.20 U	0.20 U	0.20 U	0.10 J	0.66	0.65	0.55	0.50 U
DMC-MW-B	11/24/2015	3.2	1.8	0.20 U	0.20 U	0.20 U	0.06 J	0.69	1.1	0.63	0.50 U
DMC-MW-B	3/30/2016	4.1	2.2	0.20 U	0.20 U	0.20 U	0.10 J	0.80	1.3	0.74 J _Q	0.50 U
DMC-MW-B	9/29/2016	2.1	1.2	0.20 U	0.20 U	0.20 U	0.06 J	0.57	1.0	0.51	0.50 U
DMC-MW-C	11/24/2015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DMC-MW-C	3/30/2016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U
DMC-MW-C	9/29/2016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U

Notes: U = Nondetected at the associated lower reporting limit.
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 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	Benzyl alcohol	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine	Hexachloro- ethane	Nitro- benzene	
		87-61-6	108-95-2	95-57-8	100-51-6	95-48-7	106-44-5	621-64-7	67-72-1	98-95-3	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Monitoring Wells											
DMC-MW-A	11/24/2015	0.50 U	1.6	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	
DMC-MW-A	3/30/2016	0.50 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
DMC-MW-A	9/29/2016	0.50 U	0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
DMC-MW-B	11/24/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	
DMC-MW-B	3/30/2016	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
DMC-MW-B	9/29/2016	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
DMC-MW-C	11/24/2015	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	
DMC-MW-C	3/30/2016	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
DMC-MW-C	9/29/2016	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

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 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	Naphthalene	4-Chloro-3-methylphenol	2-Methyl-naphthalene	2,4,6-Trichloro-phenol	2,4,5-Trichloro-phenol
		78-59-1	105-67-9	65-85-0	120-83-2	91-20-3	59-50-7	91-57-6	88-06-2	95-95-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells										
DMC-MW-A	11/24/2015	1.0 U	3.0 U	20 U	3.0 U	4.1	3.0 U	5.1	0.25 U	5.0 U
DMC-MW-A	3/30/2016	0.2 U	1.0 U	2.0 U	1.0 U	3.7	1.0 U	0.8	1.0 U	1.0 U
DMC-MW-A	9/29/2016	0.2 U	1.0 U	2.0 U	1.0 U	19	1.0 U	14	1.0 U	1.0 U
DMC-MW-B	11/24/2015	1.0 U	3.0 U	20 U	3.0 U	4.1	3.0 U	7.8	0.25 U	5.0 U
DMC-MW-B	3/30/2016	0.2 U	1.0 U	2.0 U	1.0 U	3.5	1.0 U	6.4	1.0 U	1.0 U
DMC-MW-B	9/29/2016	0.2 U	1.0 U	2.0 U	1.0 U	0.5	1.0 U	1.3	1.0 U	1.0 U
DMC-MW-C	11/24/2015	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
DMC-MW-C	3/30/2016	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U
DMC-MW-C	9/29/2016	0.2 U	1.0 U	0.2 J _B	1.0 U	0.014 J _B	1.0 U	0.2 U	1.0 U	1.0 U

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 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	2-Chloro-naphthalene	Dimethyl-phthalate	Acenaphthylene	Acenaphthene	Dibenzo-furan	2,6-Dinitro-toluene	2,4-Dinitro-toluene	Diethyl-phthalate	4-Chlorophenyl-phenylether
		91-58-7	131-11-3	208-96-8	83-32-9	132-64-9	606-20-2	121-14-2	84-66-2	7005-72-3
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells										
DMC-MW-A	11/24/2015	1.0 U	1.0 U	0.23	4.0	0.49	3.0 U	3.0 U	1.0 U	1.0 U
DMC-MW-A	3/30/2016	0.2 U	0.2 U	0.1 J	3.9	0.4	1.0 U	1.0 U	0.2 U	0.2 U
DMC-MW-A	9/29/2016	0.2 U	0.2 U	0.11	5.9	0.6	1.0 U	1.0 U	0.2 U	0.2 U
DMC-MW-B	11/24/2015	1.0 U	1.0 U	0.05 J	3.0	0.16	3.0 U	3.0 U	1.0 U	1.0 U
DMC-MW-B	3/30/2016	0.2 U	0.2 U	0.01 U	1.3	0.10	1.0 U	1.0 U	0.1 J	0.2 U
DMC-MW-B	9/29/2016	0.2 U	0.2 U	0.043	4.0	0.081	1.0 U	1.0 U	0.2 U	0.2 U
DMC-MW-C	11/24/2015	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U
DMC-MW-C	3/30/2016	0.2 U	0.2 U	0.01 U	0.01 U	0.01 U	1.0 U	1.0 U	0.1 J	0.2 U
DMC-MW-C	9/29/2016	0.2 U	0.2 U	0.010 U	0.007 J	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U

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J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Fluorene	N-Nitrosodi-phenylamine	Pentachloro-phenol	Phen-anthrene	Carbazole	Anthracene	Di-n-butyl-phthalate	Fluoranthene	Pyrene
		86-73-7	86-30-6	87-86-5	85-01-8	86-74-8	120-12-7	84-74-2	206-44-0	129-00-0
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells										
DMC-MW-A	11/24/2015	1.1	1.2	0.25 U	1.1	1.0	0.59	1.0 U	0.33	0.38
DMC-MW-A	3/30/2016	1.0	0.2 U	0.025 U	0.9	0.7 J _Q	0.4	0.2 U	0.4	0.6
DMC-MW-A	9/29/2016	1.3	0.2 U	0.025 U	1.3	1.5 J _Q	0.4	0.2 U	0.13	0.21
DMC-MW-B	11/24/2015	1.0	1.0 U	0.25 U	0.30	1.0	0.10 U	1.0 U	0.08 J	0.10 U
DMC-MW-B	3/30/2016	0.6	0.2 U	0.025 U	0.12	0.7 J _Q	0.016	0.2 U	0.027	0.023
DMC-MW-B	9/29/2016	0.8	0.2 U	0.025 U	0.076	1.2 J _Q	0.011	0.2 U	0.031	0.028
DMC-MW-C	11/24/2015	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U
DMC-MW-C	3/30/2016	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.012	0.015
DMC-MW-C	9/29/2016	0.006 J	0.2 U	0.025 U	0.005 J	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U

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 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Butylbenzyl-phthalate	Benzo(a)-anthracene	bis (2-Ethylhexyl)-phthalate	Chrysene	Di-n-octyl-phthalate	total Benzo-fluoranthenes	Benzo(a)-pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)-anthracene	Benzo(g,h,i)-perylene
		85-68-7	56-55-3	117-81-7	218-01-9	117-84-0		50-32-8	193-39-5	53-70-3	191-24-2
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	1.0 U	0.08 J	4.0	0.10 J	1.0 U	0.04 J	0.07 J	0.10 U	0.10 U	0.10 U
DMC-MW-A	3/30/2016	0.2 U	0.088	1.4	0.2	0.2 U	0.2 J	0.060	0.022 J	0.05 U	0.037 J
DMC-MW-A	9/29/2016	0.2 U	0.031	0.2	0.051	0.2 U	0.029	0.019	0.008 J	0.010 U	0.013
DMC-MW-B	11/24/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DMC-MW-B	3/30/2016	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DMC-MW-B	9/29/2016	0.2 U	0.004 J	0.3	0.006 J	0.2 U	0.005 J	0.010 U	0.010 U	0.010 U	0.010 U
DMC-MW-C	11/24/2015	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
DMC-MW-C	3/30/2016	0.2 U	0.01 U	0.3	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U
DMC-MW-C	9/29/2016	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Notes: *U* = Nondetected at the associated lower reporting limit.
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J_Q = Estimate; due to noncompliant CCV check.
 ----- = Not analyzed

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	LPAH	HPAH	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	
				319-84-6	319-85-7	319-86-8	58-89-9	76-44-8	309-00-2	1024-57-3	959-98-8	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Monitoring Wells												
DMC-MW-A	11/24/2015	11.1	1.0	0.0038 U	0.0036 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	
DMC-MW-A	3/30/2016	10	1.6	0.0058 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	
DMC-MW-A	9/29/2016	28	0.48	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	
DMC-MW-B	11/24/2015	8.45	0.10 U	0.0019 U	0.0023 U	0.00062 U	0.00062 U	0.00064 U	0.00062 U	0.00062 U	0.00062 U	
DMC-MW-B	3/30/2016	5.5	0.05	0.0048 U	0.0088 U	0.00062 U	0.00062 U	0.0019 U	0.00062 U	0.00062 U	0.00062 U	
DMC-MW-B	9/29/2016	5.4	0.074	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	
DMC-MW-C	11/24/2015	0.10 U	0.10 U	0.0022 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0015 U	0.0012 U	
DMC-MW-C	3/30/2016	0.01 U	0.027	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	
DMC-MW-C	9/29/2016	0.032	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	

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J_B = Estimate; associated value may be biased high due to contribution from
 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	Dieldrin	4,4'-DDE	Endrin	Endo-sulfan II	4,4'-DDD	Endosulfan sulfate	4,4'-DDT	Meth- oxychlor	Endrin ketone	Endrin aldehyde
		60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	1031-07-8	50-29-3	72-43-5	53494-70-5	7421-93-4
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	0.0062 U	0.039	0.0062 U	0.0076 U	0.14	0.0062 U	0.0076 U	0.031 U	0.0062 U	0.0062 U
DMC-MW-A	3/30/2016	0.0062 U	0.030	0.0062 U	0.0062 U	0.11 J _p	0.0062 U	0.0062 U	0.031 U	0.0062 U	0.0062 U
DMC-MW-A	9/29/2016	0.0013 U	0.016	0.0013 U	0.0013 U	0.064	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DMC-MW-B	11/24/2015	0.0016 U	0.0031	0.0012 U	0.0012 U	0.0077 J _p	0.0012 U	0.0017 U	0.0062 U	0.0012 U	0.0012 U
DMC-MW-B	3/30/2016	0.0066 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DMC-MW-B	9/29/2016	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
DMC-MW-C	11/24/2015	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.012 U	0.0025 U	0.0025 U
DMC-MW-C	3/30/2016	0.0012 U	0.0012 U	0.0012 U	0.0023 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
DMC-MW-C	9/29/2016	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property

ICS/NWC RI/FS
 Seattle, Washington

Location	Date	trans-Chlordane	cis-Chlordane	Toxaphene	Hexachloro-benzene	Hexachloro-butadiene	Aroclor 1016	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
		5103-74-2	5103-71-9	8001-35-2	118-74-1	87-68-3	12674-11-2	53469-21-9	12672-29-6	11097-69-1	11096-82-5
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Monitoring Wells											
DMC-MW-A	11/24/2015	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.18	0.29	0.14
DMC-MW-A	3/30/2016	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.083	0.14	0.067
DMC-MW-A	9/29/2016	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.015 U	0.035 J _p	0.036 J _p
DMC-MW-B	11/24/2015	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020	0.020	0.009 J
DMC-MW-B	3/30/2016	0.00062 U	0.00062 U	0.063 U	0.0021	0.0012 U	0.010 U	0.010 U	0.010 U	0.018	0.008 J
DMC-MW-B	9/29/2016	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.013	0.007 J
DMC-MW-C	11/24/2015	0.0012 U	0.019 U	0.13 U	0.0025 U	0.0025 U	0.010 U	0.010 U	0.012	0.019 J _p	0.010 U
DMC-MW-C	3/30/2016	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.012 U	0.016	0.005 J
DMC-MW-C	9/29/2016	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
 laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

**TABLE G-4 - MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
- Douglas Property**

ICS/NWC RI/FS
Seattle, Washington

Location	Date	Aroclor 1221	Aroclor 1232	total PCBs
		11104-28-2	11141-16-5	
		µg/L	µg/L	µg/L
Monitoring Wells				
DMC-MW-A	11/24/2015	0.010 U	0.010 U	0.61
DMC-MW-A	3/30/2016	0.010 U	0.010 U	0.29
DMC-MW-A	9/29/2016	0.010 U	0.010 U	0.071
DMC-MW-B	11/24/2015	0.010 U	0.010 U	0.049
DMC-MW-B	3/30/2016	0.010 U	0.010 U	0.026
DMC-MW-B	9/29/2016	0.010 U	0.010 U	0.020
DMC-MW-C	11/24/2015	0.010 U	0.010 U	0.031
DMC-MW-C	3/30/2016	0.010 U	0.010 U	0.021
DMC-MW-C	9/29/2016	0.010 U	0.010 U	0.010 U

Notes: *U* = Nondetected at the associated lower reporting limit.

J = Estimate associated with value less than the verifiable lower quantitation limit.

J_B = Estimate; associated value may be biased high due to contribution from
laboratory background or method blank

J_Q = Estimate; due to noncompliant CCV check.

----- = Not analyzed

J_p = Estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B)

Table G-4
RI Groundwater Analytical Data - TPH and VOCs Results
7100 1st Avenue South Site
Seattle, Washington

Parameter	Screening Level	Unit	DP-10 7/8/2013	DP-11 7/8/2013	SP-1 7/18/2008	SP-1 9/4/2013	SP-1 3/20/2014	SP-1 7/14/2014	SEEP-1 5/4/2007	SEEP-1 9/3/2013	SEEP-1 3/20/2014	SEEP-1 7/14/2014	MW-1 11/1/1990	MW-1 9/5/1991	MW-1 1/10/1992
Total Petroleum Hydrocarbons (TPH)															
TPH ¹	500	µg/L	–	–	–	–	–	–	–	–	–	–	590	10000 U	2000 U
Gasoline-range hydrocarbons	800	µg/L	4900	1000	–	250 U	250 U	250 U	–	250 U	250 U	250 U	–	–	–
Diesel-range hydrocarbons	500	µg/L	1900	990	–	100 U	100 U	100 U	–	970	600	210	–	–	–
Lube Oil-range Hydrocarbons	500	µg/L	390	410	–	200 U	200 U	200 U	–	1700	360	230	–	–	–
Volatile Organic Compounds (VOCs)															
1,1,2-Trichloroethane	8.9	µg/L	3.4	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
1,2,4-Trimethylbenzene	NE	µg/L	3.6	0.29	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
1,2-Dichloroethane	99	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
1,3,5-Trimethylbenzene	NE	µg/L	2.1	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
2-Butanone (MEK)	NE	µg/L	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	–	5.0 U	5.0 U	5.0 U	–	–	–
2-Hexanone	NE	µg/L	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	–	5.0 U	5.0 U	5.0 U	–	–	–
Acetone	NE	µg/L	5.0 U	5.0 U	20 U*	2.9 NJ	5.0 U	5.0 U	–	5.8 U	2.3 J	2.7 J	–	–	–
Benzene	58	µg/L	360	1.4	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	1.0 U*	1.0 U*	1.0 U*
Bromomethane	967.9	µg/L	1.0 U	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	–	–
Carbon Disulfide	NE	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Chloroform	150	µg/L	0.20 U	0.20 U	1.7 *	0.20 U	0.12 J	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Chloromethane	NE	µg/L	0.50 U	0.50 U	0.5 U*	0.50 U	0.50 U	0.33 J	–	0.50 U	0.50 U	0.50 U	–	–	–
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Dichlorodifluoromethane (CFC-12)	NE	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Ethylbenzene	130	µg/L	97	0.22	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	1.0 U*	1.0 U*	1.0 U*
Isopropylbenzene (Cumene)	NE	µg/L	33	2.2	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Methyl Iodide (Iodomethane)	NE	µg/L	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	–	–
Methylene Chloride	590	µg/L	1.0 U	1.0 U	2 U*	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	–	–
n-Butylbenzene	NE	µg/L	13	12	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
n-Propylbenzene	NE	µg/L	110	8.1	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
p-Isopropyltoluene	NE	µg/L	0.72	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Sec-Butylbenzene	NE	µg/L	5.4	3.1	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Tert-Butylbenzene	NE	µg/L	0.22	0.25	2 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Tetrachloroethene	3.3	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Toluene	520	µg/L	9.2	0.96	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	1.0 U*	1.0 U*	1.0 U*
Trichloroethene	12.7	µg/L	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	–	–	–
Xylene, m-,p-	NE	µg/L	29	2.1	0.5 U*	0.40 U	0.40 U	0.40 U	–	0.40 U	0.40 U	0.40 U	1.0 U*	–	–
Xylene, o-	NE	µg/L	1.8	0.34	0.5 U*	0.20 U	0.20 U	0.20 U	–	0.20 U	0.20 U	0.20 U	1.0 U*	–	–

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-1 4/9/1992	MW-1 8/16/1992	MW-1 7/16/2008	MW-1 8/15/2013	MW-1 12/16/2013	MW-1 3/19/2014	MW-1 7/15/2014	MW-2 11/1/1990	MW-2 9/5/1991	MW-2 1/10/1992	MW-2 4/9/1992	MW-2 8/16/1992	MW-2R 8/20/2013
TPH															
TPH ¹	500	µg/L	–	–	–	–	–	–	–	560	–	2000 U	–	–	–
Gasoline-range hydrocarbons	800	µg/L	250 U*	250 U*	–	250 U	250 U	250 U	250 U	–	–	–	140 J*	250 U*	320
Diesel-range hydrocarbons	500	µg/L	250 U*	250 U*	250 U*	270	260	360	270	–	–	–	580 *	250 U*	570
Lube Oil-range Hydrocarbons	500	µg/L	–	–	500 U*	220	240	320	200 U	–	–	–	–	–	500
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.42
1,2-Dichloroethane	99	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
2-Butanone (MEK)	NE	µg/L	–	–	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	–	–	–	–	–	5.0 U
2-Hexanone	NE	µg/L	–	–	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	–	–	–	–	–	5.0 U
Acetone	NE	µg/L	–	–	20 U*	5.0 U	5.3	5.0 U	2.7 J	–	–	–	–	–	5.2
Benzene	58	µg/L	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U*	88 *	110 *	65 *	1.0 U*	66
Bromomethane	967.9	µg/L	–	–	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–	1.0 U
Carbon Disulfide	NE	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Chloroform	150	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Chloromethane	NE	µg/L	–	–	0.5 U*	0.50 U	0.50 U	0.50 U	0.50 U	–	–	–	–	–	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Dichlorodifluoromethane (CFC-12)	NE	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Ethylbenzene	130	µg/L	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U*	1.0 U*	1.0 U*	1.0 U*	1.0 U*	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	1.7
Methyl Iodide (Iodomethane)	NE	µg/L	–	–	–	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–	1.0 U
Methylene Chloride	590	µg/L	–	–	2 U*	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–	1.0 U
n-Butylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
n-Propylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	1.1
p-Isopropyltoluene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Sec-Butylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Tert-Butylbenzene	NE	µg/L	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Tetrachloroethene	3.3	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Toluene	520	µg/L	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U*	1.0 U*	1.0 U*	1.0 U*	1.0 U*	2.2
Trichloroethene	12.7	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–	0.20 U
Xylene, m-,p-	NE	µg/L	–	–	0.5 U*	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U*	–	–	–	–	7.8
Xylene, o-	NE	µg/L	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U*	–	–	–	–	2.0

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-2R 12/20/2013	MW-2R 3/18/2014	MW-2R 7/17/2014	MW-3 11/1/1990	MW-3 12/18/1990	MW-3 9/5/1991	MW-3 1/10/1992	MW-3 4/9/1992	MW-3 8/16/1992	MW-3 7/16/2008	MW-3 8/16/2013	MW-3 12/16/2013	MW-3 3/19/2014
TPH															
TPH ¹	500	µg/L	–	–	–	330	–	10000 U	2000 U	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	390	750	680	–	–	–	–	720 *	310 *	–	250 U	360	290
Diesel-range hydrocarbons	500	µg/L	780	500	570	–	–	–	–	250 U*	300 *	–	320	310	350
Lube Oil-range Hydrocarbons	500	µg/L	980	200	320	–	–	–	–	–	–	–	200 U	200 U	200 U
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	0.64	1.2	0.92	–	–	–	–	–	–	2 U*	0.20 U	0.38	0.25
1,2-Dichloroethane	99	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	2.5 *	0.20 U	0.20 U	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	0.20 U	0.79	0.62	–	–	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U
2-Butanone (MEK)	NE	µg/L	5.0 U	5.0 U	5.0 U	–	–	–	–	–	–	20 U*	5.0 U	9.8	5.0 U
2-Hexanone	NE	µg/L	5.0 U	5.0 U	5.0 U	–	–	–	–	–	–	20 U*	5.0 U	5.0 U	5.0 U
Acetone	NE	µg/L	3.9 J	5.0 U	4.8 J	–	–	–	–	–	–	20 U*	8.5	9.8	6.6
Benzene	58	µg/L	65	7.4	18	1.0 U*	420.0 *	670 *	500 *	620 *	910 *	89 J*	7.9	10	7.1
Bromomethane	967.9	µg/L	1.0 U	1.0 U	1.0 U	–	–	–	–	–	–	0.5 U*	1.0 U	1.0 U	1.0 U
Carbon Disulfide	NE	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.12 J	0.20 U
Chloroform	150	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
Chloromethane	NE	µg/L	0.50 U	0.50 U	0.28 J	–	–	–	–	–	–	0.5 U*	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
Dichlorodifluoromethane (CFC-12)	NE	µg/L	0.20 U	–	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
Ethylbenzene	130	µg/L	0.15 J	0.20 U	0.14 J	1.1 *	13.0 *	16 *	14 *	9.1 *	9.4 *	0.5 U*	0.20 U	0.34	0.12 J
Isopropylbenzene (Cumene)	NE	µg/L	2.3	7.0	6.0	–	–	–	–	–	–	2 U*	0.20 U	1.2	0.46
Methyl Iodide (Iodomethane)	NE	µg/L	1.0 U	1.0 U	1.0 U	–	–	–	–	–	–	–	1.0 U	1.0 U	1.0 U
Methylene Chloride	590	µg/L	1.0 U	1.0 U	1.0 U	–	–	–	–	–	–	2 U*	1.0 U	1.0 U	1.0 U
n-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U
n-Propylbenzene	NE	µg/L	1.6	6.6	6.6	–	–	–	–	–	–	2 U*	0.38	3.0	1.0
p-Isopropyltoluene	NE	µg/L	0.08 J	0.20 U	0.17 J	–	–	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U
Sec-Butylbenzene	NE	µg/L	0.03 J	0.20 U	0.20 U	–	–	–	–	–	–	2 U*	0.20 U	0.22	0.20 U
Tert-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U
Tetrachloroethene	3.3	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
Toluene	520	µg/L	2.9	4.4	3.5	1.0 U*	3.5 *	3.2 *	3.8 *	3.0 *	3.2 *	0.89 *	0.49	1.1	0.69
Trichloroethene	12.7	µg/L	0.20 U	0.20 U	0.20 U	–	–	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U
Xylene, m-,p-	NE	µg/L	11	23	16	5.3 *	45.0 *	–	–	–	–	1.9 *	1.1	5.4	2.8
Xylene, o-	NE	µg/L	2.8	3.7	2.6	1.0 U*	3.4 *	–	–	–	–	0.78 *	0.48	1.0	0.75

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-3 7/16/2014	MW-4 11/1/1990	MW-4 12/18/1990	MW-4 9/5/1991	MW-4 1/10/1992	MW-4 4/9/1992	MW-4 8/16/1992	MW-4 7/16/2008	MW-4 8/16/2013	MW-4 12/16/2013	MW-4 3/17/2014	MW-4 7/16/2014	MW-5 12/18/1990
TPH															
TPH ¹	500	µg/L	–	270	–	10000 U	2000 U	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	250 U	–	–	–	–	150 J*	220 J*	350 J*	23000	5100	9500	7500	–
Diesel-range hydrocarbons	500	µg/L	340	–	–	–	–	250 U*	250 U*	730 J*	2700	2000	2700	2500	–
Lube Oil-range Hydrocarbons	500	µg/L	200 U	–	–	–	–	–	–	520 U*	350	410	440	500	–
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
1,2,4-Trimethylbenzene	NE	µg/L	0.21	–	–	–	–	–	–	2 U*	64	18	41	23	–
1,2-Dichloroethane	99	µg/L	0.20 U	–	–	–	–	–	–	2.9 *	3.0 U	0.20 U	0.20 U	1.0 U	–
1,3,5-Trimethylbenzene	NE	µg/L	0.11 J	–	–	–	–	–	–	2.3 *	71	32	55	39	–
2-Butanone (MEK)	NE	µg/L	5.0 U	–	–	–	–	–	–	20 U*	75 U	5.0 U	5.0 U	18 J	–
2-Hexanone	NE	µg/L	5.0 U	–	–	–	–	–	–	20 U*	75 U	5.0 U	5.0 U	25 U	–
Acetone	NE	µg/L	3.2 U	–	–	–	–	–	–	20 U*	75 U	4.8 J	5.4	25 U	–
Benzene	58	µg/L	3.4	4200 *	3600 *	2000 *	2700 *	1800 *	3400 *	100 J*	29	15	37	29	5.0 U*
Bromomethane	967.9	µg/L	1.0 U	–	–	–	–	–	–	0.5 U*	15 U	1.0 U	1.0 U	5.0 U	–
Carbon Disulfide	NE	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
Chloroform	150	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
Chloromethane	NE	µg/L	0.33 J	–	–	–	–	–	–	0.5 U*	7.5 U	0.50 U	0.50 UJ	2.5 U	–
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
Dichlorodifluoromethane (CFC-12)	NE	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 UJ	1.0 U	–
Ethylbenzene	130	µg/L	0.20 U	2.1 *	50 U*	1.0 U*	4.1 *	1.0 U*	4.6 *	0.89 *	270	52	41	17	5.0 U*
Isopropylbenzene (Cumene)	NE	µg/L	0.14 J	–	–	–	–	–	–	2 U*	31	7.7	6.3	4.2	–
Methyl Iodide (Iodomethane)	NE	µg/L	1.0 U	–	–	–	–	–	–	–	15 U	1.0 U	1.0 U	5.0 U	–
Methylene Chloride	590	µg/L	1.0 U	–	–	–	–	–	–	2 U*	15 U	1.0 U	1.0 U	5.0 U	–
n-Butylbenzene	NE	µg/L	0.20 U	–	–	–	–	–	–	3.5 *	41	5.0	0.20 U	12	–
n-Propylbenzene	NE	µg/L	0.18 J	–	–	–	–	–	–	2 U*	100	17	13	8.1	–
p-Isopropyltoluene	NE	µg/L	0.20 U	–	–	–	–	–	–	2 U*	9.4	2.9	4.3	3.4	–
Sec-Butylbenzene	NE	µg/L	0.20 U	–	–	–	–	–	–	2 U*	13	2.6	2.5	1.6	–
Tert-Butylbenzene	NE	µg/L	0.20 U	–	–	–	–	–	–	2 U*	3.0 U	0.18 J	0.18 J	1.0 U	–
Tetrachloroethene	3.3	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
Toluene	520	µg/L	0.45	8.3 *	50 U*	12 *	11 *	6.2 *	12 *	3.9 *	3.6	1.6	2.6	2.9	5.0 U*
Trichloroethene	12.7	µg/L	0.20 U	–	–	–	–	–	–	0.5 U*	3.0 U	0.20 U	0.20 U	1.0 U	–
Xylene, m-,p-	NE	µg/L	1.1	1.0 U*	63 *	–	–	–	–	15 *	37	16	25	15	5.0 U*
Xylene, o-	NE	µg/L	0.60	4.2 *	50 U*	–	–	–	–	1.6 *	3.1	2.0	3.0	1.8	5.0 U*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-5 1/10/1992	MW-5 4/9/1992	MW-5 8/16/1992	MW-5 7/17/2008	MW-5 8/15/2013	MW-5 12/26/2013	MW-5 3/17/2014	MW-5 7/17/2014	MW-6 12/18/1990	MW-6 1/10/1992	MW-6 4/9/1992	MW-6 8/16/1992	MW-7 12/18/1990
TPH															
TPH ¹	500	µg/L	2000 U	–	–	–	–	–	–	–	–	2000 U	–	–	–
Gasoline-range hydrocarbons	800	µg/L	–	250 U*	250 U*	–	250 U	250 U	250 U	250 U	–	–	250 U*	250 U*	–
Diesel-range hydrocarbons	500	µg/L	–	250 U*	280 *	750 J*	240	200	350	320	–	–	4200 *	1100 *	–
Lube Oil-range Hydrocarbons	500	µg/L	–	–	–	500 U*	200 U	200 U	240	220	–	–	–	–	–
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
1,2,4-Trimethylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
1,2-Dichloroethane	99	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
1,3,5-Trimethylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
2-Butanone (MEK)	NE	µg/L	–	–	–	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	–	–	–	–	–
2-Hexanone	NE	µg/L	–	–	–	20 U*	5.0 U	5.0 UJ	5.0 U	5.0 U	–	–	–	–	–
Acetone	NE	µg/L	–	–	–	20 U*	5.0 U	3.5 U	5.0 U	3.9 J	–	–	–	–	–
Benzene	58	µg/L	1.0 U*	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U*	1.0 U*	1.0 U*	1.0 U*	5.0 U*
Bromomethane	967.9	µg/L	–	–	–	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–
Carbon Disulfide	NE	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Chloroform	150	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Chloromethane	NE	µg/L	–	–	–	0.5 U*	0.50 U	0.50 U	0.50 UJ	0.50 U	–	–	–	–	–
cis-1,2-Dichloroethene	NE	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Dichlorodifluoromethane (CFC-12)	NE	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 UJ	0.20 U	–	–	–	–	–
Ethylbenzene	130	µg/L	1.0 U*	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U*	1.0 U*	1.0 U*	1.0 U*	5.0 U*
Isopropylbenzene (Cumene)	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Methyl Iodide (Iodomethane)	NE	µg/L	–	–	–	–	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–
Methylene Chloride	590	µg/L	–	–	–	2 U*	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–
n-Butylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
n-Propylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
p-Isopropyltoluene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Sec-Butylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Tert-Butylbenzene	NE	µg/L	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Tetrachloroethene	3.3	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Toluene	520	µg/L	1.0 U*	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U*	1.0 U*	1.0 U*	1.0 U*	5.0 U*
Trichloroethene	12.7	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	–	–	–	–	–
Xylene, m-,p-	NE	µg/L	–	–	–	0.5 U*	0.40 U	0.40 U	0.40 U	0.40 U	5.0 U*	–	–	–	5.0 U*
Xylene, o-	NE	µg/L	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U*	–	–	–	5.0 U*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-7 9/5/1991	MW-7 1/10/1992	MW-7 4/9/1992	MW-7 8/16/1992	MW-8 7/17/2008	MW-8 8/14/2013	MW-8 12/19/2013	MW-8 3/19/2014	MW-8 7/14/2014	MW-9 7/17/2008	MW-9 8/15/2013	MW-9 12/16/2013	MW-9 3/19/2014
TPH															
TPH ¹	500	µg/L	10000 U	2000 U	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	–	–	250 U*	250 U*	–	250 U	250 U	250 U	250 U	–	250 U	250 U	250 U
Diesel-range hydrocarbons	500	µg/L	–	–	6600 *	730 *	–	100 U	100 U	100 U	100 U	–	100 U	100 U	100 U
Lube Oil-range Hydrocarbons	500	µg/L	–	–	–	–	–	200 U	200 U	200 U	200 U	–	200 U	200 U	200 U
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
1,2-Dichloroethane	99	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
2-Butanone (MEK)	NE	µg/L	–	–	–	–	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U
2-Hexanone	NE	µg/L	–	–	–	–	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U
Acetone	NE	µg/L	–	–	–	–	20 U*	5.0 U	4.0 J	5.0 U	5.0 U	20 U*	5.0 U	3.8 J	2.5 J
Benzene	58	µg/L	2.0 *	1.7 *	1.6 *	1.1 *	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.8 *	0.20 U	0.20 U	0.20 U
Bromomethane	967.9	µg/L	–	–	–	–	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 UJ
Carbon Disulfide	NE	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Chloroform	150	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Chloromethane	NE	µg/L	–	–	–	–	0.5 U*	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U*	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Dichlorodifluoromethane (CFC-12)	NE	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 UJ
Ethylbenzene	130	µg/L	1.0 U*	1.0 U*	1.0 U*	1.0 U*	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
Methyl Iodide (Iodomethane)	NE	µg/L	–	–	–	–	–	1.0 U	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 UJ
Methylene Chloride	590	µg/L	–	–	–	–	2 U*	1.0 U	1.0 U	1.0 U	1.0 U	2 U*	1.0 U	1.0 U	1.0 U
n-Butylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
n-Propylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
p-Isopropyltoluene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
Sec-Butylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
Tert-Butylbenzene	NE	µg/L	–	–	–	–	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U
Tetrachloroethene	3.3	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Toluene	520	µg/L	70 *	4.2 *	1.0 U*	22 *	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Trichloroethene	12.7	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U
Xylene, m-,p-	NE	µg/L	–	–	–	–	0.5 U*	0.40 U	0.40 U	0.40 U	0.40 U	0.5 U*	0.40 U	0.40 U	0.40 U
Xylene, o-	NE	µg/L	–	–	–	–	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-9 7/14/2014	MW-10 7/17/2008	MW-10 8/16/2013	MW-10 12/16/2013	MW-10 3/19/2014	MW-10 7/15/2014	MW-11 7/17/2008	MW-11 8/15/2013	MW-11 12/26/2013	MW-11 3/19/2014	MW-11 7/14/2014	MW-12 7/16/2008	MW-12 8/16/2013
TPH															
TPH ¹	500	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	250 U	–	250 U	250 U	250 U	250 U	–	250 U	250 U	250 U	250 U	250 U*	310
Diesel-range hydrocarbons	500	µg/L	100 U	–	150	100 U	360	100 U	–	100 U	100 U	100 U	100 U	680 J*	410
Lube Oil-range Hydrocarbons	500	µg/L	200 U	–	200 U	200 U	240	200 U	–	200 U	200 U	200 U	200 U	500 U*	200 U
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
1,2-Dichloroethane	99	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	1.5 *	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
2-Butanone (MEK)	NE	µg/L	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U
2-Hexanone	NE	µg/L	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U
Acetone	NE	µg/L	5.0 U	20 U*	5.0 U	3.0 J	2.2 J	2.8 J	20 U*	5.0 U	5.0 U	5.0 U	5.0 U	20 U*	5.0 U
Benzene	58	µg/L	0.20 U	1.1 *	0.20 U	0.20 U	0.30	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	59 *	0.55
Bromomethane	967.9	µg/L	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U*	1.0 U
Carbon Disulfide	NE	µg/L	0.17 J	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
Chloroform	150	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	3.6 *	0.20 U	0.43	0.20 U	0.20 U	0.5 U*	0.20 U
Chloromethane	NE	µg/L	0.30 J	0.5 U*	0.50 U	0.50 U	0.50 U	0.50 U	0.5 U*	0.50 U	0.50 U	0.50 U	0.28 J	0.5 U*	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.11 J	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.24
Dichlorodifluoromethane (CFC-12)	NE	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
Ethylbenzene	130	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.28
Methyl Iodide (Iodomethane)	NE	µg/L	1.0 U	–	1.0 U	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	1.0 U	–	1.0 U
Methylene Chloride	590	µg/L	1.0 U	2 U*	1.0 U	1.0 U	1.0 U	1.0 U	2 U*	1.0 U	1.0 U	1.0 U	1.0 U	2 U*	1.0 U
n-Butylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
n-Propylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
p-Isopropyltoluene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
Sec-Butylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
Tert-Butylbenzene	NE	µg/L	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U	0.20 U	0.20 U	0.20 U	2 U*	0.20 U
Tetrachloroethene	3.3	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
Toluene	520	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.15 J	0.20 U	0.20 U	0.73 *	0.20 U
Trichloroethene	12.7	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.20 U
Xylene, m-,p-	NE	µg/L	0.40 U	0.5 U*	0.40 U	0.40 U	0.38 J	0.40 U	0.5 U*	0.40 U	0.11 J	0.40 U	0.40 U	0.5 U*	0.69
Xylene, o-	NE	µg/L	0.20 U	0.5 U*	0.20 U	0.20 U	0.14 J	0.20 U	0.5 U*	0.20 U	0.20 U	0.20 U	0.20 U	0.5 U*	0.42

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-12 12/16/2013	MW-12 3/19/2014	MW-12 7/15/2014	MW-13 8/14/2013	MW-13 12/17/2013	MW-13 3/20/2014	MW-13 7/14/2014	MW-14 8/19/2013	MW-14 12/17/2013	MW-14 3/18/2014	MW-14 7/14/2014	MW-15 8/15/2013	MW-15 12/26/2013
TPH															
TPH ¹	500	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	550	500	680	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Diesel-range hydrocarbons	500	µg/L	550	530	540	100 U	100 U	100 U	100 U	100 U	990	100 U	100 U	140	130
Lube Oil-range Hydrocarbons	500	µg/L	350	230	200	200 U	200 U	200 U	200 U	200 U	370	200 U	200 U	200 U	200 U
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	0.15 J	0.20 U	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichloroethane	99	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Butanone (MEK)	NE	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	NE	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	NE	µg/L	2.9 J	2.7 J	5.0 U	5.0 U	3.0 J	5.0 U	5.0 U	5.0 U	2.4 J	5.0 U	5.0 U	5.0 U	3.1 U
Benzene	58	µg/L	0.12 J	0.28	0.30	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromomethane	967.9	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloroform	150	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloromethane	NE	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.36 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	0.18 J	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Dichlorodifluoromethane (CFC-12)	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Ethylbenzene	130	µg/L	0.05 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	0.43	0.30	0.37	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Methyl Iodide (Iodomethane)	NE	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	590	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
n-Propylbenzene	NE	µg/L	0.10 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
p-Isopropyltoluene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	1.4	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Sec-Butylbenzene	NE	µg/L	0.16 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tert-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tetrachloroethene	3.3	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	520	µg/L	0.22	0.23	0.16 J	0.11 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene	12.7	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Xylene, m-,p-	NE	µg/L	1.0	0.82	0.77	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Xylene, o-	NE	µg/L	0.44	0.40	0.43	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-15 3/20/2014	MW-15 7/15/2014	MW-16 8/19/2013	MW-16 12/16/2013	MW-16 3/17/2014	MW-16 7/17/2014	MW-17 8/19/2013	MW-17 12/20/2013	MW-17 3/17/2014	MW-17 7/16/2014	MW-18 8/20/2013	MW-18 12/19/2013	MW-18 3/18/2014
TPH															
TPH ¹	500	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	250 U	250 U	250 U	250 U	390	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Diesel-range hydrocarbons	500	µg/L	150	120	360	270	480	360	300 J	440	370	530	430	420	600
Lube Oil-range Hydrocarbons	500	µg/L	200 U	200 U	390	250	200 U	210	230	470	290	450	270	380	330
VOCs															
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2,4-Trimethylbenzene	NE	µg/L	0.20 U	0.20 U	0.14 J	0.19 J	0.49	0.35	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U	0.20 U
1,2-Dichloroethane	99	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.31	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Butanone (MEK)	NE	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone		ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	NE	µg/L	2.6 J	5.0 U	5.0 U	2.9 J	4.6 J	2.3 J	4.2 J	4.3 J	2.2 J	2.9 U	5.0 U	2.8 J	5.0 U
Benzene	58	µg/L	0.20 U	0.20 U	49	78	22	65	0.12 J	0.22	0.17 J	0.13 J	0.20 U	0.20 U	0.20 U
Bromomethane	967.9	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	NE	µg/L	0.20 U	0.20 U	0.48	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloroform	150	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloromethane	NE	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.22 J	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	0.20 U	0.21	0.30	0.20 U	0.14 J	0.11 J	0.20 U	0.20 U	0.20 U	0.19 J	0.18 J	0.13 J
Dichlorodifluoromethane (CFC-12)		ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U
Ethylbenzene	130	µg/L	0.20 U	0.20 U	0.20 U	0.18 J	0.57	0.24	2.3	1.2	0.56	0.33	0.20 U	0.20 U	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	0.20 U	0.20 U	0.20 U	0.36	0.92	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U	0.20 U
Methyl Iodide (Iodomethane)		ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	590	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.27	0.20 U	0.23	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
n-Propylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	1.1	2.5	1.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
p-Isopropyltoluene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Sec-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tert-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tetrachloroethene	3.3	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	520	µg/L	0.20 U	0.20 U	0.19 J	0.46	0.66	0.62	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene	12.7	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Xylene, m-,p-	NE	µg/L	0.40 U	0.40 U	0.35 J	1.9	4.9	2.7	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Xylene, o-	NE	µg/L	0.20 U	0.20 U	0.18 J	0.45	0.77	0.76	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-18 7/16/2014	MW-19 8/20/2013	MW-19 12/16/2013	MW-19 3/17/2014	MW-19 7/16/2014	MWA 11/24/2015	MWA 3/30/2016	MWB 11/24/2015	MWB 3/30/2016	MWC 11/24/2015	MWC 3/30/2016
TPH													
TPH ¹	500	µg/L	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	800	µg/L	250 U	420	690	1000	980	350	260	380	500	250 U	100 U
Diesel-range hydrocarbons	500	µg/L	400	1100	100 U	1100	1100	750	760	460	150	100 U	100 U
Lube Oil-range Hydrocarbons	500	µg/L	250	260	200 U	400	320	1200	1100	200 U	200 U	200 U	200 U
VOCs													
1,1,2-Trichloroethane	8.9	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	–	0.20 U	–	0.20 U	–
1,2,4-Trimethylbenzene	NE	µg/L	0.20 U	0.78	0.73	1.2	1.4	0.82	0.59	7.6	12	0.20 U	0.03 JB
1,2-Dichloroethane	99	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,3,5-Trimethylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.70	0.85	0.20 U	–	4	–	0.20 U	–
2-Butanone (MEK)	NE	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	NE	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	NE	µg/L	3.6 U	6.6	4.8 J	3.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	58	µg/L	0.20 U	27	25	31	24	31	29	0.27	0.33	0.20 U	0.20 U
Bromomethane	967.9	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloroform	150	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U	0.20 U
Chloromethane	NE	µg/L	0.50 U	0.50 U	0.50 U	0.50 UJ	0.38 J	0.50 U	0.14 JB	0.50 U	0.33 JB	0.50 U	0.50 U
cis-1,2-Dichloroethene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.15 J	0.12 J	0.20 U	0.20 U
Dichlorodifluoromethane (CFC-12)	NE	ug/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	–	–	–	–	–	–
Ethylbenzene	130	µg/L	0.20 U	2.0	2.1	2.4	2.2	0.99	0.15 J	2	1.6	0.20 U	0.20 U
Isopropylbenzene (Cumene)	NE	µg/L	0.20 U	4.6	6.1	8.3	8.2	2.3	1.7	3.2	4.1	0.20 U	0.20 U
Methyl Iodide (Iodomethane)	NE	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	–	–	–	–	–	–
Methylene Chloride	590	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20	0.20 U	0.59	0.37 JQ	0.63	0.74 JQ	0.20 U	0.20 U
n-Propylbenzene	NE	µg/L	0.20 U	7.6	9.6	15	15	0.96	0.62	1.8	2.2	0.20 U	0.20 U
p-Isopropyltoluene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.22	0.34	0.6	0.22	1.1	1.3	0.20 U	0.20 U
Sec-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20	0.34	0.40	0.63	0.41	0.69	0.8	0.20 U	0.20 U
Tert-Butylbenzene	NE	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.06 J	0.10 J	0.20 U	0.20 U
Tetrachloroethene	3.3	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	520	µg/L	0.20 U	2.9	3.3	3.8	3.5	0.26	0.07 J	0.28	0.10 J	0.20 U	0.20 U
Trichloroethene	12.7	ug/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Xylene, m-,p-	NE	µg/L	0.40 U	11	13	18	16	0.84	0.55	2.7	6.1	0.40 U	0.40 U
Xylene, o-	NE	µg/L	0.20 U	1.9	1.9	2.5	2.7	0.83	0.27	0.12 J	1.7	0.20 U	0.20 U

Notes:

¹ Historic Dames and Moore samples were analyzed by an out of date combined Total Petroleum Hydrocarbons (TPH) method. Review of chromatographs indicate product is predominantly heavy oil range hydrocarbons. Therefore, the Proposed Screening Level for lube oil range hydrocarbons is used to screen the historic data.

J = estimated value

NE = A Screening Level was not established for this analyte (See Table 9)

T = summed result

U = not detected

µg/L = micrograms per liter

Bold = detected value

Yellow Fill indicates detected result > the groundwater Screening Level

Blue Fill indicates not detected with reporting limit > the groundwater Screening Level

Table G-5
RI Groundwater Analytical Data - SVOCs and PAHs Results
7100 1st Avenue South Site
Seattle, Washington

Parameter	Screening Level	Unit	DP-10 7/8/2013	DP-11 7/8/2013	SP-1 7/18/2008	SP-1 9/4/2013	SP-1 3/20/2014	SP-1 7/14/2014	SEEP-1 5/4/2007	SEEP-1 9/3/2013	SEEP-1 3/20/2014	SEEP-1 7/14/2014	MW-1 7/16/2008	MW-1 8/15/2013	MW-1 12/16/2013
Semivolatile Organic Compounds (SVOCs)															
2,4-Dimethylphenol	150	µg/L	3.0 U	3.0 U	4 U*	3.0 U	3.0 U	3.0 U	2.3 U*	3.0 U	3.0 U	3.0 U	3.8 U*	3.0 U	3.0 U
Benzoic Acid	NE	µg/L	20 U	20 U	5 U*	20 U	20 U	20 U	5.6 U*	20 U	20 U	20 U	4.8 U*	20 U	20 U
Benzyl Alcohol		µg/L	2.0 U	2.0 U	5 U*	2.0 U	2.0 U	2.0 U	5.6 U*	2.0 U	2.0 U	2.0 U	4.8 U*	2.0 U	2.0 U
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	3.0 U	3.0 U	1 U*	3.0 U	3.0 U	3.0 U	1.2 U*	1.0 J	3.0 U	3.0 U	0.95 U*	3.0 U	3.0 U
Butyl benzyl phthalate	82.4	µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	0.23 U*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
Carbazole	NE	µg/L	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U
Dibutyl phthalate	2900	µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	0.11 J*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
Diethyl phthalate	600	µg/L	1.0 U	1.4	0.2 U*	1.0 U	1.0 U	1.0 U	0.04 J*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	0.23 U*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
Di-N-Octyl Phthalate		µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	0.23 U*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
Isophorone	600	µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	0.23 U*	1.0 U	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	2.0 U	2.0 U	0.5 U*	2.0 U	2.0 U	2.0 U	0.56 U*	2.0 U	2.0 U	2.0 U	0.48 U*	2.0 U	2.0 U
Pentachlorophenol	5	µg/L	10 U	10 U	1 U*	10 U	10 U	10 U	0.06 J*	10 U	10 U	10 U	0.95 U*	10 U	10 U
Phenol	150000	µg/L	1.7	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 U	0.56 U*	1.0 U	1.0 U	1.0 U	0.48 U*	1.0 U	1.0 U
Phosphoric Acid Tributyl Ester	NE	µg/L	–	–	–	1.0 U	1.0 U	–	–	1.0 U	1.0 U	–	–	1.0 U	1.0 U
Polycyclic Aromatic Hydrocarbons (PAHs)															
1-Methylnaphthalene	NE	µg/L	20	2.2	–	0.096	0.010 U	0.010	–	0.010 U	0.010 U	0.010 U	–	0.013	0.017
2-Methylnaphthalene	NE	µg/L	31	0.99	0.2 U*	0.010 U	0.010 U	0.010 U	0.23 U*	0.010 U	0.010 U	0.010 U	0.19 U*	0.017	0.017
Acenaphthene	90	µg/L	0.19	0.49	0.35 *	0.94 J	0.030 J	0.24	0.23 U*	0.010	0.010 U	0.010 U	0.19 U*	0.14	0.10
Acenaphthylene	NE	µg/L	0.010 U	0.013	0.2 U*	0.015	0.010 U	0.010 U	0.23 U*	0.010 U	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Anthracene	400	µg/L	0.027	0.014	0.2 U*	0.057 J	0.010 U	0.010 U	0.23 U*	0.010 U	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Benzo(ghi)perylene	0.016	µg/L	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.23 U*	0.034	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Dibenzofuran	NE	µg/L	0.048	0.033	0.2 U*	0.19 UJ	0.010 J	0.026	0.23 U*	0.010 UJ	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Fluoranthene	3.3	µg/L	0.056	0.012	0.2 U*	0.50 J	0.037	0.019	0.04 J*	0.056	0.028	0.010 U	0.19 U*	0.010 U	0.010 U
Fluorene	70	µg/L	0.11	0.13	0.2 U*	0.19 J	0.010 U	0.020	0.23 U*	0.010 U	0.010 U	0.010 U	0.19 U*	0.018	0.015
Naphthalene	1.4	µg/L	57	0.43	–	0.17	0.022 J	0.027	–	0.018	0.010	0.013	–	0.046	0.018
Phenanthrene	NE	µg/L	0.15	0.072	0.2 U*	0.16	0.012	0.012	0.23 U*	0.019	0.010 U	0.010 U	0.19 U*	0.010 U	0.013
Pyrene	30	µg/L	0.065	0.011	0.2 U*	0.36	0.041 J	0.012	0.04 J*	0.074	0.032	0.010 U	0.19 U*	0.010 U	0.010 UJ
Benzo(a)pyrene	0.010	µg/L	0.010 U	0.010 U	–	0.010 UJ	0.011	0.010 U	–	0.018	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Benzo(a)anthracene	0.010	µg/L	0.011	0.010 U	–	0.022 J	0.020	0.010 U	–	0.021	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Benzo(b)fluoranthene	0.018	µg/L	0.010 U	0.010 U	–	–	–	–	–	–	–	–	0.19 U*	–	–
Benzo(k)fluoranthene	0.018	µg/L	0.010 U	0.010 U	–	–	–	–	–	–	–	–	0.19 U*	–	–
Benzo(b,k)fluoranthene	0.018	µg/L	–	–	–	–	–	–	–	–	–	–	0.19 UT*	–	–
Benzo(a)fluoranthenes (Sum)	0.036	µg/L	0.020 U	0.020 U	–	0.020 UJ	0.036	0.020 U	–	0.049	0.020 U	0.020 U	–	0.020 U	0.020 U
Chrysene	0.031	µg/L	0.011	0.010 U	–	0.033 J	0.072 J	0.010 U	–	0.032	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.010 U	0.010 U	–	0.010 UJ	0.010 U	0.010 U	–	0.017 J	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.00821 T*	0.00755 UT*	–	0.00953 JT*	0.01832 JT*	0.00755 UT*	–	0.02752 JT*	0.00755 UT*	0.00755 UT*	0.1340 UT*	0.00755 UT*	0.00755 UT*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-1 3/19/2014	MW-1 7/15/2014	MW-2R 8/20/2013	MW-2R 12/20/2013	MW-2R 3/18/2014	MW-2R 7/17/2014	MW-3 7/16/2008	MW-3 8/16/2013	MW-3 12/16/2013	MW-3 3/19/2014	MW-3 7/16/2014	MW-4 7/16/2008	MW-4 8/16/2013
SVOCs															
2,4-Dimethylphenol	150	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 UJ	4 U*	3.0 U	3.0 U	3.0 U	3.0 UJ	3.9 U*	3.0 U
Benzoic Acid	NE	µg/L	20 U	20 U	20 U	20 U	20 U	20 UJ	5 U*	20 U	20 UJ	20 U	20 UJ	4.9 U*	12 J
Benzyl Alcohol	0.00	µg/L	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 UJ	5 U*	2.0 U	2.0 U	2.0 U	2.0 UJ	4.9 U*	2.0 U
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	3.0 U	3.0 U	0.9 J	3.0 U	3.0 U	3.0 UJ	0.99 U*	3.0 U	3.0 U	3.0 U	3.0 UJ	0.98 U*	3.0 U
Butyl benzyl phthalate	82.4	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
Carbazole	NE	µg/L	1.0 U	1.0 U	1.1	1.2	1.1	1.2 J	–	1.0 U	0.7 J	0.7 J	1.0 J	–	1.0 U
Dibutyl phthalate	2900	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
Diethyl phthalate	600	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
Di-N-Octyl Phthalate	0.00	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
Isophorone	600	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	–	1.0 U	1.0 U	1.0 U	1.0 UJ	–	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	0.5 U*	2.0 U	2.0 U	2.0 U	2.0 UJ	0.49 U*	3.7 NJ
Pentachlorophenol	5	µg/L	10 U	10 U	10 U	10 U	10 U	10 UJ	0.99 U*	10 U	10 U	10 U	10 UJ	0.98 U*	10 U
Phenol	150000	µg/L	1.0 U	1.0 U	1.3	0.5 J	1.0 U	1.0 UJ	2.2 *	1.0 U	1.0 U	1.0 U	1.0 UJ	3 *	1.0 U
Phosphoric Acid Tributyl Ester	NE	µg/L	1.0 U	–	1.0 U	1.0 U	1.0 U	–	–	1.0 U	1.0 U	1.0 U	–	–	1.0 U
PAHs															
1-Methylnaphthalene	NE	µg/L	0.010 U	0.010 U	1.5	1.0	1.6	1.6	–	2.7	4.5	4.8	4.8	–	42
2-Methylnaphthalene	NE	µg/L	0.010 U	0.010 U	0.86	0.30	0.044	0.19	0.26 *	0.53	1.8	1.8	1.7	0.2 U*	83
Acenaphthene	90	µg/L	0.54	0.32	8.4	7.5	8.4	8.0	5.7 *	8.1	11	13	15	0.2 U*	0.28
Acenaphthylene	NE	µg/L	0.010 U	0.010 U	0.027	0.025	0.028	0.016	0.2 U*	0.10 U	0.035	0.053	0.044	0.2 U*	0.10 U
Anthracene	400	µg/L	0.010 U	0.010 U	0.18	0.092	0.010 U	0.013	0.2 U*	0.10 U	0.080	0.098	0.11	0.2 U*	0.10 U
Benzo(ghi)perylene	0.016	µg/L	0.010 U	0.010 U	0.016	0.028	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Dibenzofuran	NE	µg/L	0.010 U	0.010 U	0.76	0.47	0.19	0.21	1.2 *	1.4	2.6	3.1	3.3	0.2 U*	0.10 U
Fluoranthene	3.3	µg/L	0.010 U	0.010 U	0.67	0.48	0.025	0.037	0.2 U*	0.10 U	0.11	0.11	0.13	0.2 U*	0.15
Fluorene	70	µg/L	0.065	0.036	2.2	1.7	1.2	1.2	1.8 *	2.3	3.6	4.2	4.7	0.2 U*	0.21
Naphthalene	1.4	µg/L	0.013	0.010 U	2.4	0.69	0.10	0.55	–	3.0	0.98	0.65	0.76	–	200
Phenanthrene	NE	µg/L	0.010 U	0.010 U	2.4	0.89	0.14	0.30	2 *	1.2	2.0	2.5	3.0	0.2 U*	0.28
Pyrene	30	µg/L	0.010 U	0.010 U	0.56	0.38 J	0.018	0.023	0.2 U*	0.10 U	0.052 J	0.065	0.072	0.2 U*	0.12
Benzo(a)pyrene	0.010	µg/L	0.010 U	0.010 U	0.026	0.022	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Benzo(a)anthracene	0.010	µg/L	0.010 U	0.010 U	0.084	0.050	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Benzo(b)fluoranthene	0.018	µg/L	–	–	–	–	–	–	0.2 U*	–	–	–	–	0.2 U*	–
Benzo(k)fluoranthene	0.018	µg/L	–	–	–	–	–	–	0.2 U*	–	–	–	–	0.2 U*	–
Benzo(b,k)fluoranthene	0.018	µg/L	–	–	–	–	–	–	0.2 UT*	–	–	–	–	0.2 UT*	–
Benzo(a)fluoranthenes (Sum)	0.036	µg/L	0.020 U	0.020 U	0.052	0.042	0.020 U	0.020 U	–	0.20 U	0.020 U	0.020 U	0.020 U	–	0.20 U
Chrysene	0.031	µg/L	0.010 U	0.010 U	0.083	0.052	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.010 U	0.010 U	0.011	0.016	0.010 U	0.010 U	0.2 U*	0.10 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.10 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.00755 UT*	0.00755 UT*	0.04203 T*	0.03382 T*	0.00755 UT*	0.00755 UT*	0.141 UT*	0.0755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.141 UT*	0.0755 UT*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-4 12/16/2013	MW-4 3/17/2014	MW-4 7/16/2014	MW-5 7/17/2008	MW-5 8/15/2013	MW-5 12/26/2013	MW-5 3/17/2014	MW-5 7/17/2014	MW-8 7/17/2008	MW-8 8/14/2013	MW-8 12/19/2013	MW-8 3/19/2014	MW-8 7/14/2014
SVOCs															
2,4-Dimethylphenol	150	µg/L	3.0 U	3.0 U	3.0 UJ	4 U	3.0 U	3.0 U	3.0 U	3.0 UJ	4 U*	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	NE	µg/L	20 UJ	20 U	20 UJ	5 U*	20 U	20 U	20 U	20 UJ	5 U*	20 U	20 U	20 U	20 U
Benzyl Alcohol	0.00	µg/L	2.0 U	2.0 U	2.0 UJ	5 U*	2.0 U	2.0 UJ	2.0 U	2.0 UJ	5 U*	2.0 U	2.0 UJ	2.0 U	2.0 U
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	0.8 J	1.6 J	0.8 J	1 U*	3.0 U	3.0 U	3.0 U	3.0 UJ	0.99 U*	3.0 U	3.0 U	3.0 U	3.0 U
Butyl benzyl phthalate	82.4	µg/L	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NE	µg/L	1.0 U	1.0 U	1.0 UJ	–	1.0 U	1.0 U	1.0 U	1.0 UJ	–	1.0 U	1.0 U	1.0 U	1.0 U
Dibutyl phthalate	2900	µg/L	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	600	µg/L	1.0 U	1.0 U	1.0 UJ	0.24 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
Di-N-Octyl Phthalate	0.00	µg/L	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	600	µg/L	1.0 U	1.0 U	1.0 UJ	0.3 *	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 UJ	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	3.2	11	1.4 J	0.5 U*	2.0 U	2.0 U	2.0 U	2.0 UJ	0.5 U*	2.0 U	2.0 U	2.0 U	2.0 U
Pentachlorophenol	5	µg/L	10 U	10 U	10 UJ	1 U*	10 U	10 U	10 U	10 UJ	0.99 U*	10 U	10 U	10 U	10 U
Phenol	150000	µg/L	1.0 U	1.0 U	1.0 UJ	0.5 U*	1.0 U	1.0 UJ	1.0 U	1.0 UJ	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U
Phosphoric Acid Tributyl Ester	NE	µg/L	1.0 U	1.0 U	–	–	1.0 U	1.0 U	1.0 U	–	–	1.0 U	1.0 U	1.0 U	–
PAHs															
1-Methylnaphthalene	NE	µg/L	19	32	28	–	0.010 U	0.010 U	0.014	0.010 U	–	0.019	0.010 U	0.010 U	0.010 U
2-Methylnaphthalene	NE	µg/L	17	52	39	0.2 U*	0.010 U	0.010 U	0.018	0.010 U	0.2 U*	0.022	0.010 U	0.010 U	0.010 U
Acenaphthene	90	µg/L	0.23	0.23	0.20	0.2 U*	0.022	0.018	0.028	0.019	0.2 U*	0.032	0.010 U	0.020	0.010 U
Acenaphthylene	NE	µg/L	0.020	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Anthracene	400	µg/L	0.073	0.070	0.048	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(ghi)perylene	0.016	µg/L	0.022	0.018	0.010	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzofuran	NE	µg/L	0.046	0.054	0.042	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Fluoranthene	3.3	µg/L	0.27	0.22	0.14	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.021	0.010 U	0.010 U
Fluorene	70	µg/L	0.18	0.19	0.16	0.2 U*	0.010 U	0.010 U	0.010	0.010 U	0.2 U*	0.016	0.010 U	0.010 U	0.010 U
Naphthalene	1.4	µg/L	47	95	66	–	0.015	0.010 U	0.043	0.014	–	0.021	0.014	0.010 U	0.014
Phenanthrene	NE	µg/L	0.11	0.26	0.14	0.2 U*	0.013	0.010 U	0.011	0.010 U	0.2 U*	0.040	0.016	0.010 U	0.010 U
Pyrene	30	µg/L	0.27 J	0.22	0.12	0.2 U*	0.011	0.010 UJ	0.010 U	0.010 U	0.2 U*	0.011	0.012 J	0.010 U	0.010 U
Benzo(a)pyrene	0.010	µg/L	0.032	0.032	0.016	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(a)anthracene	0.010	µg/L	0.068	0.060	0.028	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(b)fluoranthene	0.018	µg/L	–	–	–	0.2 U*	–	–	–	–	0.2 U*	–	–	–	–
Benzo(k)fluoranthene	0.018	µg/L	–	–	–	0.2 U*	–	–	–	–	0.2 U*	–	–	–	–
Benzo(b,k)fluoranthene	0.018	µg/L	–	–	–	0.2 UT*	–	–	–	–	0.2 UT*	–	–	–	–
Benzo(a,b)fluoranthene (Sum)	0.036	µg/L	0.052	0.059	0.028	–	0.020 U	0.020 U	0.020 U	0.020 U	–	0.020 U	0.020 U	0.020 U	0.020 U
Chrysene	0.031	µg/L	0.049	0.042	0.019	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.013	0.011	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.04629 T*	0.04592 T*	0.02279 T*	0.141 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.141 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-9 7/17/2008	MW-9 8/15/2013	MW-9 12/16/2013	MW-9 3/19/2014	MW-9 7/14/2014	MW-10 7/17/2008	MW-10 8/16/2013	MW-10 12/16/2013	MW-10 3/19/2014	MW-10 7/15/2014	MW-11 7/17/2008	MW-11 8/15/2013	MW-11 12/26/2013
SVOCs															
2,4-Dimethylphenol	150	µg/L	4 U*	3.0 U	3.0 U	3.0 U	3.0 U	4 U*	3.0 U	3.0 U	3.0 U	3.0 U	4 U*	3.0 U	3.0 U
Benzoic Acid	NE	µg/L	5 U*	20 U	20 UJ	20 U	20 U	5 U*	20 U	20 UJ	20 U	20 U	5 U*	20 U	20 U
Benzyl Alcohol	0.00	µg/L	5 U*	2.0 U	2.0 U	2.0 U	2.0 U	5 U*	2.0 U	2.0 U	2.0 U	2.0 U	5 U*	2.0 U	2.0 UJ
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	1 U*	3.0 U	3.0 U	3.0 U	3.0 U	0.99 U*	3.0 U	3.0 U	3.0 U	3.0 U	1 U*	3.0 U	3.0 U
Butyl benzyl phthalate	82.4	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
Carbazole	NE	µg/L	–	1.0 U	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U
Dibutyl phthalate	2900	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
Diethyl phthalate	600	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
Di-N-Octyl Phthalate	0.00	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
Isophorone	600	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U*	1.0 U	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	0.5 U*	2.0 U	0.6 J	2.0 U	2.0 U	0.5 U*	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U*	2.0 U	2.0 U
Pentachlorophenol	5	µg/L	1 U*	10 U	10 U	10 U	10 U	0.99 U*	10 U	10 U	10 U	10 U	1 U*	10 U	10 U
Phenol	150000	µg/L	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U*	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U*	1.0 U	1.0 UJ
Phosphoric Acid Tributyl Ester	NE	µg/L	–	1.0 U	1.0 U	1.0 U	–	–	1.0 U	1.0 U	1.0 U	–	–	1.0 U	1.0 U
PAHs															
1-Methylnaphthalene	NE	µg/L	–	0.064	0.010 U	0.010 U	0.010 U	–	0.045	0.010 U	0.33	0.046	–	0.017	0.010 U
2-Methylnaphthalene	NE	µg/L	0.2 U*	0.10	0.010 U	0.010 U	0.010 U	0.2 U*	0.011	0.010 U	0.025	0.010 U	0.2 U*	0.034	0.010 U
Acenaphthene	90	µg/L	0.28 *	0.045	0.010 U	0.045	0.16	0.68 *	4.6	1.4	7.0	3.3	0.2 U*	0.010 U	0.010 U
Acenaphthylene	NE	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.020	0.010 U	0.2 U*	0.010 U	0.010 U
Anthracene	400	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.020	0.011	0.020	0.013	0.2 U*	0.010 U	0.010 U
Benzo(ghi)perylene	0.016	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Dibenzofuran	NE	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.048	0.010 U	0.17	0.017	0.2 U*	0.010 U	0.010 U
Fluoranthene	3.3	µg/L	0.2 U*	0.012	0.010 U	0.012	0.010 U	0.2 U*	0.044	0.068	0.060	0.062	0.2 U*	0.010 U	0.010 U
Fluorene	70	µg/L	0.2 U*	0.011	0.010 U	0.010 U	0.010 U	0.2 U*	0.087	0.010 U	0.66	0.031	0.2 U*	0.010 U	0.010 U
Naphthalene	1.4	µg/L	–	0.26	0.012	0.014	0.014	–	0.024	0.053	0.14	0.096	–	0.096	0.046
Phenanthrene	NE	µg/L	0.2 U*	0.022	0.010 U	0.010 U	0.010 U	0.2 U*	0.037	0.010 U	0.15	0.012	0.2 U*	0.010 U	0.010 U
Pyrene	30	µg/L	0.2 U*	0.011	0.010 UJ	0.012	0.010 U	0.2 U*	0.029	0.032 J	0.027	0.035	0.2 U*	0.010 U	0.010 UJ
Benzo(a)pyrene	0.010	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Benzo(a)anthracene	0.010	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Benzo(b)fluoranthene	0.018	µg/L	0.2 U*	–	–	–	–	–	–	–	–	–	0.2 U*	–	–
Benzo(k)fluoranthene	0.018	µg/L	0.2 U*	–	–	–	–	–	–	–	–	–	0.2 U*	–	–
Benzo(b,k)fluoranthene	0.018	µg/L	0.2 UT*	–	–	–	–	–	–	–	–	–	0.2 UT*	–	–
Benzo(a)fluoranthenes (Sum)	0.036	µg/L	–	0.020 U	0.020 U	0.020 U	0.020 U	–	0.020 U	0.020 U	0.020 U	0.020 U	–	0.020 U	0.020 U
Chrysene	0.031	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.2 U*	0.010 U	0.010 U	0.010 U	0.010 U	–	0.010 U	0.010 U	0.010 U	0.010 U	0.2 U*	0.010 U	0.010 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.141 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	–	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.141 UT*	0.00755 UT*	0.00755 UT*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-11 3/19/2014	MW-11 7/14/2014	MW-12 7/16/2008	MW-12 8/16/2013	MW-12 12/16/2013	MW-12 3/19/2014	MW-12 7/15/2014	MW-13 8/14/2013	MW-13 12/17/2013	MW-13 3/20/2014	MW-13 7/14/2014	MW-14 8/19/2013	MW-14 12/17/2013
SVOCs															
2,4-Dimethylphenol	150	µg/L	3.0 U	3.0 U	3.8 U*	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	NE	µg/L	20 U	20 U	4.8 U*	20 U	20 UJ	20 U	20 U	20 U	20 UJ	20 U	20 U	20 U	20 UJ
Benzyl Alcohol	0.00	µg/L	2.0 U	2.0 U	4.8 U*	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	3.0 U	3.0 U	0.95 U*	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Butyl benzyl phthalate	82.4	µg/L	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NE	µg/L	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibutyl phthalate	2900	µg/L	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl phthalate	600	µg/L	1.0 U	1.0 U	0.19 U*	0.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-N-Octyl Phthalate	0.00	µg/L	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	600	µg/L	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 U	1.0 U	0.19 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	2.0 U	2.0 U	0.48 U*	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Pentachlorophenol	5	µg/L	10 U	10 U	0.95 U*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	150000	µg/L	1.0 U	1.0 U	0.48 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Phosphoric Acid Tributyl Ester	NE	µg/L	1.0 U	–	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U
PAHs															
1-Methylnaphthalene	NE	µg/L	0.010 U	0.010 U	–	0.11	0.10	0.20	0.20	0.13	0.016	0.010 U	0.010 U	0.011	0.013
2-Methylnaphthalene	NE	µg/L	0.010 U	0.010 U	0.3 *	0.010 U	0.010 U	0.010 U	0.020	0.14	0.018	0.010 U	0.011	0.012	0.015
Acenaphthene	90	µg/L	0.010 U	0.010 U	0.19 U*	0.49	0.69	2.1	1.2	0.081	0.026	0.010 U	0.010 U	0.012	0.020
Acenaphthylene	NE	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.034	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Anthracene	400	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.038	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(ghi)perylene	0.016	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzofuran	NE	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.014	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Fluoranthene	3.3	µg/L	0.010 U	0.010 U	0.19 U*	0.012	0.010 U	0.010 U	0.010 U	0.11	0.024	0.010 U	0.010 U	0.010 U	0.010 U
Fluorene	70	µg/L	0.010 U	0.010 U	0.19 U*	0.040	0.028	0.046	0.024	0.087	0.010 U	0.010 U	0.010 U	0.0053 J	0.010 U
Naphthalene	1.4	µg/L	0.010 U	0.023	–	0.023	0.012	0.014	0.012	0.16	0.014	0.010 U	0.010	0.019	0.016
Phenanthrene	NE	µg/L	0.010 U	0.010 U	0.19 U*	0.040	0.020	0.026	0.024	0.22	0.019	0.010 U	0.016	0.0081 J	0.010 U
Pyrene	30	µg/L	0.010 U	0.010 U	0.19 U*	0.013	0.010 UJ	0.010 U	0.010 U	0.14	0.023 J	0.010 U	0.010 U	0.0076 J	0.010 UJ
Benzo(a)pyrene	0.010	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.021	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(a)anthracene	0.010	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.029	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(b)fluoranthene	0.018	µg/L	–	–	0.19 U*	–	–	–	–	–	–	–	–	–	–
Benzo(k)fluoranthene	0.018	µg/L	–	–	0.19 U*	–	–	–	–	–	–	–	–	–	–
Benzo(b,k)fluoranthene	0.018	µg/L	–	–	0.19 UT*	–	–	–	–	–	–	–	–	–	–
Benzo(a)fluoranthenes (Sum)	0.036	µg/L	0.020 U	0.020 U	–	0.020 U	0.020 U	0.020 U	0.020 U	0.035	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Chrysene	0.031	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.044	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.010 U	0.010 U	0.19 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.00755 UT*	0.00755 UT*	0.1340 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.02884 T*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-14 3/18/2014	MW-14 7/14/2014	MW-15 8/15/2013	MW-15 12/26/2013	MW-15 3/20/2014	MW-15 7/15/2014	MW-16 8/19/2013	MW-16 12/16/2013	MW-16 3/17/2014	MW-16 7/17/2014	MW-17 8/19/2013	MW-17 12/20/2013	MW-17 3/17/2014
SVOCs															
2,4-Dimethylphenol	150	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	0.8 J	3.0 U	3.0 U	3.0 U
Benzoic Acid	NE	µg/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 UJ	20 U	20 UJ	20 U	20 U	20 U
Benzyl Alcohol	0.00	µg/L	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 U
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	0.9 J	3.0 U	3.0 U	3.0 UJ	0.6 J	3.0 U	1.8 J
Butyl benzyl phthalate	82.4	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Carbazole	NE	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.1	1.9 J	1.0 U	1.0 U
Dibutyl phthalate	2900	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Diethyl phthalate	600	µg/L	1.0 U	0.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Dimethyl phthalate	1.1e+006	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Di-N-Octyl Phthalate	0.00	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Isophorone	600	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
p-Cresol (4-methylphenol)	NE	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	1.1 J	2.0 U	2.0 U
Pentachlorophenol	5	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Phenol	150000	µg/L	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	0.7 J	1.0	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Phosphoric Acid Tributyl Ester	NE	µg/L	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U	–	1.0 U	1.0 U	1.0 U
PAHs															
1-Methylnaphthalene	NE	µg/L	0.010 U	0.90	0.011	0.010 U	0.010 U	0.010 U	0.095	0.16	19	4.8	0.077	0.068	0.075
2-Methylnaphthalene	NE	µg/L	0.011	1.3	0.014	0.010 U	0.010 U	0.011	0.054	0.034	11	2.9	0.069	0.060	0.068
Acenaphthene	90	µg/L	0.034	0.15	0.016	0.020	0.050	0.036	0.12	0.11	24	7.4	0.022	0.020	0.021
Acenaphthylene	NE	µg/L	0.010 U	0.041	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.19	0.048	0.010 U	0.010 U	0.010 U
Anthracene	400	µg/L	0.010 U	0.053	0.010 U	0.010 U	0.010 U	0.010 U	0.036	0.010 U	0.33	0.16	0.010 U	0.010 U	0.010
Benzo(ghi)perylene	0.016	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0066 J	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzofuran	NE	µg/L	0.010 U	0.049	0.010 U	0.010 U	0.010 U	0.010 U	0.013	0.010 U	4.6	1.5	0.0064 J	0.010 U	0.010 U
Fluoranthene	3.3	µg/L	0.010 U	0.040	0.017	0.010 U	0.014	0.010 U	0.088	0.016	0.31	0.18	0.014	0.010 U	0.032
Fluorene	70	µg/L	0.010 U	0.39	0.011	0.010 U	0.010 U	0.010 U	0.099	0.031	11	3.8	0.015	0.012	0.023
Naphthalene	1.4	µg/L	0.010 U	0.057	0.015	0.010 U	0.010 U	0.011	0.054	0.16	42	8.3	0.048 J	0.069	0.090
Phenanthrene	NE	µg/L	0.010 U	0.47	0.029	0.010 U	0.011	0.010 U	0.15	0.032	9.3	4.2	0.027	0.016	0.058
Pyrene	30	µg/L	0.010 U	0.046	0.024	0.010 UJ	0.011	0.010 U	0.091	0.012 J	0.14	0.072	0.020	0.010 UJ	0.045
Benzo(a)pyrene	0.010	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0082 J	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010
Benzo(a)anthracene	0.010	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.014	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.014
Benzo(b)fluoranthene	0.018	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Benzo(k)fluoranthene	0.018	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Benzo(b,k)fluoranthene	0.018	µg/L	–	–	–	–	–	–	–	–	–	–	–	–	–
Benzo(a)fluoranthenes (Sum)	0.036	µg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.0073 J	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Chrysene	0.031	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.017	0.010 U	0.010 U	0.010 U	0.0064 J	0.010 U	0.022
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.0115 JT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00756 JT*	0.00755 UT*	0.01362 T*

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-17 7/16/2014	MW-18 8/20/2013	MW-18 12/19/2013	MW-18 3/18/2014	MW-18 7/16/2014	MW-19 8/20/2013	MW-19 12/16/2013	MW-19 3/17/2014	MW-19 7/16/2014	MWA 11/24/2015	MWA 3/30/2016	MWB 11/24/2015	MWB 3/30/2016	MWC 11/24/2015	MWC 3/30/2016
SVOCs																	
2,4-Dimethylphenol	150	µg/L	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 UJ	3.0 U	1.0 U	3.0 U	1.0 U	3.0 U	1.0 U
Benzoic Acid	NE	µg/L	20 UJ	20 U	20 U	20 U	20 UJ	20 U	20 UJ	20 U	3.7 J	20 U	2.0 U	20 U	2.0 U	20 U	2.0 U
Benzyl Alcohol	0.00	µg/L	2.0 UJ	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ	-	-	-	-	-	-
Bis(2-Ethylhexyl) Phthalate	1.0	µg/L	1.3 J	3.0 U	3.0 U	3.0 U	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 UJ	4	1.4	3.0 U	0.2	3.0 U	0.3
Butyl benzyl phthalate	82.4	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	-	-	-	-	-	-
Carbazole	NE	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	19	13	10	13 J	1	0.7 J	1	0.7 J	1.0 U	0.2 U
Dibutyl phthalate	2900	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	-	-	-	-	-	-
Diethyl phthalate	600	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.2 U	1.0 U	0.1 J	1.0 U	0.1 J
Dimethyl phthalate	1.1e+006	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	-	-	-	-	-	-
Di-N-Octyl Phthalate	0.00	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	-	-	-	-	-	-
Isophorone	600	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	0.2 U	1.0 U	0.2 U	1.0 U	0.2 U
N-Nitrosodiphenylamine (as diphe	6	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	-	-	-	-	-	-
p-Cresol (4-methylphenol)	NE	µg/L	2.0 UJ	0.7 J	2.0 U	2.0 U	2.0 UJ	0.8 J	2.0 U	2.0 U	2.0 UJ	2.0 U	0.2 U	2.0 U	0.2 U	2.0 U	0.2 U
Pentachlorophenol	5	µg/L	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	-	-	-	-	-	-
Phenol	150000	µg/L	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.6	0.4	1.0 U	0.2 U	1.0 U	0.2 U
Phosphoric Acid Tributyl Ester	NE	µg/L	-	6.8	7.4 J	3.4	-	1.0 U	1.0 U	1.0 U	-	-	-	-	-	-	-
PAHs																	
1-Methylnaphthalene	NE	µg/L	0.078	0.24	0.11	0.10	0.058	29	18	22	29	-	-	-	-	-	-
2-Methylnaphthalene	NE	µg/L	0.065	0.10	0.039	0.028	0.017	28	16	20	26	5.1	0.8	7.8	6.4	1.0 U	0.2 U
Acenaphthene	90	µg/L	0.030	0.66	1.6	1.4	0.60	44	27	31	42	4	3.9	3	1.3	0.10 U	0.01 U
Acenaphthylene	NE	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.095	0.057	0.078	0.10	0.23	0.1 J	0.05 J	0.01 U	0.10 U	0.01 U
Anthracene	400	µg/L	0.010 U	0.013	0.010 U	0.010 U	0.010 U	0.25	0.12	0.14	0.22	0.59	0.4	0.10 U	0.016	0.10 U	0.01 U
Benzo(ghi)perylene	0.016	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0063 J	0.010 U	0.010 U	0.010 U	0.10 U	0.037 J	0.10 U	0.01 U	0.10 U	0.01 U
Dibenzofuran	NE	µg/L	0.010	0.014	0.012	0.011	0.010 U	18	11	12	17	0.49	0.4	0.16	0.1	0.10 U	0.01 U
Fluoranthene	3.3	µg/L	0.012	0.035	0.020	0.011	0.013	0.043	0.034	0.027	0.038	0.33	0.4	0.08 J	0.027	0.10 U	0.012
Fluorene	70	µg/L	0.020	0.11	0.22	0.21	0.092	18	11	12	17	1.1	1	1	0.6	0.10 U	0.01 U
Naphthalene	1.4	µg/L	0.066	0.074	0.026	0.013	0.013	3.3	0.53	1.7	12	4.1	3.7	4.1	3.5	0.10 U	0.01 U
Phenanthrene	NE	µg/L	0.026	0.098	0.060	0.047	0.021	9.2	5.6	6.4	9.1	1.1	0.9	0.3	0.12	0.10 U	0.01 U
Pyrene	30	µg/L	0.014	0.034	0.013 J	0.010	0.011	0.033	0.018 J	0.013	0.014	0.38	0.6	0.10 U	0.023	0.10 U	0.015
Benzo(a)pyrene	0.010	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0056 J	0.010 U	0.010 U	0.010 U	0.07 J	0.06	0.10 U	0.01 U	0.10 U	0.01 U
Benzo(a)anthracene	0.010	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0080 J	0.010 U	0.010 U	0.010 U	0.08 J	0.088	0.10 U	0.01 U	0.10 U	0.01 U
Benzo(b)fluoranthene	0.018	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	0.018	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b,k)fluoranthene	0.018	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzofluoranthenes (Sum)	0.036	µg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.016 J	0.020 U	0.020 U	0.020 U	0.04 J	0.2 J	0.10 U	0.02 U	0.10 U	0.02 U
Chrysene	0.031	µg/L	0.010 U	0.0052 J	0.010 U	0.010 U	0.010 U	0.0086 J	0.010 U	0.010 U	0.010 U	0.10 J	0.2	0.10 U	0.01 U	0.10 U	0.01 U
Dibenzo(a,h)anthracene	0.018	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U						
Indeno(1,2,3-cd)pyrene	0.01	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.022 J	0.10 U	0.01 U	0.10 U	0.01 U
Total cPAH TEQ (ND=0.5RL)	0.01	µg/L	0.00755 UT*	0.00755 JT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.00909 JT*	0.00755 UT*	0.00755 UT*	0.00755 UT*	0.09	0.093	0.071 U	0.01 U	0.071 U	0.01 U

Notes:

cPAH = carcinogenic PAH

J = estimated value

NE = A Screening Level was not established for this analyte (See Table 9)

T = summed result

TEQ = toxicity equivalent

U = not detected

µg/L = micrograms per liter

Bold = detected value

Yellow Fill indicates detected result > the groundwater Screening Level

Blue Fill indicates not detected with reporting limit > the groundwater Screening Level

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-8 7/14/2014	MW-9 7/17/2008	MW-9 8/15/2013	MW-9 12/16/2013	MW-9 3/19/2014	MW-9 7/14/2014	MW-10 7/17/2008	MW-10 8/16/2013	MW-10 12/16/2013	MW-10 3/19/2014	MW-10 7/15/2014	MW-11 7/17/2008	MW-11 8/15/2013	MW-11 12/26/2013	MW-11 3/19/2014	MW-11 7/14/2014	MW-12 7/16/2008	MW-12 8/16/2013	MW-12 12/16/2013
PCBs																					
PCB-aroclor 1242	0.03	µg/L	0.010 U	0.02 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.11 *	0.010 U	0.010 U	0.010 U	0.010 U	0.02 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.1 *	0.010 U	0.010 U
PCB-aroclor 1248	0.03	µg/L	0.010 U	0.034 *	0.010 J	0.015 U	0.016	0.013	0.02 U*	0.021	0.020 U	0.011	0.015	0.02 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.02 U*	0.018	0.018
PCB-aroclor 1254	0.01	µg/L	0.0060 J	0.025 U*	0.0080 J	0.037	0.032	0.024	0.02 U*	0.010 U	0.026	0.0090 J	0.014	0.02 U*	0.010 U	0.010 U	0.010 U	0.0080 J	0.02 U*	0.012	0.017
PCB-aroclor 1260	0.015	µg/L	0.010 U	0.02 U*	0.010 U	0.021	0.016	0.0080 J	0.02 U*	0.010 U	0.011	0.010 U	0.010 U	0.02 U*	0.010 U	0.010 U	0.010 U	0.010 U	0.02 U*	0.010 U	0.010 U
Total PCBs	0.01	µg/L	0.006 T	0.034 T	0.018 T	0.058 T	0.064 T	0.045 T	0.11 T	0.021 T	0.037 T	0.02 T	0.029 T	0.04 UT	0.01 UT	0.01 UT	0.01 UT	0.01 UT	0.008 T	0.1 T	0.03 T
Pesticides																					
2,4'-DDD	0.0005	µg/L	0.00050 U	0.0023 U*	0.00049 U	0.00016 J	0.00050 U	0.00050 U	0.0005 U*	0.00030 J	0.00027 J	0.00050 U	0.0005 U	0.0005 U*	0.00049 U	0.00049 U	0.00050 U	0.00050 U	0.00079 U*	0.00031 J	0.00030 J
2,4'-DDE	0.0005	µg/L	0.00050 U	0.00049 U*	0.00049 U	0.00050 U	0.00011 J	0.00050 U	0.0005 U*	0.00023 J	0.00025 J	0.00012 J	0.0005 U	0.0005 U*	0.00013 J	0.00049 U	0.00050 U	0.00050 U	0.0005 U*	0.00050 U	0.00049 U
2,4'-DDT	0.0005	µg/L	0.00050 U	0.0016 U*	0.00049 U	0.00050 U	0.00050 U	0.00050 U	0.00062 U*	0.00050 U	0.00049 U	0.00050 U	0.0005 U	0.0005 U*	0.00049 U	0.00049 U	0.00050 U	0.00050 U	0.0015 *	0.00050 U	0.00049 U
4,4'-DDD	0.0005	µg/L	0.00050 U	0.00049 U*	0.00019 J	0.00029 J	0.00025 J	0.00022 J	0.0005 U*	0.00032 J	0.00049 U	0.00025 J	0.00025 J	0.0005 U*	0.00049 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U*	0.00078	0.00081
4,4'-DDE	0.0005	µg/L	0.000091 J	0.00049 U*	0.00058	0.0016	0.0011	0.00067	0.0005 U*	0.0011	0.00079 U	0.00040 J	0.00047 J	0.0005 U*	0.00016 J	0.00012 J	0.000081 J	0.00015 J	0.0005 U*	0.00059	0.00047 J
4,4'-DDT	0.0005	µg/L	0.00050 U	0.00049 U*	0.00049 U	0.00050 U	0.00059 U	0.00050 U	0.0005 U*	0.00050 U	0.00049 U	0.00050 U	0.0005 U	0.0005 U*	0.00049 U	0.00049 U	0.00050 U	0.00050 U	0.0024 J*	0.00050 U	0.00049 U
Aldrin	0.001	µg/L	0.0010 U	0.00057 U*	0.0010 UJ	0.0010 UJ	0.0010 U	-	0.0011 U*	0.0010 U	0.0010 U	0.0010 U	0.001 U	0.0005 U*	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00055 U*	0.0010 U	0.0010 U
Alpha-BHC	0.0049	µg/L	0.00050 U	-	0.00049 U	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.0005 U	-	0.00021 J	0.00049 U	0.00050 U	0.00020 J	-	0.00050 U	0.00049 U
Beta-BHC	0.017	µg/L	0.00050 U	-	0.00097 U	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.0005 U	-	0.00097 U	0.00049 U	0.00050 U	0.00050 U	-	0.00099 U	0.00049 U
Chlorpyrifos	0.0056	µg/L	0.00050 U	-	0.0014	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.00049 UJ	-	0.00049 U	0.00049 U	0.00050 U	0.00050 U	-	0.0093	0.00049 U
Delta-BHC	0.0414	µg/L	0.00050 U	-	0.00049 U	0.00050 UJ	0.00050 U	0.00050 U	-	0.00050 U	0.00049 UJ	0.00050 U	0.0005 U	-	0.00049 U	0.00049 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 UJ
Dieldrin	0.005	µg/L	0.0050 U	0.0012 U*	0.0049 U	0.0050 U	0.0050 U	0.0050 U	0.0005 U*	0.0050 U	0.0049 U	0.0050 U	0.005 U	0.0005 U*	0.0049 U	0.0049 U	0.0050 U	0.0050 U	0.0015 U*	0.0050 U	0.0049 U
Endosulfan II	0.0087	µg/L	0.0020 U	-	0.0020 U	0.0020 U	0.0050 U	0.0020 U	-	0.0020 U	0.0020 U	0.0050 U	0.002 U	-	0.0020 U	0.0020 U	0.0050 U	0.0020 U	-	0.0020 U	0.0020 U
Endosulfan Sulfate	0.0087	µg/L	0.00050 U	-	0.00049 U	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.0005 U	-	0.00049 U	0.00049 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U
Endrin	0.0023	µg/L	0.0020 U	-	0.0020 U	0.0050 U	0.0020 U	0.0020 U	-	0.0020 U	0.0049 U	0.0020 U	0.002 U	-	0.0020 U	0.0049 U	0.0020 U	0.0020 U	-	0.0020 U	0.0049 U
Endrin Ketone	0.0023	µg/L	0.0010 U	-	0.00097 U	0.00099 U	0.00099 U	0.0010 U	-	0.00099 U	0.00098 U	0.00099 U	0.00099 U	-	0.00097 U	0.00097 U	0.00099 U	0.0010 U	-	0.00099 U	0.00098 U
Heptachlor	0.001	µg/L	0.0010 U	0.002 U*	0.00017 J	0.00099 U	0.00012 J	0.0010 U	0.0013 J*	0.00099 U	0.00098 U	0.00017 J	0.00099 U	0.0005 U*	0.00036 J	0.00097 U	0.00017 J	0.0010 U	0.0005 U*	0.00019 J	0.00098 U
Heptachlor Epoxide	0.001	µg/L	0.0010 U	-	0.00097 U	0.00099 U	0.00063 J	0.0010 U	-	0.00099 U	0.00098 U	0.00099 U	0.00099 U	-	0.00025 J	0.00097 U	0.00099 U	0.0010 U	-	0.00099 U	0.00098 U
Hexachlorobenzene	0.001	µg/L	0.00050 U	0.2 U*	0.00049 U	0.00099 U	0.0099 U	0.00050 U	0.2 U*	0.00050 U	0.00098 U	0.0099 U	0.0005 U	0.2 U*	0.00049 U	0.00097 U	0.0099 U	0.00050 U	0.19 U*	0.00050 U	0.00098 U
Isodrin	NE	µg/L	0.0020 U	-	0.0020 UJ	0.0020 UJ	0.0020 U	-	-	0.0020 U	0.0020 U	0.0020 U	0.002 U	-	0.0020 U	0.0020 U	0.0020 U	0.0020 U	-	0.0020 U	0.0011 J
Lindane (Gamma-BHC)	0.063	µg/L	0.00050 U	0.00049 U*	0.00097 U	0.00050 U	0.00050 U	0.00050 U	0.0005 U*	0.00050 U	0.00049 U	0.00050 U	0.0005 U	0.0005 U*	0.00097 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U*	0.00099 U	0.00049 U
Methoxychlor	0.03	µg/L	0.00016 J	-	0.00049 U	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.0005 U	-	0.00049 U	0.00049 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U
Mirex	0.001	µg/L	0.0010 U	-	0.00097 U	0.00099 U	0.00099 U	0.00099 J	-	0.00013 J	0.00098 U	0.00011 U	0.00099 U	-	0.00097 U	0.00097 U	0.00099 U	0.00099 U	0.00011 J	0.00099 J	0.00098 J
trans-Nonachlor	NE	µg/L	0.00050 U	-	0.00049 U	0.00050 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U	0.00050 U	0.0005 U	-	0.00017 J	0.00049 U	0.00050 U	0.00050 U	-	0.00050 U	0.00049 U
alpha-Chlordane (cis)	0.00059	µg/L	0.00050 U	0.0015 U*	0.00049 U	0.00050 U	0.00042 J	0.00050 U	0.00099 U*	0.00050 U	0.00049 U	0.00050 U	0.0005 U	0.0011 U*	0.00020 J	0.00049 U	0.00050 U	0.00050 U	0.0005 U*	0.00050 U	0.00049 U
gamma-Chlordane	0.00059	µg/L	0.00050 U	0.00049 U*	0.00049 U	0.00050 U	0.00047 J	0.00050 U	0.0005 U*	0.00050 U	0.00049 U	0.00028 J	0.0005 U	0.0005 U*	0.00022 J	0.00049 U	0.00050 U	0.00050 U	0.0005 U*	0.00050 U	0.00049 U
Total Metals																					
Arsenic	5	µg/L	7	5.4 *	4	3	6.1	9	5 U*	1 U	1.6	2 U	2 U	5 U*	1 U	1.1	1.7	5	5 U*	1.3	1.1
Cadmium	8.8	µg/L	1 U	0.03 *	0.5 U	0.1 U	0.1 U	1 U	0.03 *	0.2 U	0.1 U	0.5 U	0.5 U	0.02 U*	0.5 U	0.1 U	0.1 U	1 U	0.02 U*	0.1 U	0.1 U
Chromium	27	µg/L	5 U	1.2 *	2 U	0.5 U	0.5 U	5 U	0.7 *	1 U	0.5 U	2 U	2 U	0.5 *	2 UJ	0.5 U	0.5 U	5 U	1.3 *	2 J	1.1
Copper	2.4	µg/L	5 U	0.9 *	4	2.3	0.9	5 U	0.3 *	1 U	1.1	2 U	2 U	0.9 *	5	3.0	5.9	6	0.5 *	0.6	0.5 U
Lead	8.1	µg/L	1 U	0.76 *	0.5 U	0.1 U	0.1 U	1 U	0.1 *	0.2 U	0.1 U	0.5 U	0.5 U	0.03 *	0.5 U	0.1 U	0.1	1 U	0.5 *	0.3	0.1 U
Mercury	0.025	µg/L	0.00016 J	0.0071 *	0.00066 J	0.00035 J	0.00050 J	0.00038 J	0.001 *	0.00017 J	0.00057 J	0.00038 J	0.00027 J	0.0012 *	0.00149	0.00191	0.00386	0.00182	0.0029 *	0.00176	0.00065 J
Nickel	8.2	µg/L	5 U	-	8	3.3	1.4	15	-	5	2.1	2 U	4	-	6	1.0	0.5	10	-	1.7	1.7
Silver	1.9	µg/L	2 U	0.02 U*	1 U	0.2 U	0.2 UJ	2 U	0.02 U*	0.5 U	0.2 U	1 UJ	1 U	0.02 U*	1 U	0.2 U	0.2 UJ	2 U	0.02 U*	0.2 U	0.2 U
Zinc	81	µg/L	40 U	4.6 *	20 UJ	6	4 U	40 U	1.3 *	10 UJ	4	20 U	20 U	8.3 *	20 J	14	4 U	40 U	2.5 *	13 J	4 U
Dissolved Metals																					
Arsenic	5	µg/L	5 U	-	3	1	5.3	5 U	-	1 U	1 U	2	2 U	-	1 U	1.6	1.5	5	-	1.2	1.1
Cadmium	8.8	µg/L	1 U	-	0.5 U	0.1 U	0.1 U	1 U	-	0.2 U	0.1 U	0.5 U	0.5 U	-	0.5 U	0.1 U	0.1 U	1 U	-	0.1 U	0.1 U
Chromium	27	µg/L	5 U	-	2 U	0.5 U	0.5 U	5 U	-	1 U	0.5 U	2 U	2 U	-	2 U	0.5 U	0.5 U	5 U	-	1 U	2 U
Copper	2.4	µg/L	5 U	-	4	2.0	0.6	5 U	-	1 U	1.1	2 U	2 U	-	7	3.7	5.9	9	-	0.5 U	0.5 U
Lead	8.1	µg/L	1 U	-	0.5 U	0.1 U	0.1 U	1 U	-	0.2 U	0.1 U	0.5 U	0.5 U	-	0.5 U	0.1 U	0.1 U	1 U	-	0.1 U	0.1 U
Mercury	0.025	µg/L	0.00010 J	-	0.00031 J	0.00015 J	0.00025 J	0.00025 J	-	0.00028 J	0.00034 J	0.00028 J	0.00031 J	-	0.00135	0.00152	0.00376	0.00241	-	0.00088 J	0.00040 J
Nickel	8.2	µg/L	5 U	-	8	3.2	2.7	18	-	5	2.5	4	4	-	6	2.3	0.6	11	-	1.6	2.9
Silver	1.9	µg/L	2 U	-	1 UJ	0.2 U	0.2 UJ	2 U	-	0.5 UJ	0.2 U	1 UJ	1 U	-	1 UJ	0.2 U	0.2 UJ	2 U	-	0.2 UJ	0.2 U
Zinc	81	µg/L	40 U	-	20 U	6	4 U	40 U	-	10 U	4	20 U	20 U	-	20 J	7	4 U	40 U	-	5 J	4 U

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-12 3/19/2014	MW-12 7/15/2014	MW-13 8/14/2013	MW-13 12/17/2013	MW-13 3/20/2014	MW-13 7/14/2014	MW-14 8/19/2013	MW-14 12/17/2013	MW-14 3/18/2014	MW-14 7/14/2014	MW-15 8/15/2013	MW-15 12/26/2013	MW-15 3/20/2014	MW-15 7/15/2014	MW-16 8/19/2013	MW-16 12/16/2013	MW-16 3/17/2014	MW-16 7/17/2014	MW-17 8/19/2013
PCBs																					
PCB-aroclor 1242	0.03	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
PCB-aroclor 1248	0.03	µg/L	0.0090 J	0.015	0.034	0.13	0.014	0.018	0.010 U	0.010 U	0.010 U	0.010 U	0.0090 J	0.010 U	0.010 U	0.010 U	0.035 U	0.010 U	0.010 U	0.010 U	0.38
PCB-aroclor 1254	0.01	µg/L	0.0080 J	0.014	0.037	0.20	0.015	0.024	0.010 U	0.010 U	0.010 U	0.010 U	0.0080 J	0.023	0.010 U	0.0080 NJ	0.10	0.015	0.012	0.011	0.34
PCB-aroclor 1260	0.015	µg/L	0.010 U	0.010 U	0.015	0.088	0.0090 J	0.010	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.011	0.010 U	0.010 U	0.062	0.010 U	0.010 U	0.010 U	0.15
Total PCBs	0.01	µg/L	0.017 T	0.029 T	0.086 T	0.418 T	0.038 T	0.052 T	0.01 UT	0.02 UT	0.01 UT	0.01 UT	0.017 T	0.034 T	0.01 UT	0.008 T	0.162 T	0.015 T	0.012 T	0.011 T	0.87 T
Pesticides																					
2,4'-DDD	0.0005	µg/L	0.00050 U	0.00018 J	0.0015	0.0060	0.00054	0.00072	0.00014 J	0.00012 J	0.00050 U	0.00050 U	0.00027 J	0.00023 J	0.00050 U	0.0005 U	0.0020	0.00019 J	0.00049 U	0.00019 J	0.0072 J
2,4'-DDE	0.0005	µg/L	0.00050 U	0.0005 U	0.00040 J	0.00093	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00014 J	0.00050 U	0.00050 U	0.0005 U	0.00087	0.00050 U	0.00049 U	0.0005 U	0.00063
2,4'-DDT	0.0005	µg/L	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.0005 U	0.00049 U
4,4'-DDD	0.0005	µg/L	0.00050 U	0.00053	0.0058	0.027	0.0023	0.0028	0.00030 J	0.00030 J	0.00050 U	0.00050 U	0.0020	0.0014	0.00021 J	0.0005 U	0.016	0.00087 U	0.00086	0.00073	0.031 J
4,4'-DDE	0.0005	µg/L	0.00021 J	0.00026 J	0.0030	0.012	0.00083	0.0012	0.00028 J	0.00022 J	0.00050 U	0.00011 J	0.0010	0.00052	0.000093 J	0.00013 J	0.01	0.00060	0.00078	0.00059	0.018 J
4,4'-DDT	0.0005	µg/L	0.00094	0.0005 U	0.00025 J	0.00050 U	0.00038 J	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00030 J	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Aldrin	0.001	µg/L	0.0010 U	0.001 U	0.00067 J	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.001 U	0.0010 U	0.0010 U	0.0010 U	0.001 U	0.0010 U
Alpha-BHC	0.0049	µg/L	0.00050 U	0.0005 U	0.00019 J	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00016 J	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Beta-BHC	0.017	µg/L	0.00050 U	0.0005 U	0.00021 J	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00021 J	0.00050 U	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Chlorpyrifos	0.0056	µg/L	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.00057	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00053	0.00050 U	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Delta-BHC	0.0414	µg/L	0.00050 U	0.0005 U	0.00065 U	0.00099 UJ	0.00049 U	0.00050 U	0.00050 U	0.00049 UJ	0.00050 U	0.00050 U	0.00032 J	0.00050 U	0.00050 U	0.0005 U	0.0013 U	0.00050 UJ	0.00049 U	0.0005 U	0.00061 U
Dieldrin	0.005	µg/L	0.0050 U	0.005 U	0.0049 U	0.0050 U	0.0049 U	0.0050 U	0.0050 U	0.0049 U	0.0050 U	0.0050 U	0.0049 U	0.0050 U	0.0050 U	0.005 U	0.0049 U	0.0050 U	0.0049 U	0.005 U	0.0049 U
Endosulfan II	0.0087	µg/L	0.0050 U	0.002 U	0.0020 U	0.0020 U	0.0049 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.002 U	0.0020 U	0.0020 U	0.0049 U	0.002 U	0.0020 U
Endosulfan Sulfate	0.0087	µg/L	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Endrin	0.0023	µg/L	0.0020 U	0.002 U	0.00067 J	0.0050 U	0.0020 U	0.00082 J	0.0020 U	0.0049 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.002 U	0.0020 U	0.0050 U	0.0020 U	0.0012 J	0.0020 U
Endrin Ketone	0.0023	µg/L	0.00099 U	0.00099 U	0.00097 U	0.00099 U	0.00098 U	0.00068 J	0.00099 U	0.00098 U	0.00099 U	0.00099 U	0.00030 J	0.00099 U	0.00099 U	0.00099 U	0.00055 J	0.0010 U	0.00098 U	0.00099 U	0.00097 U
Heptachlor	0.001	µg/L	0.00099 U	0.00099 U	0.00030 J	0.00044 J	0.00016 J	0.0010 U	0.00012 J	0.00098 U	0.00015 J	0.00099 U	0.00021 J	0.00099 U	0.00015 J	0.00099 U	0.00042 J	0.0010 U	0.00098 U	0.00099 U	0.00015 J
Heptachlor Epoxide	0.001	µg/L	0.0013 U	0.00099 U	0.00025 J	0.00099 U	0.00067 J	0.0010 U	0.00099 U	0.00098 U	0.00099 U	0.00099 U	0.00097 U	0.00099 U	0.00099 U	0.00099 U	0.00097 U	0.0010 U	0.00098 U	0.00099 U	0.00097 U
Hexachlorobenzene	0.001	µg/L	0.0099 U	0.0005 U	0.00049 U	0.00027 J	0.0098 U	0.00050 U	0.00050 U	0.00098 U	0.0099 U	0.00050 U	0.00049 U	0.00099 U	0.0099 U	0.0005 U	0.00049 U	0.0010 U	0.0098 U	0.0005 U	0.00049 U
Isodrin	NE	µg/L	0.0020 U	0.002 U	0.0020 U	0.0019 UJ	0.0020 U	0.0020 U	0.0020 U	0.00041 J	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.002 U	0.0020 U	0.0020 U	0.0020 U	0.002 U	0.0020 U
Lindane (Gamma-BHC)	0.063	µg/L	0.00082 U	0.0005 U	0.00097 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00097 U	0.00050 U	0.00050 U	0.0005 U	0.00069	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Methoxychlor	0.03	µg/L	0.00050 U	0.0005 U	0.00016 J	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00049 U	0.00050 U	0.00049 U	0.0005 U	0.00049 U
Mirex	0.001	µg/L	0.00099 U	0.00099 U	0.00097 U	0.00012 J	0.00011 U	0.00013 J	0.000098 J	0.00010 J	0.00099 U	0.00099 U	0.00011 J	0.00099 U	0.00099 U	0.00099 U	0.00097 U	0.0010 U	0.00098 U	0.00099 U	0.000092 J
trans-Nonachlor	NE	µg/L	0.00050 U	0.0005 U	0.00017 J	0.00029 J	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.0005 U	0.00019 J	0.00050 U	0.00049 U	0.0005 U	0.00026 J
alpha-Chlordane (cis)	0.00059	µg/L	0.00090	0.0005 U	0.00025 J	0.00080	0.00032 J	0.00019 J	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00017 J	0.00050 U	0.00050 U	0.0005 U	0.00050	0.00050 U	0.00049 U	0.0005 U	0.00076
gamma-Chlordane	0.00059	µg/L	0.00084	0.0005 U	0.00029 J	0.0012	0.00037 J	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U	0.00023 J	0.00050 U	0.00050 U	0.0005 U	0.0016	0.00020 J	0.00049 U	0.0005 U	0.0012 J
Total Metals																					
Arsenic	5	µg/L	0.9	1.2	2	1.5	3.7	6	2	1.2	0.5 U	5	2.4	4.0	1	2 U	7.1	7.4	4.9	2.0	4.2
Cadmium	8.8	µg/L	0.1 U	0.2 U	0.5 U	0.1 U	0.1 U	1 U	0.2 U	0.1 U	0.2 U	1 U									

TABLE G-5 - Douglas Property Groundwater Data

Parameter	Screening Level	Unit	MW-17 12/20/2013	MW-17 3/17/2014	MW-17 7/16/2014	MW-18 8/20/2013	MW-18 12/19/2013	MW-18 3/18/2014	MW-18 7/16/2014	MW-19 8/20/2013	MW-19 12/16/2013	MW-19 3/17/2014	MW-19 7/16/2014	MWA (1) 11/24/2015	MWA (1) 3/30/2015	MWB (1) 11/24/2015	MWB (1) 3/30/2015	MWC (1) 11/24/2015	MWC (1) 3/30/2015
PCBs																			
PCB-aroclor 1242	0.03	µg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.025 U	0.010 U	0.010 U	0.015 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
PCB-aroclor 1248	0.03	µg/L	0.086	0.98	0.42	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.015 U	0.010 U	0.010 U	0.18	0.083	0.02	0.010 U	0.012	0.012 U
PCB-aroclor 1254	0.01	µg/L	0.10	0.88	0.48	0.010 U	0.010 U	0.010 U	0.010 J	0.012 U	0.015 U	0.010 U	0.010 U	0.29	0.14	0.02	0.018	0.019 J	0.016
PCB-aroclor 1260	0.015	µg/L	0.037	0.55	0.22	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.14	0.067	0.009 J	0.008 J	0.010 U	0.005 J
Total PCBs	0.01	µg/L	0.223 T	2.41 T	1.12 T	0.01 UT	0.01 UT	0.01 UT	0.01 T	0.025 UT	0.015 UT	0.01 UT	0.015 UT	0.61	.29	0.049	0.026	0.031	0.021
Pesticides																			
2,4'-DDD	0.0005	µg/L	0.00091	0.0020	0.002	0.00030 J	0.00050 U	0.00050 U	0.00011 J	0.00020 J	0.00049 U	0.00050 U	0.0005 U	-	-	-	-	-	-
2,4'-DDE	0.0005	µg/L	0.00050 U	0.00044 J	0.00043 J	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0005 U	-	-	-	-	-	-
2,4'-DDT	0.0005	µg/L	0.00050 U	0.00050 U	0.0005 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0005 U	-	-	-	-	-	-
4,4'-DDD	0.0005	µg/L	0.0033	0.0084	0.0092	0.0015	0.00053	0.00050 U	0.00052	0.00085	0.00051 U	0.00050 U	0.00044 J	0.14	0.11 J	0.0077 J	0.0012 U	0.0025 U	0.0012 U
4,4'-DDE	0.0005	µg/L	0.0023	0.0046	0.0053	0.0013	0.00048 J	0.00019 J	0.00035 J	0.00048 J	0.00026 J	0.00010 J	0.00078	0.039	0.03	0.0031	0.0012 U	0.0025 U	0.0012 U
4,4'-DDT	0.0005	µg/L	0.00050 U	0.00050 U	0.00077	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.00055	0.0076 U	0.0062 U	0.0017 U	0.0012 U	0.0025 U	0.0012 U
Aldrin	0.001	µg/L	0.0010 U	0.0010 U	0.001 U	0.0010 U	0.0010 U	0.0010 U	0.001 U	0.0010 U	0.0010 U	0.0010 U	0.001 U	0.0031 U	0.0031 U	0.00062 U	0.00062 U	0.0012 U	0.00062 U
Alpha-BHC	0.0049	µg/L	0.00050 U	0.00050 U	0.0015 J	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.00094 U	0.0038 U	0.0058 U	0.0019 U	0.0048 U	0.0022 U	0.00062 U
Beta-BHC	0.017	µg/L	0.00050 U	0.00050 U	0.0005 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0005 U	0.0036 U	0.0031 U	0.0023 U	0.0088 U	0.0012 U	0.00062 U
Chlorpyrifos	0.0056	µg/L	0.00050 U	0.00027 J	0.0005 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0005 U	-	-	-	-	-	-
Delta-BHC	0.0414	µg/L	0.00050 U	0.00050 U	0.00099 J	0.00044 J	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.00064 U	0.0031 U	0.0031 U	0.00062 U	0.00062 U	0.0012 U	0.00062 U
Dieldrin	0.005	µg/L	0.0050 U	0.0050 U	0.0027 J	0.0050 U	0.0050 U	0.0050 U	0.0049 U	0.0049 U	0.0049 U	0.0050 U	0.00075 J	0.0062 U	0.0062 U	0.0016 U	0.0066 U	0.0025 U	0.0012 U
Endosulfan II	0.0087	µg/L	0.0020 U	0.0050 U	0.002 U	0.0020 U	0.0020 U	0.0050 U	0.002 U	0.0020 U	0.0020 U	0.0050 U	0.002 U	-	-	-	-	-	-
Endosulfan Sulfate	0.0087	µg/L	0.00050 U	0.00050 U	0.0011	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.00083	0.0062 U	0.0062 U	0.0012 U	0.0012 U	0.0025 U	0.0012 U
Endrin	0.0023	µg/L	0.0050 U	0.0020 U	0.002 U	0.0020 U	0.0050 U	0.0020 U	0.002 U	0.0020 U	0.0049 U	0.0020 U	0.002 U	0.0062 U	0.0062 U	0.0012 U	0.0012 U	0.0025 U	0.0012 U
Endrin Ketone	0.0023	µg/L	0.00099 U	0.00099 U	0.0021 U	0.0010 U	0.0010 U	0.00099 U	0.00098 U	0.00048 J	0.00098 U	0.00099 U	0.0015 U	0.0062 U	0.0062 U	0.0012 U	0.0012 U	0.0025 U	0.0012 U
Heptachlor	0.001	µg/L	0.00099 U	0.00013 J	0.00034 J	0.00014 J	0.0010 U	0.00099 U	0.00098 U	0.00098 U	0.00098 U	0.00099 U	0.00022 J	0.0031 U	0.0031 U	0.00064 U	0.0019 U	0.0012 U	0.00062 U
Heptachlor Epoxide	0.001	µg/L	0.00099 U	0.00099 U	0.00097 J	0.0010 U	0.0010 U	0.00099 U	0.00098 U	0.00098 U	0.00098 U	0.00099 U	0.00057 J	0.0031 U	0.0031 U	0.00062 U	0.00062 U	0.0015 U	0.00062 U
Hexachlorobenzene	0.001	µg/L	0.00099 U	0.0099 U	0.0005 U	0.00050 U	0.0010 U	0.0099 U	0.00049 U	0.00049 U	0.00098 U	0.0099 U	0.0005 U	0.0062 U	0.0062 U	0.0012 U	0.0021	0.0025 U	0.0012 U
Isodrin	NE	µg/L	0.0020 U	0.0020 U	0.002 U	0.0020 U	0.0020 U	0.0020 U	0.002 U	0.0020 U	0.0020 U	0.0020 U	0.002 U	-	-	-	-	-	-
Lindane (Gamma-BHC)	0.063	µg/L	0.00050 U	0.00050 U	0.0005 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0005 U	0.0031 U	0.0031 U	0.00062 U	0.00062 U	0.0012 U	0.00062 U
Methoxychlor	0.03	µg/L	0.00050 U	0.00050 U	0.0018 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00049 U	0.00050 U	0.0014	0.031 U	0.031 U	0.0062 U	0.0062 U	0.012 U	0.0062 U
Mirex	0.001	µg/L	0.00099 U	0.00010 J	0.00099 U	0.00012 J	0.00012 J	0.00099 U	0.00098 U	0.00098 U	0.00098 U	0.00099 U	0.00099 U	-	-	-	-	-	-
trans-Nonachlor	NE	µg/L	0.00050 U	0.00012 J	0.0005 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00013 J	0.00050 U	0.0005 U	-	-	-	-	-	-
alpha-Chlordane (cis)	0.00059	µg/L	0.00050 U	0.00020 J	0.00069	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00021 J	0.00050 U	0.00024 J	0.0031 U	-	0.00062 U	-	0.019 U	-
gamma-Chlordane	0.00059	µg/L	0.00022 J	0.00050 U	0.0012	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00049 U	0.00023 J	0.00050 U	0.00042 J	0.0031 U	-	0.00062 U	-	0.0012 U	-
Total Metals																			
Arsenic	5	µg/L	3.1	5	3	6.6	3.4	2	3.5	4.5	2.5	2.4 J	2.4	12	8.6	6	5	1	2
Cadmium	8.8	µg/L	0.1 U	0.5 U	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.8	0.4	0.1 J	0.2 J	0.5 U	0.5 U
Chromium	27	µg/L	6	6.2	7	3.1 J	1.6	2	2 U	4 J	2.0	2 U	2 U	40	30	9	5	3	4
Copper	2.4	µg/L	1.0	7	3	10.7	1.6	1 U	2 U	4.1	2.2	1 U	1 U	41.4	26	4	2 J	2 J	3
Lead	8.1	µg/L	0.8	10.8	5.4 J	9.0	2.3	0.7	1.7 J	2.9	1.4	0.5 J	0.4 J	306	206	32.8	12.6	1.6	2.4
Mercury	0.025	µg/L	0.00818	0.0328	0.0142	0.0183	0.0061 J	0.00151	0.00266	0.0500	0.00584	0.00150	0.00205	-	0.19	-	0.014 J	-	0.027
Nickel	8.2	µg/L	1.6	4	4	3.1	2.3 J	5 U	2.5	3.5	3.2	3	2 U	20.2	12	2 J	2 J	0.9 J	1 J
Silver	1.9	µg/L	0.2 U	1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 J	0.1 J	0.05 J	1 U	1 U	0.05 J
Zinc	81	µg/L	4	20	20	14	7	4 U	5	8	10	10 U	4 U	188	240	30	13 J	4 J	8 J
Dissolved Metals																			
Arsenic	5	µg/L	2.9	3.4	3	5.4	3.1	4	3.6	3.0	2.2	2.4 J	2.3	3	2.0	7.3	4.5	2	1 J
Cadmium	8.8	µg/L	0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.08 J	0.1 U	0.5 U	0.02 J	0.2 J	0.5 U
Chromium	27	µg/L	5	4	5	1 U	2 U	2 U	1.6	1.3	2	2 U	2 U	4.4	3	8	4	1.8	2 J
Copper	2.4	µg/L	0.5 U	0.5 U	1 U	1.1	0.5 U	5 U	2 U	0.5 U	0.5 U	0.5 U	1 U	2.6	0.3 J	2	0.5 J	2.4	1 J
Lead	8.1	µg/L	0.1 U	0.2 U	0.2	0.1 U	0.2	1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.5 U	19.2	0.08 J	14.4	0.1 J	2	0.2 J
Mercury	0.025	µg/L	0.00093 J	0.00438	0.00302	0.00032 J	0.00063 J	0.00043	0.00054	0.00066 J	0.00040 J	0.00060 J	0.00047 J	0.0165	0.020 U	0.0153	0.007 J	0.0164	0.005 J
Nickel	8.2	µg/L	1.6	1.4	1	1.6	2.0 J	5 U	2.1	2.0	2.6	2.9	2.0	1.4	0.3 J	1.0	0.7 J	1.5 J	0.3 J
Silver	1.9	µg/L	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.02 J	0.01 J	0.05 J	0.4 U	2 U	1 U
Zinc	81	µg/L	6	10 U	10 U	4 U	4 U	4 U	4 U	4 U	4 U	10 U	20 U	12	4 U	10	3 J	5.2 J	15 J

Notes:

NE = A Screening Level was not established for this analyte (See Table 9)

J = estimated value

T = summed result

U = not detected

µg/L = micrograms per liter

Bold = detected value

Yellow Fill indicates detected result > the groundwater Screening Level

Blue Fill indicates not detected with reporting limit > the groundwater Screening Level

APPENDIX H
SOIL ANALYTICAL DATA TABLES
1986 to 2015
ICS/NWC – UPLAND SAMPLE LOCATIONS

REMEDIAL INVESTIGATION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025

- **TABLE H.1** – RESULTS OF SOIL SAMPLE ANALYSES – 1986
- **TABLE H.2** – RESULTS OF SOIL SAMPLE ANALYSES – 1991
- **TABLE H.3a** – RESULTS OF SOIL SAMPLE ANALYSES – 2007 and 2008
- **TABLE H.3b** – BaPEq-TEQ Calculations – 2007 Data
- **TABLE H.4a** – RESULTS OF SOIL SAMPLE ANALYSES – 2012 to 2015
- **TABLE H.4b** – BaPEq-TEQ Calculations – 2012 to 2015 Data
- **TABLE H.5** – RESULTS OF PCDD/PCDF SOIL SAMPLE ANALYSES – 2014
- **TABLE H.6** – DOUGLAS PROPERTY – RESULTS OF SOIL ANALYSES - 1990 to 2015 (from GEOENGINEERS 2016 draft RI Report)

TABLE H.1 - Results of Soil Sample Analyses - 1986

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (f) (mg/kg)	HC-B-1 May-86 (a) 2.5-12 (mg/kg)	HC-B-2 May-86 (a) 2.5-9 (mg/kg)	1 (b) Feb-86 (a) 0-2 (mg/kg)	2(b) Feb-86 (a) 0-2 (mg/kg)	3(b) Feb-86 (a) 0-2 (mg/kg)	4(b) Feb-86 (a) 0-2 (mg/kg)	5(b) Feb-86 (a) 0-2 (mg/kg)	6(b) Feb-86 (a) 0-2 (mg/kg)	EPA-B1A Sep-86 (c) Spl. D (d) (mg/kg)	EPA-B1A Sep-86 (c) 5-7(e) (mg/kg)	EPA-B1A Sep-86 (c) 7-8.5(e) (mg/kg)
Total Metals												
Anitmony	1400	5	nd	nd	nd	nd	nd	nd	nd	0.3	nd	0.6
Arsenic	87.5	5.1	6.2	5	5.5	4.5	4.5	4	7.8	7.8	2.9	3.4
Beryllium	7000	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	3.5	2.9	2.7
Cadmium	3500	nd	nd	0.5	1.4	0.5	nd	nd	3.5	0.72	0.74	0.84
Chromium (SL as Cr+6)	10,500	35	120	27	200	20	37	22	200	22.6	50.5	55.1
Copper	140,000	35	72	26	28	13	15	13	100	40.6	49.5	50.7
Lead	1000	63	170	1400	640	48	160	60	1400	56.9	157.8	171.3
Mercury	2	0.2	0.4	0.5	1	0.3	0.6	0.2	6.7	0.05	0.19	0.22
Nickel	70,000	28	61	22	21	11	15	12	47	14.4	31.9	26.6
Silver	17,500	0.5	0.9	nd	1.2	0.2	0.1	nd	0.2	0.11	0.1	0.14
Zinc	1,050,000	81	290	130	440	91	120	70	640	91	140	141
Volatile Organic Compounds												
Vinyl chloride	87.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	21,000	0.13	0.35	0.06	0.04	TR	0.051	0.053	0.33	nd	nd	nd
Acetone	3,150,000	0.41	1.7	nd	nd	TR	0.04	0.044	0.092	nd	nd	nd
Chloroform	4230	nd	nd	TR	TR	nd	TR	nd	TR	nd	nd	nd
1,1-Dichloroethylene	175,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	23,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans 1,2-dichloroethylene	70,000	nd	TR	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	7,000,000	TR	TR	nd	nd	nd	nd	nd	TR	nd	nd	nd
Trichloroethylene	1750	nd	TR	nd	TR	nd	nd	nd	0.039	nd	nd	nd
Tetrachloroethylene	21,000	TR	0.13	TR	TR	nd	nd	nd	0.87	nd	0.42	0.35
Benzene	2390	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4,-Methyl-2-pentanone	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	280,000	nd	0.035	nd	nd	nd	nd	nd	TR	nd	nd	nd
Ethylbenzene	350,000	TR	0.19	nd	nd	nd	nd	nd	0.11	0.12	nd	nd
Total Xylene	700,000	0.028	0.36	nd	nd	nd	nd	nd	0.32	nd	1.3	nd
Semivolatile Organic Compounds												
Phenol	1,050,000	nd	0.32	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	315,000	nd	nd	nd	nd	nd	nd	nd	0.66	nd	nd	nd
2,4-Dimethylphenol	70,000	nd	0.93	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	70,000	1.9	1.9	nd	nd	nd	nd	nd	nd	nd	2.8	2.9
4-Chloro-m-cresol	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	210,000	0.68	0.33	nd	nd	nd	nd	nd	nd	nd	0.72	nd
Fluorene	140,000	0.43	0.34	nd	nd	nd	nd	nd	nd	nd	0.6	nd
Pentachlorophenol	328	nd	nd	0.07	0.48	nd	nd	nd	0.81	nd	nd	nd
Phenanthrene	-----	0.93	0.98	0.086	0.64	nd	nd	nd	0.66	nd	1.8	nd
Anthracene	1,050,000	0.25	1.3	nd	nd	nd	nd	nd	nd	nd	0.36	nd

TABLE H.1 - Results of Soil Sample Analyses - 1986

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (f) (mg/kg)	HC-B-1 May-86 (a) 2.5-12 (mg/kg)	HC-B-2 May-86 (a) 2.5-9 (mg/kg)	1 (b) Feb-86 (a) 0-2 (mg/kg)	2(b) Feb-86 (a) 0-2 (mg/kg)	3(b) Feb-86 (a) 0-2 (mg/kg)	4(b) Feb-86 (a) 0-2 (mg/kg)	5(b) Feb-86 (a) 0-2 (mg/kg)	6(b) Feb-86 (a) 0-2 (mg/kg)	EPA-B1A Sep-86 (c) Spl. D (d) (mg/kg)	EPA-B1A Sep-86 (c) 5-7(e) (mg/kg)	EPA-B1A Sep-86 (c) 7-8.5(e) (mg/kg)
Dibutylphthalate	-----	nd	0.53	0.057	0.68	nd	nd	nd	0.6	nd	nd	nd
Fluoranthene	140,000	0.75	0.39	0.072	0.84	nd	nd	nd	nd	nd	1.1	nd
Pyrene	105,000	0.47	0.37	nd	0.51	nd	nd	nd	0.5	nd	nd	0.97
Butyl benzyl phthalate	69,100	nd	nd	nd	nd	nd	nd	0.15	nd	nd	nd	nd
bis(2-ethylhexyl)phthalate	9,380	2.63	1.8	5.8	6.9	0.32	nd	0.36	4.8	nd	nd	nd
Di-n-octyl phthalate	35,000	0.38	0.13	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	3,500	0.42	0.16	nd	nd	nd	nd	nd	nd	nd	0.63	nd
2-Methylnaphthalene	14,000	0.77	1.5	nd	nd	nd	nd	nd	1.26	nd	1.1	nd
2-Methylphenol	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	-----	0.51	0.53	nd	nd	nd	nd	nd	nd	nd	0.5	nd
Pesticides/PCBs												
Dieldrin	8.2	nd	nd	nd	nd	nd	0.029	0.016	nd	nd	nd	nd
4,4'-DDD	547	nd	nd	nd	0.046	nd	nd	nd	0.427	nd	nd	nd
4,4'-DDE	386	nd	nd	nd	0.11	nd	0.219	0.019	nd	nd	nd	nd
4,4'-DDT	386	nd	nd	nd	nd	nd	0.246	0.199	0.684	nd	nd	nd
Endrin	1050	nd	nd	0.104	nd	nd	nd	nd	nd	nd	nd	nd
PCB 1248	10 (as total)	1.8	1.7	nd	nd	nd	nd	nd	nd	1.93	4.37	3.48
PCB 1260	10 (as total)	0.95	1.2	nd	nd	0.398	0.435	nd	nd	1.1	2.21	2.04
Other Compounds												
Total Cyanide	2,100	0.7	8.3	0.6	3.6	1.9	9.8	3.6	4.5	-----	-----	-----
Total Phenol	1,050,000	0.7	1.6	nd	0.6	nd	nd	nd	nd	-----	-----	-----

Notes:

nd - Not detected

TR - Trace

(a) - Hart Crowser 1986

(b) - Surface composite sample

(c) - Hart Crowser 1987

(d) - Depth not reported in Hart Crowser 1987 report

(e) - EPA split sample results collected during drilling of borings/wells.

Sample depth assumed to be sequential (i.e. sample S-1 on log = C-1 on Hart Crowser table)

(f) - Based on industrial land use

 - Exceeds soil contact screening level (SL)

TABLE H.1 - Results of Soil Sample Analyses - 1986

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (f) (mg/kg)	EPA-B1A Sep-86 (c) 8.5-10.5(e) (mg/kg)	EPA-B2A Sep-86 (c) Spl. D (d) (mg/kg)	EPA-B2A Sep-86 (c) 5-7(e) (mg/kg)	EPA-B2A Sep-86 (c) 7-8.5(e) (mg/kg)	EPA-B2A Sep-86 (c) 8.5-10.5(e) (mg/kg)	EPA-B4 Sep-86 (c) 2-3(e) (mg/kg)	EPA-B4 Sep-86 (c) 4.5-6(e) (mg/kg)	EPA-B4 Sep-86 (c) 7-8.5(e) (mg/kg)	EPA-B5 Sep-86 (c) Spl. D(d) (mg/kg)	EPA-B5 Sep-86 (c) 2-3.5(e) (mg/kg)	EPA-B5 Sep-86 (c) 5-6.5(e) (mg/kg)	EPA-B5 Sep-86 (c) 7-8.5(e) (mg/kg)
Total Metals													
Anitmony	1400	0.4	nd	0.2	0.1	0.2	0.2	0.2	0.5	nd	nd	0.3	0.1
Arsenic	87.5	7.6	1.2	3.3	6.4	1.6	1.9	4.1	2.1	4.8	2.4	3.9	1.8
Beryllium	7000	3.6	1.1	1.5	2.9	1.4	1.7	3	1.2	3.9	1.7	3.6	2.3
Cadmium	3500	0.66	0.04	0.72	1.53	0.15	0.22	0.15	0.05	0.06	nd	0.07	0.03
Chromium (SL as Cr+6)	10,500	22.5	7.6	32.6	38.6	12.4	12.2	11.6	10.6	14.6	7.6	14	10.4
Copper	140,000	48	14.1	21.5	41.6	12.8	33.1	26.8	10.9	35.5	12.3	35.3	18.3
Lead	1000	51.5	7.4	444	158.2	28.3	22.6	1	0.5	0.8	0.8	1.7	nd
Mercury	2	0.06	0.02	0.26	2.18	0.06	0.12	0.02	0.01	0.02	0.03	0.02	0.02
Nickel	70,000	13.9	5.9	9.9	14	6.4	7.8	10.1	5	10.3	6.7	11.2	8.5
Silver	17,500	0.13	nd	0.03	0.17	nd	nd	nd	nd	nd	nd	nd	nd
Zinc	1,050,000	87	19	149	217	35	37	34	22	35	23	35	29
Volatile Organic Compounds													
Vinyl chloride	87.5	nd	nd	nd	0.015	nd	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	21,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acetone	3,150,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chloroform	4230	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethylene	175,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	23,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans 1,2-dichloroethylene	70,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	7,000,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene	1750	nd	nd	0.023	nd	nd	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene	21,000	nd	nd	nd	0.072	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	2390	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4,-Methyl-2-pentanone	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	280,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	350,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total Xylene	700,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Semivolatile Organic Compounds													
Phenol	1,050,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	315,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	70,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	70,000	nd	nd	1.7	nd	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-m-cresol	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	210,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	140,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	328	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	1,050,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

TABLE H.1 - Results of Soil Sample Analyses - 1986

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (f) (mg/kg)	EPA-B1A Sep-86 (c) 8.5-10.5(e) (mg/kg)	EPA-B2A Sep-86 (c) Spl. D (d) (mg/kg)	EPA-B2A Sep-86 (c) 5-7(e) (mg/kg)	EPA-B2A Sep-86 (c) 7-8.5(e) (mg/kg)	EPA-B2A Sep-86 (c) 8.5-10.5(e) (mg/kg)	EPA-B4 Sep-86 (c) 2-3(e) (mg/kg)	EPA-B4 Sep-86 (c) 4.5-6(e) (mg/kg)	EPA-B4 Sep-86 (c) 7-8.5(e) (mg/kg)	EPA-B5 Sep-86 (c) Spl. D(d) (mg/kg)	EPA-B5 Sep-86 (c) 2-3.5(e) (mg/kg)	EPA-B5 Sep-86 (c) 5-6.5(e) (mg/kg)	EPA-B5 Sep-86 (c) 7-8.5(e) (mg/kg)
Dibutylphthalate	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	140,000	nd	nd	0.5	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	105,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Butyl benzyl phthalate	69,100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
bis(2-ethylhexyl)phthalate	9,380	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-octyl phthalate	35,000	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	3,500	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	14,000	nd	nd	2	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	-----	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	-----	nd	nd	0.6	nd	nd	nd	nd	nd	nd	nd	nd	nd
Pesticides/PCBs													
Dieldrin	8.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4,4'-DDD	547	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4,4'-DDE	386	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
4,4'-DDT	386	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Endrin	1050	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PCB 1248	10 (as total)	3.42	1.05	12.4	1.67	2.31	0.42	nd	nd	nd	nd	nd	nd
PCB 1260	10 (as total)	1.65	0.62	2.9	4.32	0.76	0.32	nd	nd	nd	nd	nd	nd
Other Compounds													
Total Cyanide	2,100	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Phenol	1,050,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Notes:

nd - Not detected

TR - Trace

(a) - Hart Crowser 1986

(b) - Surface composite sample

(c) - Hart Crowser 1987

(d) - Depth not reported in Hart Crowser 1987 report

(e) - EPA split sample results collected during drilling of borings/wells.

Sample depth assumed to be sequential (i.e. sample S-1 on log = C-1 on Hart Crowser table)

(f) - Based on industrial land use

 - Exceeds soil contact screening level (SL)

TABLE H.2 - Results of Soil Sample Analyses - 1991

 ICS/NW Cooperage Site
 Seattle, WA

Location Date Source Depth (cm) Units	SC-1 (b) 1991 (a) <15 (mg/kg)
Total Metals	
Arsenic	<11
Cadmium	<0.57
Chromium	15.9
Copper	22
Lead	49.2
Mercury	<0.11
Nickel	15.8
Zinc	58.1
Volatile Organic Compounds	
1,1,1-Trichloroethane	<0.057
1,1,2,2-Tetrachloroethane	<0.057
1,1,2-Trichloroethane	<0.057
1,1-Dichloroethane	<0.057
1,1-Dichloroethene	<0.057
1,2-Dichloroethane	<0.057
1,2-Dichloropropane	<0.057
2-Hexanone	<0.011
Acetone	<0.011
Allyl chloride	-----
Benzene	<0.057
Bromodichloromethane	<0.057
Bromoform	<0.057
Bromomethane	<0.011
Carbon disulfide	<0.057
Carbon Tetrachloride	<0.057
Chlorobenzene	<0.057
Chloroethane	<0.011
Chloroform	<0.057
Chloromethane	<0.011
cis-1,3-Dichloropropene	<0.057
Dibromochloromethane	<0.057
Dichloromethane	<0.057
Ethylbenzene	<0.057
Methyl ethyl ketone	<0.011
Styrene	<0.057
Tetrachloroethene	<0.057
Toluene	<0.057
Trichloroethene	<0.057
Vinyl chloride	<0.011
Xylene (m & p)	<0.057
Xylene (o)	<0.057
Semivolatile Organic Compounds	
Acenaphthene	<0.38
Acenaphthylene	<0.38
Anthracene	<0.38
Benzo(a)anthracene	<0.38
Benzo(a)pyrene	<0.38
Benzo(b)fluoranthene	<0.38
Benzo(ghi)perylene	<0.38
Benzo(k)fluoranthene	<0.38
Total Benzofluoranthenes	<0.38
Chrysene	<0.38
Dibenzo(ah)anthracene	<0.38
Fluoranthene	<0.38

Location Date Source Depth (cm) Units	SC-1 (b) 1991 (a) <15 (mg/kg)
Fluorene	<0.38
Indeno(123-cd)pyrene	<0.38
Naphthalene	<0.38
Phenanthrene	<0.38
Pyrene	<0.38
Pesticides/PCBs	
4,4'-DDD	<0.039
4,4'-DDE	<0.039
4,4'-DDT	<0.039
Aldrin	<0.019
alpha-BHC	<0.019
beta-BHC	<0.019
delta-BHC	<0.019
Dieldrin	<0.039
Endosulfan sulfate	<0.039
Endrin	<0.039
Endrin aldehyde	<0.039
Heptachlor	<0.019
Heptachlor epoxide	<0.019
Lindane	<0.019
Methoxychlor	<0.200
Toxaphene	<0.390
PCB 1016	<0.200
PCB 1221	<0.200
PCB 1232	<0.200
PCB 1242	<0.200
PCB 1248	<0.200
PCB 1254	<0.200
PCB 1260	<0.200
Total PCBs	<0.200
Dioxin/Furans (ng/kg)	
1,2,3,4,6,7,8-HpCDD	0.24
1,2,3,4,6,7,8-HpCDF	<0.019
1,2,3,4,7,8,9-HpCDF	<0.019
1,2,3,4,7,8-HxCDD	<0.023
1,2,3,4,7,8-HxCDF	<0.021
1,2,3,6,7,8-HxCDD	<0.023
1,2,3,6,7,8-HxCDF	<0.021
1,2,3,7,8,9-HxCDD	<0.023
1,2,3,7,8,9-HxCDF	<0.021
1,2,3,7,8-PeCDD	<0.027
1,2,3,7,8-PeCDF	<0.0089
2,3,4,6,7,8-HxCDF	<0.021
2,3,4,7,8-PeCDF	<0.0089
2,3,7,8-TCDD	<0.0082
2,3,7,8-TCDF	<0.0053
OCDD	2.3
OCDF	<0.077

Notes:

nd - Not detected

< - Not detected at indicated reporting limit

----- - Not analyzed

(a) - Parametrix 1991

(b) - Composite of four samples

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	SA-MW-1 Apr-07 (a) 5-6.5 (mg/kg)	SA-MW-1 Apr-07 (a) 12.5-13.5 (mg/kg)	SA-MW-2 Apr-07 (a) 7.5-8 (mg/kg)	SA-MW-2 Apr-07 (a) 10-11.5 (mg/kg)	SA-MW-2 Apr-07 (a) 15-16.5 (mg/kg)	SA-MW-3 Apr-07 (a) 10-11.5 (mg/kg)	P1 Jul-08 (b) 2.5-3 (mg/kg)	P2 Jul-08 (b) 5-5.5 (mg/kg)	P2 Jul-08 (b) 10-10.5 (mg/kg)
Observations	-----	heavy sheen	sl sheen	heavy sheen	heavy sheen	heavy sheen	No sheen	No sheen	mod. sheen	lt sheen
Total Solids (%)	-----	76.3	74	80	86.3	80.4	77.6	-----	-----	-----
Total Organic Carbon (%)	-----	4.25	0.28	1.63	2.6	4.01	0.3	-----	-----	-----
Petroleum Hydrocarbons										
Gasoline Range Organics	30	260	<20	10	<20	54	<20	-----	-----	-----
Diesel Range Organics (DRO)	2000	15000	<50	1000	61	1000	<50	620	4500	47
Motor-Oil Range Organics (RRO)	2000	49000	<100	3000	210	2100	<100	690	8700	74
Total DRO+RRO	2000	64000	<100	4000	271	3100	<100	1310	13200	121
Type	-----	-----	-----	-----	-----	-----	-----	D/MO	D/MO	D/MO
Total Metals										
Arsenic	87.5	11.7	1.11	2.61	4.69	3.1	1.14	-----	-----	-----
Cadmium	3500	0.858	0.095	0.322	0.121	0.537	0.078	-----	-----	-----
Chromium	10500	56.6	18.2	22.9	14.6	55.3	8.7	-----	-----	-----
Copper	140000	284	20.8	18.8	18.9	41.2	13.1	-----	-----	-----
Lead	1000	836	6.44	76.8	25	204	1.82	50	3570	13
Mercury	24	2.01	0.771	0.019	0.055	0.318	0.019	-----	-----	-----
Silver	17500	0.44	0.11	0.45	0.04	0.13	0.03	-----	-----	-----
Zinc	1050000	220	25.9	85.7	34.7	126	18.1	-----	-----	-----
Semivolatile Organic Compounds										
1,2,4-Trichlorobenzene	4530	<1	<0.05	<0.2	<0.04	0.058	<0.01	-----	-----	-----
1,2-Dichlorobenzene	315000	0.98	<0.05	<0.2	<0.04	0.048	<0.01	-----	-----	-----
1,4-Dichlorobenzene	24300	2.4	<0.05	<0.2	<0.04	0.15	<0.01	-----	-----	-----
2,4-Dimethylphenol	70000	<5	<0.25	<1.0	<0.20	<1	<0.05	-----	-----	-----
2-Methylnaphthalene	14000	17	0.067	0.073	0.035	0.27	<0.01	-----	-----	-----
2-Methylphenol	-----	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
4-Methylphenol	-----	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Acenaphthene	210000	0.82	<0.05	0.057	0.0099	0.18	<0.01	-----	-----	-----
Acenaphthylene	-----	<1	<0.05	<0.2	0.0085	0.063	<0.01	-----	-----	-----
Anthracene	1050000	0.91	<0.05	0.06	0.022	0.2	<0.01	-----	-----	-----
Benzo(a)anthracene	See BaPEq	0.45	<0.05	0.038	0.046	0.26	<0.01	-----	-----	-----
Benzo(a)pyrene	See BaPEq	<1	<0.05	<0.2	0.045	0.28	<0.01	-----	-----	-----
Benzo(b)fluoranthene	See BaPEq	<1	<0.05	<0.2	0.051	0.3	<0.01	-----	-----	-----
Benzo(ghi)perylene	-----	<1	<0.05	<0.2	0.035	0.22	<0.01	-----	-----	-----
Benzo(k)fluoranthene	See BaPEq	<1	<0.05	<0.2	0.017	0.12	<0.01	-----	-----	-----
Total Benzo(a)fluoranthenes	See BaPEq	<1	<0.05	<0.2	0.068	0.42	<0.01	-----	-----	-----
Benzoic Acid	-----	<20	<1	<4	<0.80	<4	<0.2	-----	-----	-----
Benzyl Alcohol	350000	<2	<0.10	<0.4	<0.080	<0.4	<0.02	-----	-----	-----
Bis(2-ethylhexyl)phthalate	9380	2.7	0.068	1.5	0.094	1.2	0.0051	-----	-----	-----
Butylbenzylphthalate	69100	<1	<0.05	<0.2	<0.04	0.11	<0.01	-----	-----	-----
Chrysene	See BaPEq	0.78	0.01	0.066	0.054	0.31	<0.01	-----	-----	-----
Dibenzo(ah)anthracene	See BaPEq	<1	<0.05	<0.2	<0.040	<0.2	<0.01	-----	-----	-----

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	SA-MW-1 Apr-07 (a) 5-6.5 (mg/kg)	SA-MW-1 Apr-07 (a) 12.5-13.5 (mg/kg)	SA-MW-2 Apr-07 (a) 7.5-8 (mg/kg)	SA-MW-2 Apr-07 (a) 10-11.5 (mg/kg)	SA-MW-2 Apr-07 (a) 15-16.5 (mg/kg)	SA-MW-3 Apr-07 (a) 10-11.5 (mg/kg)	P1 Jul-08 (b) 2.5-3 (mg/kg)	P2 Jul-08 (b) 5-5.5 (mg/kg)	P2 Jul-08 (b) 10-10.5 (mg/kg)
Dibenzofuran	3500	0.68	<0.05	0.042	0.012	0.093	<0.01	-----	-----	-----
Diethylphthalate	2800000	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Dimethylphthalate	-----	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Di-N-Butylphthalate	-----	<1	<0.05	0.13	<0.04	0.15	<0.01	-----	-----	-----
Di-n-octyl phthalate	35000	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Fluoranthene	140000	1.9	0.021	0.12	0.1	0.89	<0.01	-----	-----	-----
Fluorene	140000	1.9	0.013	0.087	0.016	0.21	<0.01	-----	-----	-----
Hexachlorobenzene	82	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Hexachlorobutadiene	1680	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Indeno(123-cd)pyrene	See BaPEq	<1	<0.05	<0.2	0.033	0.2	<0.01	-----	-----	-----
Naphthalene	70000	3.6	0.02	<0.068	0.095	1.1	<0.01	-----	-----	-----
N-Nitrosodiphenylamine	26800	<1	<0.05	<0.2	<0.04	<0.2	<0.01	-----	-----	-----
Pentachlorophenol	328	<10	<0.5	<2	<0.4	0.37	<0.1	-----	-----	-----
Phenanthrene	-----	7	0.054	0.24	0.079	0.98	0.0023	-----	-----	-----
Phenol	1050000	<3	0.038	<0.59	<0.12	0.051	<0.03	-----	-----	-----
Pyrene	105000	2.7	0.023	0.11	0.11	0.79	<0.01	-----	-----	-----
BaPEq.-TEQ (see Table H.3b)	131	0.05	0.0001	0.004	0.06	0.37	nd	-----	-----	-----
Pesticides/PCBs										
2,4'-DDD	-----	<0.19	<0.0011	0.0049	0.0082	0.19	<0.00049	-----	-----	-----
2,4'-DDE	-----	<0.16	0.0033	0.0018	0.00032	<0.037	<0.00049	-----	-----	-----
2,4'-DDT	-----	0.41	0.0024	<0.0022	0.01	0.2	<0.00049	-----	-----	-----
4,4'-DDD	547	<0.017	<0.0005	0.0026	0.0049	0.19	<0.00049	-----	-----	-----
4,4'-DDE	386	1.9	0.0210	0.0064	0.0081	0.34	<0.00049	-----	-----	-----
4,4'-DDT	386	0.49	0.0032	0.005	0.0073	<0.2	<0.00049	-----	-----	-----
Aldrin	7.7	<0.005	<0.0012	<0.0005	<0.0005	<0.025	<0.00049	-----	-----	-----
Chlordane	-----	<0.26	<0.0240	0.032	<0.011	<0.25	<0.0049	-----	-----	-----
Dieldrin	8.2	<0.011	<0.0005	<0.0005	<0.0026	<0.065	<0.00049	-----	-----	-----
Heptachlor	29.2	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00049	-----	-----	-----
Lindane	119	<0.03	0.0012	<0.0005	0.0016	<0.025	<0.00049	-----	-----	-----
PCB 1016	see Total	<5	<0.005	<0.025	<0.049	<0.5	<0.0049	<9.2	<1.2	<0.032
PCB 1221	see Total	<10	<0.010	<0.049	<0.097	<0.99	<0.0049	<9.2	<1.2	<0.032
PCB 1232	see Total	<5	<0.005	<0.025	<0.049	<0.5	<0.0049	<9.2	<1.2	<0.032
PCB 1242	see Total	51	0.24	0.1	0.4	6.3	<0.0049	14	<1.2	0.064
PCB 1248	see Total	<5	<0.005	<0.025	<0.049	<0.5	<0.0049	<9.2	2.7	<0.032
PCB 1254	see Total	18	0.081	0.065	0.16	2.8	<0.0049	28	5.5	0.038
PCB 1260	see Total	7.5	0.041	0.046	0.21	2.8	<0.0049	76	12	<0.032
Total PCBs	10	76.5	0.362	0.211	0.77	11.9	<0.0049	90	20	0.1

Notes:

(a) - SAIC 2007

(b) - By DOF

(c) - Based on an industrial landuse

MO - Motor oil fuel pattern

DRO - Diesel range organics - pattern not match standard

RRO - Residual range organics - pattern not match standard

D - Diesel fuel pattern

< - Not detected at indicated reporting level

- Shading indicates exceedance of industrial land use screening level

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P2 Jul-08 (b) 15-15.5 (mg/kg)	P3 Jul-08 (b) 5-5.5 (mg/kg)	P3 Jul-08 (b) 10-10.5 (mg/kg)	P3 Jul-08 (b) 15-15.5 (mg/kg)	P4 Jul-08 (b) 5-5.5 (mg/kg)	P4 Jul-08 (b) 10-10.5 (mg/kg)	P4 Jul-08 (b) 15-15.5 (mg/kg)	P5 Jul-08 (b) 6-6.5 (mg/kg)	P5 Jul-08 (b) 10-10.5 (mg/kg)
Observations	-----	lt sheen	mod. sheen	mod. sheen	no sheen	no sheen	no sheen	no sheen	sheen	no sheen
Total Solids (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Organic Carbon (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Petroleum Hydrocarbons										
Gasoline Range Organics	30	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diesel Range Organics (DRO)	2000	23	6800	120	67	190	<7.2	<6.7	2300	25
Motor-Oil Range Organics (RRO)	2000	34	18000	160	70	230	16	<13	5600	30
Total DRO+RRO	2000	57	24800	280	137	420	16	<13	7900	55
Type	-----	D/MO	D/MO	DRO/MO	DRO/MO	DRO/MO	MO	-----	D/MO	DRO/MO
Total Metals										
Arsenic	87.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cadmium	3500	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chromium	10500	-----	-----	-----	-----	-----	-----	-----	-----	-----
Copper	140000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lead	1000	3	7	3	<3	9	3	<3	8	4
Mercury	24	-----	-----	-----	-----	-----	-----	-----	-----	-----
Silver	17500	-----	-----	-----	-----	-----	-----	-----	-----	-----
Zinc	1050000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Semivolatile Organic Compounds										
1,2,4-Trichlorobenzene	4530	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dichlorobenzene	315000	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,4-Dichlorobenzene	24300	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dimethylphenol	70000	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Methylnaphthalene	14000	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acenaphthene	210000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acenaphthylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Anthracene	1050000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(a)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(a)pyrene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(b)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(ghi)perylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(k)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Benzo(a)fluoranthenes	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzoic Acid	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzyl Alcohol	350000	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bis(2-ethylhexyl)phthalate	9380	-----	-----	-----	-----	-----	-----	-----	-----	-----
Butylbenzylphthalate	69100	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chrysene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dibenzo(ah)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P2 Jul-08 (b) 15-15.5 (mg/kg)	P3 Jul-08 (b) 5-5.5 (mg/kg)	P3 Jul-08 (b) 10-10.5 (mg/kg)	P3 Jul-08 (b) 15-15.5 (mg/kg)	P4 Jul-08 (b) 5-5.5 (mg/kg)	P4 Jul-08 (b) 10-10.5 (mg/kg)	P4 Jul-08 (b) 15-15.5 (mg/kg)	P5 Jul-08 (b) 6-6.5 (mg/kg)	P5 Jul-08 (b) 10-10.5 (mg/kg)
Dibenzofuran	3500	----	----	----	----	----	----	----	----	----
Diethylphthalate	2800000	----	----	----	----	----	----	----	----	----
Dimethylphthalate	----	----	----	----	----	----	----	----	----	----
Di-N-Butylphthalate	----	----	----	----	----	----	----	----	----	----
Di-n-octyl phthalate	35000	----	----	----	----	----	----	----	----	----
Fluoranthene	140000	----	----	----	----	----	----	----	----	----
Fluorene	140000	----	----	----	----	----	----	----	----	----
Hexachlorobenzene	82	----	----	----	----	----	----	----	----	----
Hexachlorobutadiene	1680	----	----	----	----	----	----	----	----	----
Indeno(123-cd)pyrene	See BaPEq	----	----	----	----	----	----	----	----	----
Naphthalene	70000	----	----	----	----	----	----	----	----	----
N-Nitrosodiphenylamine	26800	----	----	----	----	----	----	----	----	----
Pentachlorophenol	328	----	----	----	----	----	----	----	----	----
Phenanthrene	----	----	----	----	----	----	----	----	----	----
Phenol	1050000	----	----	----	----	----	----	----	----	----
Pyrene	105000	----	----	----	----	----	----	----	----	----
BaPEq.-TEQ (see Table H.3b)	131	----	----	----	----	----	----	----	----	----
Pesticides/PCBs										
2,4'-DDD	----	----	----	----	----	----	----	----	----	----
2,4'-DDE	----	----	----	----	----	----	----	----	----	----
2,4'-DDT	----	----	----	----	----	----	----	----	----	----
4,4'-DDD	547	----	----	----	----	----	----	----	----	----
4,4'-DDE	386	----	----	----	----	----	----	----	----	----
4,4'-DDT	386	----	----	----	----	----	----	----	----	----
Aldrin	7.7	----	----	----	----	----	----	----	----	----
Chlordane	----	----	----	----	----	----	----	----	----	----
Dieldrin	8.2	----	----	----	----	----	----	----	----	----
Heptachlor	29.2	----	----	----	----	----	----	----	----	----
Lindane	119	----	----	----	----	----	----	----	----	----
PCB 1016	see Total	<0.032	<3.5	<0.35	<0.16	<0.032	<0.032	<0.032	<1.2	<0.033
PCB 1221	see Total	<0.032	<3.5	<0.35	<0.16	<0.032	<0.032	<0.032	<1.2	<0.033
PCB 1232	see Total	<0.032	<3.5	<0.35	<0.16	<0.032	<0.032	<0.032	<1.2	<0.033
PCB 1242	see Total	0.049	<3.5	<0.35	<0.16	<0.032	<0.032	<0.032	11	0.069
PCB 1248	see Total	<0.032	13	1.2	0.36	<0.29	<0.032	<0.032	<1.2	<0.033
PCB 1254	see Total	<0.032	6.2	0.5	0.25	<0.097	<0.032	<0.032	1.7	<0.033
PCB 1260	see Total	<0.032	8.9	0.72	0.28	<0.065	<0.032	<0.032	<1.2	<0.033
Total PCBs	10	0.05	28	2.4	0.89	<0.032	<0.032	<0.032	13	0.07

Notes:

(a) - SAIC 2007

(b) - By DOF

(c) - Based on an industrial landuse

MO - Motor oil fuel pattern

DRO - Diesel range organics - pattern not match standard

RRO - Residual range organics - pattern not match standard

D - Diesel fuel pattern

< - Not detected at indicated reporting level

- Shading indicates exceedance of industrial land use screening level

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P5 Jul-08 (b) 15-15.5 (mg/kg)	P6 Jul-08 (b) 5-5.5 (mg/kg)	P6 Jul-08 (b) 10-10.5 (mg/kg)	P6 Jul-08 (b) 15-15.5 (mg/kg)	P7 Jul-08 (b) 5-5.5 (mg/kg)	P7 Jul-08 (b) 10-10.5 (mg/kg)	P7 Jul-08 (b) 15-15.5 (mg/kg)	P8 Jul-08 (b) 0.5-1 (mg/kg)	P8 Jul-08 (b) 5-5.5 (mg/kg)	P8 Jul-08 (b) 10-10.5 (mg/kg)
Observations	-----	no sheen	no sheen	sheen	no sheen	no sheen	no sheen	no sheen	heavy sheen	no sheen	sl sheen
Total Solids (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Organic Carbon (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Petroleum Hydrocarbons											
Gasoline Range Organics	30	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diesel Range Organics (DRO)	2000	30	200	780	18	130	9.2	<6.4	11000	100	1500
Motor-Oil Range Organics (RRO)	2000	31	640	1200	66	460	30	15	24000	230	3400
Total DRO+RRO	2000	61	840	1980	84	590	39.2	15	35000	330	4900
Type	-----	DRO/MO	D/MO	D/MO	DRO/RRO	DRO/MO	DRO/MO	MO	D/MO	D/MO	DRO/MO
Total Metals											
Arsenic	87.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cadmium	3500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chromium	10500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Copper	140000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lead	1000	3	219	150	3	178	4	3	687	39	161
Mercury	24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Silver	17500	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Zinc	1050000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Semivolatile Organic Compounds											
1,2,4-Trichlorobenzene	4530	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,2-Dichlorobenzene	315000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,4-Dichlorobenzene	24300	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,4-Dimethylphenol	70000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Methylnaphthalene	14000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acenaphthene	210000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Acenaphthylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Anthracene	1050000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(a)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(a)pyrene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(b)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(ghi)perylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzo(k)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Benzo(a)fluoranthenes	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzoic Acid	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Benzyl Alcohol	350000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bis(2-ethylhexyl)phthalate	9380	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Butylbenzylphthalate	69100	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Chrysene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dibenzo(ah)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P5 Jul-08 (b) 15-15.5 (mg/kg)	P6 Jul-08 (b) 5-5.5 (mg/kg)	P6 Jul-08 (b) 10-10.5 (mg/kg)	P6 Jul-08 (b) 15-15.5 (mg/kg)	P7 Jul-08 (b) 5-5.5 (mg/kg)	P7 Jul-08 (b) 10-10.5 (mg/kg)	P7 Jul-08 (b) 15-15.5 (mg/kg)	P8 Jul-08 (b) 0.5-1 (mg/kg)	P8 Jul-08 (b) 5-5.5 (mg/kg)	P8 Jul-08 (b) 10-10.5 (mg/kg)
Dibenzofuran	3500	----	----	----	----	----	----	----	----	----	----
Diethylphthalate	2800000	----	----	----	----	----	----	----	----	----	----
Dimethylphthalate	----	----	----	----	----	----	----	----	----	----	----
Di-N-Butylphthalate	----	----	----	----	----	----	----	----	----	----	----
Di-n-octyl phthalate	35000	----	----	----	----	----	----	----	----	----	----
Fluoranthene	140000	----	----	----	----	----	----	----	----	----	----
Fluorene	140000	----	----	----	----	----	----	----	----	----	----
Hexachlorobenzene	82	----	----	----	----	----	----	----	----	----	----
Hexachlorobutadiene	1680	----	----	----	----	----	----	----	----	----	----
Indeno(123-cd)pyrene	See BaPEq	----	----	----	----	----	----	----	----	----	----
Naphthalene	70000	----	----	----	----	----	----	----	----	----	----
N-Nitrosodiphenylamine	26800	----	----	----	----	----	----	----	----	----	----
Pentachlorophenol	328	----	----	----	----	----	----	----	----	----	----
Phenanthrene	----	----	----	----	----	----	----	----	----	----	----
Phenol	1050000	----	----	----	----	----	----	----	----	----	----
Pyrene	105000	----	----	----	----	----	----	----	----	----	----
BaPEq.-TEQ (see Table H.3b)	131	----	----	----	----	----	----	----	----	----	----
Pesticides/PCBs											
2,4'-DDD	----	----	----	----	----	----	----	----	----	----	----
2,4'-DDE	----	----	----	----	----	----	----	----	----	----	----
2,4'-DDT	----	----	----	----	----	----	----	----	----	----	----
4,4'-DDD	547	----	----	----	----	----	----	----	----	----	----
4,4'-DDE	386	----	----	----	----	----	----	----	----	----	----
4,4'-DDT	386	----	----	----	----	----	----	----	----	----	----
Aldrin	7.7	----	----	----	----	----	----	----	----	----	----
Chlordane	----	----	----	----	----	----	----	----	----	----	----
Dieldrin	8.2	----	----	----	----	----	----	----	----	----	----
Heptachlor	29.2	----	----	----	----	----	----	----	----	----	----
Lindane	119	----	----	----	----	----	----	----	----	----	----
PCB 1016	see Total	<0.031	<0.031	<0.29	<0.032	<0.032	<0.032	<0.032	<9	<0.033	<0.38
PCB 1221	see Total	<0.031	<0.031	<0.29	<0.032	<0.032	<0.032	<0.032	<9	<0.033	<0.38
PCB 1232	see Total	<0.031	<0.031	<0.29	<0.032	<0.032	<0.032	<0.032	<9	<0.033	<0.38
PCB 1242	see Total	<0.031	<0.031	<0.29	<0.032	<0.032	<0.032	<0.032	48	<0.033	<0.38
PCB 1248	see Total	<0.031	<0.076	1.7	<0.032	<0.032	<0.032	<0.032	<9	<0.033	0.93
PCB 1254	see Total	<0.031	0.13	1.2	<0.032	0.087	<0.032	<0.032	36	0.057	1.0
PCB 1260	see Total	<0.031	0.062	0.52	<0.032	0.054	<0.032	<0.032	35	<0.033	0.61
Total PCBs	10	<0.031	0.19	3.4	<0.032	0.14	<0.032	<0.032	119	0.06	2.5

Notes:

(a) - SAIC 2007

DRO - Diesel range organics - pattern not match standard

(b) - By DOF

RRO - Residual range organics - pattern not match standard

(c) - Based on an industrial landuse

D - Diesel fuel pattern

< - Not detected at indicated reporting level

MO - Motor oil fuel pattern

- Shading indicates exceedance of industrial land use screening level

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P8 Jul-08 (b) 15-15.5 (mg/kg)	P9 Jul-08 (b) 2-2.5 (mg/kg)	P9 Jul-08 (b) 6-6.5 (mg/kg)	P9 Jul-08 (b) 10-10.5 (mg/kg)	P9 Jul-08 (b) 12-12.5 (mg/kg)	P10 Jul-08 (b) 5-5.5 (mg/kg)	P10 Jul-08 (b) 10-10.5 (mg/kg)	P10 Jul-08 (b) 17.5-18 (mg/kg)	Max. Detected Conc. (mg/kg)
Observations	-----	no sheen	no sheen	no sheen	no sheen	no sheen	no sheen	no sheen	no sheen	-----
Total Solids (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Organic Carbon (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Petroleum Hydrocarbons										
Gasoline Range Organics	30	-----	-----	-----	-----	-----	-----	-----	-----	260
Diesel Range Organics (DRO)	2000	29	22	58	940	310	<6.1	<6.8	<6.8	15000
Motor-Oil Range Organics (RRO)	2000	80	34	240	3100	230	13	19	17	49000
Total DRO+RRO	2000	109	56	298	4040	540	19.1	25.8	23.8	64000
Type	-----	DRO/MO	DRO/MO	DRO/MO	DRO/MO	DRO/MO	MO	MO	MO	-----
Total Metals										
Arsenic	87.5	-----	-----	-----	-----	-----	-----	-----	-----	11.7
Cadmium	3500	-----	-----	-----	-----	-----	-----	-----	-----	0.86
Chromium	10500	-----	-----	-----	-----	-----	-----	-----	-----	56.6
Copper	140000	-----	-----	-----	-----	-----	-----	-----	-----	284
Lead	1000	21	4	25	52	52	4	3	3	3570
Mercury	24	-----	-----	-----	-----	-----	-----	-----	-----	2.0
Silver	17500	-----	-----	-----	-----	-----	-----	-----	-----	0.45
Zinc	1050000	-----	-----	-----	-----	-----	-----	-----	-----	220
Semivolatile Organic Compounds										
1,2,4-Trichlorobenzene	4530	-----	-----	-----	-----	-----	-----	-----	-----	0.058
1,2-Dichlorobenzene	315000	-----	-----	-----	-----	-----	-----	-----	-----	0.98
1,4-Dichlorobenzene	24300	-----	-----	-----	-----	-----	-----	-----	-----	2.4
2,4-Dimethylphenol	70000	-----	-----	-----	-----	-----	-----	-----	-----	nd
2-Methylnaphthalene	14000	-----	-----	-----	-----	-----	-----	-----	-----	17
2-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	nd
4-Methylphenol	-----	-----	-----	-----	-----	-----	-----	-----	-----	nd
Acenaphthene	210000	-----	-----	-----	-----	-----	-----	-----	-----	0.82
Acenaphthylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.063
Anthracene	1050000	-----	-----	-----	-----	-----	-----	-----	-----	0.91
Benzo(a)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.45
Benzo(a)pyrene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.28
Benzo(b)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.3
Benzo(ghi)perylene	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.22
Benzo(k)fluoranthene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.12
Total Benzo(a)fluoranthenes	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.42
Benzoic Acid	-----	-----	-----	-----	-----	-----	-----	-----	-----	nd
Benzyl Alcohol	350000	-----	-----	-----	-----	-----	-----	-----	-----	nd
Bis(2-ethylhexyl)phthalate	9380	-----	-----	-----	-----	-----	-----	-----	-----	2.7
Butylbenzylphthalate	69100	-----	-----	-----	-----	-----	-----	-----	-----	0.11
Chrysene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.78
Dibenzo(ah)anthracene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	nd

TABLE H.3a - Results of Soil Sample Analyses -2007 and 2008

ICS/NW Cooperage Site
Seattle, WA

Location Date Source Depth (feet) Units	Soil Contact Screening Level (c)	P8 Jul-08 (b) 15-15.5 (mg/kg)	P9 Jul-08 (b) 2-2.5 (mg/kg)	P9 Jul-08 (b) 6-6.5 (mg/kg)	P9 Jul-08 (b) 10-10.5 (mg/kg)	P9 Jul-08 (b) 12-12.5 (mg/kg)	P10 Jul-08 (b) 5-5.5 (mg/kg)	P10 Jul-08 (b) 10-10.5 (mg/kg)	P10 Jul-08 (b) 17.5-18 (mg/kg)	Max. Detected Conc. (mg/kg)
Dibenzofuran	3500	-----	-----	-----	-----	-----	-----	-----	-----	0.68
Diethylphthalate	2800000	-----	-----	-----	-----	-----	-----	-----	-----	nd
Dimethylphthalate	-----	-----	-----	-----	-----	-----	-----	-----	-----	nd
Di-N-Butylphthalate	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.15
Di-n-octyl phthalate	35000	-----	-----	-----	-----	-----	-----	-----	-----	nd
Fluoranthene	140000	-----	-----	-----	-----	-----	-----	-----	-----	1.9
Fluorene	140000	-----	-----	-----	-----	-----	-----	-----	-----	1.9
Hexachlorobenzene	82	-----	-----	-----	-----	-----	-----	-----	-----	nd
Hexachlorobutadiene	1680	-----	-----	-----	-----	-----	-----	-----	-----	nd
Indeno(123-cd)pyrene	See BaPEq	-----	-----	-----	-----	-----	-----	-----	-----	0.2
Naphthalene	70000	-----	-----	-----	-----	-----	-----	-----	-----	3.6
N-Nitrosodiphenylamine	26800	-----	-----	-----	-----	-----	-----	-----	-----	nd
Pentachlorophenol	328	-----	-----	-----	-----	-----	-----	-----	-----	0.37
Phenanthrene	-----	-----	-----	-----	-----	-----	-----	-----	-----	7
Phenol	1050000	-----	-----	-----	-----	-----	-----	-----	-----	0.038
Pyrene	105000	-----	-----	-----	-----	-----	-----	-----	-----	2.7
BaPEq.-TEQ (see Table H.3b)	131	-----	-----	-----	-----	-----	-----	-----	-----	0.37
Pesticides/PCBs										
2,4'-DDD	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.19
2,4'-DDE	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0033
2,4'-DDT	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.41
4,4'-DDD	547	-----	-----	-----	-----	-----	-----	-----	-----	0.0049
4,4'-DDE	386	-----	-----	-----	-----	-----	-----	-----	-----	1.9
4,4'-DDT	386	-----	-----	-----	-----	-----	-----	-----	-----	0.49
Aldrin	7.7	-----	-----	-----	-----	-----	-----	-----	-----	nd
Chlordane	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.032
Dieldrin	8.2	-----	-----	-----	-----	-----	-----	-----	-----	nd
Heptachlor	29.2	-----	-----	-----	-----	-----	-----	-----	-----	nd
Lindane	119	-----	-----	-----	-----	-----	-----	-----	-----	0.0012
PCB 1016	see Total	<0.032	<0.032	<0.033	<0.56	<0.032	<0.033	<0.031	<0.032	nd
PCB 1221	see Total	<0.032	<0.032	<0.033	<0.56	<0.032	<0.033	<0.031	<0.032	nd
PCB 1232	see Total	<0.032	<0.032	<0.033	<0.56	<0.032	<0.033	<0.031	<0.032	nd
PCB 1242	see Total	<0.032	<0.032	<0.033	<0.56	<0.032	<0.033	<0.031	<0.032	51
PCB 1248	see Total	<0.032	<0.032	<0.033	2.6	<0.032	<0.033	<0.031	<0.032	13
PCB 1254	see Total	<0.032	<0.032	0.071	2.4	<0.032	<0.033	<0.031	<0.032	36
PCB 1260	see Total	<0.032	<0.032	0.099	1.3	<0.032	<0.033	<0.031	<0.032	76
Total PCBs	10	<0.032	<0.032	0.17	6.3	<0.032	<0.033	<0.031	<0.032	119

Notes:

(a) - SAIC 2007

(b) - By DOF

(c) - Based on an industrial landuse

MO - Motor oil fuel pattern

DRO - Diesel range organics - pattern not match standard

RRO - Residual range organics - pattern not match standard

D - Diesel fuel pattern

< - Not detected at indicated reporting level

- Shading indicates exceedance of industrial land use screening level

TABLE H.3b - BaPEq-TEQ Calculations -2007 Soil Data

ICS/NW Cooperaage Site
Seattle, WA

cPAHs	Location Date Source Depth (feet) Units	SA-MW-1 Apr-07 (a) 5-6.5 (mg/kg)	Adjusted Conc. (mg/kg)	SA-MW-1 Apr-07 (a) 12.5-13.5 (mg/kg)	Adjusted Conc. (mg/kg)	SA-MW-2 Apr-07 (a) 7.5-8 (mg/kg)	Adjusted Conc. (mg/kg)	SA-MW-2 Apr-07 (a) 10-11.5 (mg/kg)	Adjusted Conc. (mg/kg)
	TEF(c)								
Benzo(a)anthracene	0.1	0.45	0.045	<0.05	-----	0.038	0.004	0.046	0.0046
Benzo(a)pyrene	1	<1	-----	<0.05	-----	<0.2	-----	0.045	0.0450
Benzo(b)fluoranthene	0.1	<1	-----	<0.05	-----	<0.2	-----	0.051	0.0051
Benzo(k)fluoranthene	0.1	<1	-----	<0.05	-----	<0.2	-----	0.017	0.0017
Chrysene	0.01	0.78	0.008	0.01	0.0001	0.066	0.0007	0.054	0.0005
Dibenzo(ah)anthracene	1	<1	-----	<0.05	-----	<0.2	-----	<0.040	-----
Indeno(123-cd)pyrene	0.1	<1	-----	<0.05	-----	<0.2	-----	0.033	0.0033
BaPEq.-TEQ (d)	-----	-----	0.05	-----	0.0001	-----	0.004	-----	0.060

cPAHs	Location Date Source Depth (feet) Units	SA-MW-2 Apr-07 (a) 15-16.5 (mg/kg)	Adjusted Conc. (mg/kg)	SA-MW-3 Apr-07 (a) 10-11.5 (mg/kg)	Adjusted Conc. (mg/kg)
	TEF(c)				
Benzo(a)anthracene	0.1	0.26	0.026	<0.01	-----
Benzo(a)pyrene	1	0.28	0.280	<0.01	-----
Benzo(b)fluoranthene	0.1	0.3	0.030	<0.01	-----
Benzo(k)fluoranthene	0.1	0.12	0.012	<0.01	-----
Chrysene	0.01	0.31	0.003	<0.01	-----
Dibenzo(ah)anthracene	1	<0.2	-----	<0.01	-----
Indeno(123-cd)pyrene	0.1	0.2	0.020	<0.01	-----
BaPEq.-TEQ (d)	-----	-----	0.37	-----	nd

Notes: (a) - SAIC 2007

(b) - By DOF

(c) - Toxicity Equivalency Factor

(d) - BaPEq.-TEQ - Benzo(a) Pyrene Equivalent Concentration-Toxicity Equivalency Quotient

nd - Not detected

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-LP1-SO-A	3 - 5'	10/15/12	VN72	90	-----	0.4 JR	14.5	0.2	0.4	30.1	44.6
ICS-LP1-SO-B	6.5 - 8'	10/15/12	VN72	58	7.41	0.3 U	21.4	0.4	1.7	60.5	103
ICS-LP1-SO-C	10.5 - 12'	10/15/12	VN72	75	-----	0.3 U	2.2	0.3 U	0.1 U	12.9	19.7
ICS-LP2-SO-A	3 - 5'	10/15/12	VN72	83	-----	0.2 U	5.9	0.2 U	0.7	31.4	160
ICS-LP2-SO-B	5.5 - 7.5'	10/15/12	VN72	73	7.45	0.3 U	4.8	0.3 U	0.1 U	17.4	23.1
ICS-LP2-SO-C	8 - 10'	10/15/12	VN72	72	-----	0.3 U	3.4	0.3 U	0.1 U	12.6	23.2
ICS-LP3-SO-A	3 - 5'	10/15/12	VN72	94	-----	0.2 U	2.7	0.2 U	0.4	41.0	24.6
ICS-LP3-SO-B	6 - 8'	10/15/12	VN72	82	6.85	0.8 JR	6.7	0.2 U	5.8	910	450
ICS-LP3-SO-C	10 - 12'	10/15/12	VN72	75	-----	0.3 U	3.4	0.3 U	0.1 U	21.1	24.1
ICS-LP3-SO-D	15 - 16'	10/15/12	XD56	80	-----	0.2 U	1.5	0.2 U	0.2	18.0	11.7
ICS-LP4-SO-A	8 - 10'	10/15/12	VN72	81	-----	0.2 U	5.2	0.3	0.7	66.3	38.7
ICS-LP4-SO-B	10 - 12'	10/15/12	VN72	67	8.34	0.3 U	10.1	0.4	0.8	37.4	41.7
ICS-LP4-SO-C	14 - 15'	10/15/12	VN72	77	-----	0.2 U	1.3	0.2 U	0.1 U	10.2	9.6
ICS-DOF-MW1-A	4 - 5'	10/15/12	VN71	92	-----	0.2 U	3.0	0.2 U	0.1 U	15.8	14.0
ICS-DOF-MW1-B	6.5 - 7.5'	10/15/12	VN71	72	-----	0.3 U	3.2	0.3 U	0.1 U	15.0	22.1
ICS-DOF-MW1-C	11 - 12'	10/15/12	VN71	71	-----	0.3 U	2.0	0.3 U	0.1	13.6	17.3
ICS-DOF-MW2-A	2 - 3'	10/16/12	VO10	97	-----	0.2 U	2.0	0.2 U	0.1 U	10.0	9.6
ICS-DOF-MW2-B	8 - 9'	10/16/12	VO10	85	-----	0.2 U	2.5	0.2 U	0.1 U	12.9	14.9
ICS-DOF-MW2-C	12 - 13'	10/16/12	VO10	71	-----	0.3 U	4.7	0.4	0.1 U	19.6	26.5
ICS-DOF-MW3-A	2 - 4'	10/16/12	VO10	93	-----	0.2 U	2.4	0.2 U	0.1 U	10.5	10.4
ICS-DOF-DUP1	dup of MW3-A	10/16/12	VO10	93	-----	0.2 U	2.7	0.2 U	0.1 U	10.9	10.2
ICS-DOF-MW3-B	7 - 8'	10/16/12	VO10	85	-----	0.2 U	2.1	0.2 U	0.1 U	11.2	11.7
ICS-DOF-MW4-A	3 - 4'	10/17/12	VO10	89	-----	0.2 U	2.4	0.2 U	0.1 U	10.5	10.8
ICS-DOF-MW4-B	7 - 8'	10/17/12	VO10	75	-----	0.2 U	2.8	0.3	0.1	12.0	17.7
ICS-DOF-MW4-C	10 - 11'	10/17/12	VO10	78	-----	0.2 U	2.0	0.2 U	0.1	12.8	22.7
ICS-DOF-MW5-A	3 - 4'	10/17/12	VO11	91	-----	0.2 U	2.2	0.2 U	0.1 U	9.6	12.9
ICS-DOF-MW5-B	7 - 8'	10/17/12	VO11	77	-----	0.2 U	2.0	0.2 U	0.1 U	10.0	11.2
ICS-DOF-MW6-A	3 - 5'	10/17/12	VO11	79	-----	0.2 U	3.0	0.2 U	0.1 U	11.8	13.9
ICS-DOF-MW6-B	6 - 8'	10/17/12	VO11	78	-----	0.3 U	2.6	0.3 U	0.1 U	11.6	13.0
ICS-DOF-DUP2	dup of MW6-B	10/17/12	VO11	78	-----	0.3 U	3.0	0.3 U	0.1 U	12.8	14.9

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-DOF-MW6-C	9 - 10'	10/17/12	VO11	62	-----	0.3 U	8.0	0.3	0.1 U	17.3	28.0
ICS-DOF-MW7-A	3 - 4'	10/16/12	VO10	77	-----	0.3 U	3.5	0.3 U	0.1 U	13.0	18.2
ICS-DOF-MW7-B	7 - 8'	10/16/12	VO10	72	-----	0.3 U	3.2	0.3 U	0.1 U	14.7	21.6
ICS-DOF-MW7-C	11 - 12'	10/16/12	VO10	70	-----	0.3 U	2.6	0.3 U	0.1 U	13.1	20.8
ICS-DOF-MW8-A	3 - 4'	10/16/12	VO10	95	-----	0.2 U	1.7	0.2 U	0.1 U	8.4	10.2
ICS-DOF-MW8-B	7 - 8'	10/16/12	VO10	73	-----	0.3 U	2.5	0.3 U	0.1 U	14.4	20.9
ICS-DOF-MW8-C	11 - 12'	10/16/12	VO10	74	-----	0.3 U	3.2	0.3 U	0.1 U	12.9	18.3
ICS-LP4-NAPL	4 - 5'	10/15/12	VN72	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	11/17/14	ZK75	78.7	-----	0.2 U	1.4	0.2 U	0.1 U	10.4	13.6
ICS-P11-SO-10	9.5 - 11'	11/17/14	ZK75	64.2	-----	0.3 U	5.2	0.3 U	0.1 U	16.2	29.3
ICS-P11-SO-16	15 - 17'	11/17/14	ZK75	80.7	-----	0.2 U	0.8	0.2 U	0.1 U	8.4	9
ICS-P12-SO-4	3 - 4.5'	11/17/14	ZK75	89.1	-----	0.2 U	1	0.2 U	0.1 U	10.1	9.9
ICS-P12-SO-7	6 - 8'	11/17/14	AKB5	79	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	11/17/14	ZK75	68.2	-----	0.3 U	4.7	0.3 U	0.1 U	14.2	22.4
ICS-P12-SO-13	12 - 14'	11/17/14	ZK75	68.6	-----	0.3 U	3.6	0.3 U	0.1 U	13.7	20.1
ICS-P12-SO-16	15 - 17'	11/17/14	ZK75	75	-----	0.3 U	3.6	0.3 U	0.1 U	12.5	18.5
ICS-P13-SO-4	4 - 6'	11/13/14	ZK33	89.3	-----	0.2 U	6.2	0.2 U	0.5	36	21.1
ICS-P13-SO-7	6 - 8'	11/13/14	AKB5	90	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	11/13/14	ZK33	78.1	-----	0.2 U	1.4	0.2 U	0.1 U	11.4	11.5
ICS-P13-SO-17	16.5 - 18'	11/13/14	ZK33	79.4	-----	0.2 U	2.2	0.2 U	0.1 U	12	12.4
ICS-P14-SO-4	3 - 5'	11/14/14	ZK50	83.3	-----	0.2 U	2.5	0.2 U	0.4	69.4	13.3
ICS-P14-SO-7	6 - 8'	11/14/15	AKB6	78	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	11/14/14	ZK50	71.3	-----	0.3 U	3.4	0.3 U	0.1 U	14.8	20.6
ICS-P14-SO-16	15 - 17'	11/14/14	ZK50	78	-----	0.2 U	1.9	0.2 U	0.1 U	11.4	12.6
ICS-P15-SO-4	3 - 5'	11/14/14	ZK50	81.2	-----	0.2 U	3	0.2 U	0.3	16.6	34.9
ICS-P15-SO-7	6 - 8'	11/14/15	AKB6	76	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	11/14/14	ZK50	67.9	-----	0.3 U	4.6	0.3 U	0.3	16.4	25.3
ICS-P15-SO-16	15 - 17'	11/14/14	ZK50	78.2	-----	0.2 U	1.4	0.2 U	0.1 U	8.7	9.5
ICS-P16-SO-4	3 - 4'	12/10/14	ZO28	94.8	-----	0.2 U	4	0.2 U	0.3	15.9	11.2
ICS-P16-SO-7	6 - 8'	12/10/15	AKB6	73	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	12/10/14	ZO28	72.8	-----	0.3 U	2.3	0.3 U	0.1 U	12.9	18.5
ICS-P16-SO-16	15 - 17'	12/10/14	ZO28	74.4	-----	0.3 U	1.8	0.3 U	0.1 U	11	14.8

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-P17-SO-4	4.5 - 6.5'	11/12/14	ZK10	75.7	-----	0.3 U	1.8	0.3 U	0.1 U	12.3	11.1
ICS-P17-SO-7	6.7 - 8'	11/12/14	AKB5	76		-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	11/12/14	ZK10	65.5	-----	0.3 U	6.5	0.3	0.1 U	14	22.4
ICS-P17-SO-13	12 - 14'	11/12/14	AKB5	78		-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	11/12/14	ZK10	82.2	-----	0.2 U	2.3	0.2 U	0.1 U	12	13.2
ICS-P17-SO-22	21 - 23'	11/12/14	AKB5	83	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	12/16/14	ZP53	92.3	-----	0.2 U	2.7	0.2 U	0.4	24.3	19.7
ICS-P18-SO-7	6 - 8'	12/16/14	AKB5	87	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	12/16/14	ZP53	86.1	-----	0.2 U	3.8	0.2 U	0.4	60.4	21.1
ICS-P18-SO-13	12 - 14'	12/16/14	AKB5	82	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	12/16/14	ZP53	78.9	-----	0.3 JR	6.9	0.3 U	1	63.1	108
ICS-P18-SO-22	21 - 23'	12/16/14	AKB5	76	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	12/16/14	ZP53	81.1	-----	0.2 U	0.7	0.2 U	0.1 U	9.9	7.5
ICS-P18-SO-42	41 - 43'	12/16/14	AKB5	79	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	12/16/14	ZP53	91.6	-----	0.2 U	3.9	0.2 U	0.3	30.8	19.2
ICS-P19-SO-10	9 - 10'	12/16/14	ZP53	75.1	-----	0.3 U	3.9	0.3 U	0.1 U	15.1	21
ICS-P19-SO-13	12 - 14'	12/16/14	AKB5	75	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	12/16/14	ZP53	78.4	-----	0.3 U	2.4	0.3 U	0.1 U	11.7	21.8
ICS-P19-SO-22	21 - 23'	12/16/14	AKB5	74	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	11/12/14	ZK10	93.7	-----	0.2 U	4.3	0.2 U	0.1 U	10	11.6
ICS-P20-SO-10	9.5 - 11'	11/12/14	ZK10	72.6	-----	0.3 U	3.4	0.3 U	0.1 U	12	19.1
ICS-P20-SO-13	12 - 14'	11/12/14	AKB5	72	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	11/12/14	ZK10	73.9	-----	0.2 U	2	0.2 U	0.1 U	12	16.4
ICS-P21-SO-7	6 - 8'	12/8/14	ZN97	83.9	-----	0.2 U	3.3	0.2 U	0.3	32.1	27.5
ICS-P21-SO-13	12 - 14'	12/8/14	ZN97	70.2	-----	0.3 U	4.7	0.3	0.3	23	21.7
ICS-P21-SO-16	15 - 17'	12/8/14	ZN97	74.3	-----	0.3 U	2.4	0.3 U	0.1 U	11.1	17.6
ICS-P21-SO-22	21 - 23'	12/8/14	AKB6	74	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	12/8/14	ZN97	80	-----	0.2 U	0.7	0.2 U	0.1 U	9.5	9.8
ICS-P22-SO-4	3 - 4.5'	11/14/14	ZK50	89.2	-----	0.2 U	3.1	0.2 U	0.2	19.1	16.1
ICS-P22-SO-7	6 - 8'	11/14/14	AKB6	85	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	11/14/14	ZK50	75.9	-----	0.3 U	3.2	0.3 U	0.1 U	13.6	20.1
ICS-P22-SO-13	12 - 14'	11/14/14	AKB6	72	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-P22-SO-16	15 - 17'	11/14/14	ZK50	70.3	-----	0.3 U	2.6	0.3 U	0.1 U	12.9	21.9
ICS-P23-SO-3	2 - 4'	11/12/14	ZK10	93.4	-----	0.2 U	6.3	0.2 U	0.4	10.2	107
ICS-P23-SO-10	9.5 - 11	11/12/14	ZK10	72.3	-----	0.3 U	3.3	0.3 U	0.1 U	13	20.7
ICS-P23-SO-13	12 - 14'	11/12/14	AKB5	74	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	11/12/14	ZK10	74.5	-----	0.3 U	1.9	0.3 U	0.1 U	11.2	16.5
ICS-P24-SO-4	3 - 5'	11/13/14	ZK33	89	-----	0.2 U	2.3	0.2 U	0.2	17	12.1
ICS-P24-SO-10	9 - 10.5'	11/13/14	ZK33	77.7	-----	0.3 U	3.7	0.3 U	0.2	20	16
ICS-P24-SO-13	12 - 14'	11/13/14	AKB5	75	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	11/13/14	ZK33	78.9	-----	0.2 U	1	0.2 U	0.1 U	10	8.8
ICS-P25-SO-3	1 - 3'	11/11/14	ZJ92	88	-----	0.2 U	6.2	0.2 U	0.3	21.1	21.9
ICS-P25-SO-10	9 - 11'	11/11/14	ZJ92	75.4	-----	0.3 U	2.9	0.3 U	0.1 U	12.3	16.5
ICS-P25-SO-13	12 - 14'	11/11/14	AKB5	73	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	11/11/14	ZJ92	76.4	-----	0.2 U	1.6	0.2 U	0.1 U	9.9	11.9
ICS-P26-SO-4	3 - 5'	11/13/14	ZK33	89.3	-----	0.2 U	25.7	0.3	0.4	31	37.8
ICS-P26-SO-7	6 - 8'	11/13/14	AKB5	73	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	11/13/14	ZK33	67.7	-----	0.3 U	2.7	0.3 U	0.1 U	13.3	22.7
ICS-P26-SO-16	15 - 17'	11/13/14	ZK33	72.3	-----	0.3 U	2.5	0.3 U	0.1 U	13.8	21.9
ICS-P27-SO-3	1 - 3'	11/11/14	ZJ92	78.1	-----	0.3 JR	10.9	0.2 U	2.2	29.3	340
ICS-P27-SO-7	6 - 8'	11/11/14	AKB5	71	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	11/11/14	ZJ92	69.3	-----	0.3 U	3.9	0.3 U	0.4	17.2	68.5
ICS-P27-SO-13	12 - 14'	11/11/14	AKB5	71	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	11/11/14	ZJ92	79.8	-----	0.2 U	0.9	0.2 U	0.1 U	9.8	10.6
ICS-P27-SO-32	31 - 33'	11/11/14	ZJ92	78.1	-----	0.3 U	1.3	0.3 U	0.1 U	11.5	14.5
ICS-P28-SO-4	3 - 5'	12/15/14	ZP37	71.8	-----	0.3 U	5.3	0.3	0.1 U	11.5	15.9
ICS-P28-SO-10	8.5 - 10'	12/15/14	ZP37	56	-----	0.3 U	4.6	0.4	0.2 U	14	25.1
ICS-P28-SO-16	15 - 17'	12/15/14	ZP37	81.4	-----	0.2 U	1.7	0.3	0.1 U	8.7	10.2
ICS-P28-SO-22	21 - 23'	12/15/14	AKB5	83	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	12/15/14	ZP37	80.3	-----	0.2 U	0.8	0.2 U	0.1 U	7.1	6.3
ICS-P29-SO-4	3 - 4'	12/10/14	ZO28	81.8	-----	1.3 JR	12.2	0.2	8.1	755	205
ICS-P29-SO-7	6 - 8'	12/10/14	AKB6	77	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	12/10/14	ZO28	71	-----	0.3 U	0.8	0.6	0.1 U	21.5	21.1
ICS-P29-SO-16	15 - 17'	12/10/14	ZO28	75.7	-----	0.3 U	1.7	0.3 U	0.1 U	11.8	14.7

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-DUP2	P29-SO-16	12/10/14	ZO28	75.8	-----	0.2 U	1.7	0.2 U	0.1 U	12.2	13.7
ICS-P29-SO-22	21 - 23'	12/10/14	AKB6	72	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	12/10/14	ZO28	72.9	-----	0.3 U	2.4	0.3 U	0.1 U	11.3	17.1
ICS-P29-SO-42	41 - 43'	12/10/14	AKB6	78	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	12/10/14	AKB6	81	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	12/9/14	ZO01	90.4	-----	0.2 U	2.7	0.2 U	0.4	46.1	58.8
ICS-P30-SO-10	9 - 10'	12/9/14	AKB6	79	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	12/9/14	ZO01	84.6	-----	0.2 U	4.4	0.2	0.6	27.1	37.5
ICS-P30-SO-16	15 - 16.5'	12/9/14	ZO01	61.5	-----	0.3 U	7.6	0.3	0.2 U	19.7	29.2
ICS-P30-SO-22	21 - 23'	12/9/14	AKB6	81	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	12/9/14	ZO01	82.8	-----	0.2 U	1.3	0.2 U	0.1 U	8.7	9.4
ICS-P30-SO-42	41 - 43'	12/9/14	AKB6	75	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	12/9/14	AKB6	79	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	12/9/14	ZO01	81.3	-----	0.2 U	3.6	0.2 U	0.1 U	14.2	17.6
ICS-P31-SO-10	9 - 11'	12/9/14	ZO01	74.5	-----	0.3 U	1.6	0.3 U	0.1 U	12.9	13.3
ICS-P31-SO-16	15 - 17'	12/9/14	ZO01	73.5	-----	0.3 U	1.2	0.3 U	0.1 U	11.7	11.7
ICS-P31-SO-32	31 - 33'	12/9/14	ZO01	79.8	-----	0.2 U	3.6	0.2 U	0.1 U	8.7	8.9
ICS-P32-SO-16	16 - 17.5'	12/15/14	ZP37	80.4	-----	0.2 U	3.6	0.3	0.1 U	9.9	10.1
ICS-SO-DUPL3	P32-SO-16	12/15/14	ZP37	81.9	-----	0.2 U	1.9	0.2 U	0.1 U	9.4	9.2
ICS-P32-SO-32	31 - 33'	12/15/14	ZP37	83.3	-----	0.2 U	1.1	0.2	0.1 U	8.7	8.2
ICS-P33-SO-16	15 - 17'	12/8/14	ZN97	73.8	-----	0.3 U	1.9	0.3 U	0.1 U	13.2	19.7
ICS-P33-SO-32	31 - 33'	12/8/14	ZN97	81.3	-----	0.2 U	0.7	0.2 U	0.1 U	9.6	9.3
ICS-P34-SO-4	3 - 5'	6/9/2015	AHN0	86	-----	0.2 U	8.0	0.3	0.4	41.8	34.8
ICS-P34-SO-10	9 - 11'	6/9/2015	AHN0	73	-----	0.3 U	2.3	0.3	0.1 U	16.6	21.6
ICS-P34-SO-16	15 - 17'	6/9/2015	AHN0	74	-----	0.3 U	1.9	0.3 U	0.2	10.4	17.7
ICS-P35-SO-4	3 - 5'	6/8/2015	AHL3	94	-----	0.2 U	3.0	0.2 U	0.2	9.0	10.4
ICS-P35-SO-10	9 - 11'	6/8/2015	AHL3	71	-----	0.3 U	1.4	0.3 U	0.1 U	14.6	24.1
ICS-P35-SO-16	15 - 17'	6/8/2015	AHL3	72	-----	0.3 U	1.7	0.3 U	0.2	10.4	17.7
ICS-P36-SO-4	3 - 4'	6/8/2015	AHL3	82	-----	0.3 U	3.5	0.3	0.3	18.2	27.7
ICS-P36-SO-10	10 - 12'	6/8/2015	AHL3	71	-----	0.3 U	3.2	0.3 U	0.1 U	12.9	22.8
ICS-P36-SO-16	15 - 17'	6/8/2015	AHL3	74	-----	0.3 U	4.6	0.3	0.1 U	17.1	24.8

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	% solids %	pH SU	Antimony mg/kg, dry	Arsenic mg/kg, dry	Beryllium mg/kg, dry	Cadmium mg/kg, dry	Chromium mg/kg, dry	Copper mg/kg, dry
Screening Level (a)						1400	87.5	7000	3500	10,500	140,000
ICS-Ap-10-SO	9 - 10'	10/5/15	AOE4	71	-----	0.3 U	2.6	0.3 U	0.1 U	12.3	16.4
ICS-Bp-10-SO	9 - 10'	10/5/15	AOE4	79	-----	0.2 U	3.9	0.02 U	0.1 U	10.5	14.3
ICS-Cp-10-SO	9 - 10'	10/7/15	AOE4	69	-----	0.3 U	5.0	0.3 U	0.1 U	14.4	20.7
ICS-Du-10-SO	9 - 10'	10/5/15	AOE4	76	-----	0.3 U	2.4	0.3 U	0.1 U	12.8	18.5
ICS-Du-16-SO	15 - 17'	10/5/15	AOE4	82	-----	0.2 U	1.1	0.2 U	0.1 U	9.1	7.9
ICS-FL-4-SO	3 - 5'	10/8/15	AOE4	95	-----	0.2 U	2.2	0.2 U	0.1 U	8.1	7.7
ICS-FL-7-SO	6 - 8'	10/8/15	AOE4	81	-----	0.2 U	3.3	0.2 U	0.1 U	10.5	15.1
ICS-FL-10-SO	9 - 10'	10/8/15	AOE4	84	-----	0.2 U	4.0	0.2 U	0.1 U	12.9	12.0
ICS-FL-13-SO	12 - 14'	10/8/15	AOE4	77	-----	0.2 U	2.9	0.2 U	0.1 U	11.6	15.3
ICS-FL-16-SO	15.5 - 17'	10/8/15	AOE4	81	-----	0.2 U	1.3	0.2 U	0.1 U	9.9	9.2
ICS-FL-21-SO	20 - 22'	10/8/15	AOE4	78	-----	0.3 U	4.7	0.3 U	0.1 U	14.2	11.0
ICS-Ju-4-SO	3 - 4'	10/7/15	AOE4	85	-----	0.2 U	4.5	0.2	0.2	23.4	23.7
ICS-Ju-10-SO	10- 11'	10/7/15	AOE4	73	-----	0.2 U	12	0.2 U	0.9	40.2	161
ICS-Ju-15-SO	15 - 16	10/7/15	AOE4	74	-----	0.3 U	2.4	0.3 U	0.1 U	15.2	13.6
Number of Samples						137	137	137	137	137	137
Number of Detections						5	137	24	40	137	137
Percent Detected						3.6%	100.0%	17.5%	29.2%	100.0%	100.0%
Highest Conc.						1.3	25.7	0.6	8.1	910	450

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

 JB = estimate; associated value may be biased high due to contribution from laboratory background
 or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	----	100	2000 (DRO+RRO)	
ICS-LP1-SO-A	3 - 5'	403	0.14	36.7	0.2 U	90	----	----	23	70
ICS-LP1-SO-B	6.5 - 8'	448	3.1	31.5	0.8	349	----	----	820	1700
ICS-LP1-SO-C	10.5 - 12'	2.5	0.3 U	10.0	0.3 U	30	----	----	8.2	18
ICS-LP2-SO-A	3 - 5'	106	0.18	52.7	0.2 U	238	----	----	7.2	31
ICS-LP2-SO-B	5.5 - 7.5'	4.3	0.06	13.3	0.3 U	95	----	----	6.8 U	14 U
ICS-LP2-SO-C	8 - 10'	3.4	0.03	9.0	0.3 U	85	----	----	6.9 U	14 U
ICS-LP3-SO-A	3 - 5'	110	0.37	21.6	0.2 U	165	----	----	32	100
ICS-LP3-SO-B	6 - 8'	3600	8.7	54.5	0.4	2120		incl lt HC solvent	6200	11,000
ICS-LP3-SO-C	10 - 12'	4.2	0.13	9.5	0.3 U	33		incl lt HC solvent	120	170
ICS-LP3-SO-D	15 - 16'	23.3	0.08 J	11.7	0.2 U	35	----	----	92	170
ICS-LP4-SO-A	8 - 10'	748	0.74	22.2	0.2 U	196	----	----	620	1300
ICS-LP4-SO-B	10 - 12'	118	2.1	20.9	0.4	116	----	----	760	440
ICS-LP4-SO-C	14 - 15'	1.6	0.03 U	7.7	0.2 U	22	----	----	10	18
ICS-DOF-MW1-A	4 - 5'	11.0	0.04	10.3	0.2 U	55	----	6.3 U	8.1	16
ICS-DOF-MW1-B	6.5 - 7.5'	3.0	0.05	10.7	0.3 U	33	----	9.2 U	6.8 U	14 U
ICS-DOF-MW1-C	11 - 12'	2.0	0.03	11.8	0.3 U	31	----	9.3 U	7.1 U	14 U
ICS-DOF-MW2-A	2 - 3'	1.8	0.02 U	9.0	0.2 U	25	----	5.7 U	5.0 U	10 U
ICS-DOF-MW2-B	8 - 9'	2.9	0.23	9.8	0.2 U	28	----	6.8 U	5.2 U	10 U
ICS-DOF-MW2-C	12 - 13'	4.7	0.04	16.3	0.3 U	37	----	8.8 U	6.7 U	13 U
ICS-DOF-MW3-A	2 - 4'	3.4	0.03 U	9.1	0.2 U	26	----	5.7 U	5.3 U	11 U
ICS-DOF-DUP1	dup of MW3-A	4.1	0.02 U	9.0	0.2 U	27	----	6.3 U	6.2	11 U
ICS-DOF-MW3-B	7 - 8'	2.8	0.02 U	11.7	0.2 U	29	----	7.0 U	22	17
ICS-DOF-MW4-A	3 - 4'	2.1	0.02 U	9.5	0.2 U	27	----	6.7 U	8.4	11 U
ICS-DOF-MW4-B	7 - 8'	3.9	0.03 U	11.0	0.2 U	29	----	8.2 U	15	18
ICS-DOF-MW4-C	10 - 11'	6.3	0.04	10.7	0.2 U	34	----	8.1 U	17	27
ICS-DOF-MW5-A	3 - 4'	2.3	0.02 U	10.1	0.2 U	28	----	6.4 U	23	22
ICS-DOF-MW5-B	7 - 8'	1.9	0.02 U	9.0	0.2 U	26	----	7.7 U	22	25
ICS-DOF-MW6-A	3 - 5'	2.6	0.04	9.6	0.2 U	25	----	3000	19,000	1200 U
ICS-DOF-MW6-B	6 - 8'	2.3	0.02 U	8.8	0.3 U	25	----	2300	12,000	1200 U
ICS-DOF-DUP2	dup of MW6-B	2.5	0.02	9.5	0.3 U	25	----	2500	9000	1300 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	-----	100	2000 (DRO+RRO)	
ICS-DOF-MW6-C	9 - 10'	4.2	0.04 U	14.6	0.3 U	36	-----	10 U	34	40
ICS-DOF-MW7-A	3 - 4'	8.4	0.03	10.3	0.3 U	34	-----	54	970	820
ICS-DOF-MW7-B	7 - 8'	3.0	0.03	10.1	0.3 U	31	-----	8.9 U	6.6 U	13 U
ICS-DOF-MW7-C	11 - 12'	2.4	0.03 U	10.5	0.3 U	32	-----	7.8 U	6.5 U	13 U
ICS-DOF-MW8-A	3 - 4'	1.5	0.02 U	7.3	0.2 U	36	-----	8.2	5.2	10 U
ICS-DOF-MW8-B	7 - 8'	3.0	0.03	10.5	0.3 U	32	-----	8.6 U	6.5 U	13 U
ICS-DOF-MW8-C	11 - 12'	2.4	0.03 U	10.5	0.3 U	28	-----	7.8 U	6.5 U	13 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	270	> 2000	> 5000	> 10,000
ICS-P11-SO-4	3 - 4.5'	4.9	0.05	9.9	0.2 U	30	-----	9.0 U	5.2 U	10 U
ICS-P11-SO-10	9.5 - 11'	4.2	0.04 U	12.3	0.3 U	33	-----	13 U	8.2 U	17
ICS-P11-SO-16	15 - 17'	1.3	0.02 U	6.1	0.2 U	24	-----	7.4 U	6.0 U	12 U
ICS-P12-SO-4	3 - 4.5'	1.7	0.03 U	8.2	0.2 U	26	-----	23	6.9	11 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	3.1	0.04	12.1	0.3 U	34	-----	9.0 U	7.0 U	14 U
ICS-P12-SO-13	12 - 14'	2.8	0.03	10.4	0.3 U	30	-----	11 U	6.8 U	14 U
ICS-P12-SO-16	15 - 17'	2.1	0.03 U	10.5	0.3 U	29	-----	9.9 U	6.5 U	13 U
ICS-P13-SO-4	4 - 6'	147	0.17	12.3	0.2 U	200	-----	80 U	1600	760 F
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.8	0.03 U	6.7	0.2 U	23	-----	8.2 U	6.4 U	13 U
ICS-P13-SO-17	16.5 - 18'	1.7	0.03 U	8.9	0.2 U	27	-----	7.4 U	6.2 U	12 U
ICS-P14-SO-4	3 - 5'	48.6	0.07	11.8	0.2 U	96	-----	10	15	20
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	3.4	0.05	10.7	0.3 U	39	-----	96 U	6.7 U	13 U
ICS-P14-SO-16	15 - 17'	1.6	0.03 U	8	0.2 U	25	-----	8.4 U	6.1 U	12 U
ICS-P15-SO-4	3 - 5'	45.7	0.07	10.1	0.2 U	68	-----	7.5 U	260	160
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	9	0.05	23.4	0.3 U	67	-----	11 U	25	78
ICS-P15-SO-16	15 - 17'	1.2	0.03 U	7.8	0.2 U	24	-----	9.8 U	6.2 U	12 U
ICS-P16-SO-4	3 - 4'	2.1	0.02 U	7.7	0.2 U	65	-----	10 U	5.4 U	11 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.2	0.03	9.7	0.3 U	26	-----	13 U	7.0 U	14 U
ICS-P16-SO-16	15 - 17'	1.9	0.03 U	8.4	0.3 U	22	-----	10 U	6.8 U	14 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	----	100	2000 (DRO+RRO)	
ICS-P17-SO-4	4.5 - 6.5'	8	0.06	6.6	0.3 U	26	----	150	950	290 F
ICS-P17-SO-7	6.7 - 8'	----	----	----	----	----	----	----	----	----
ICS-P17-SO-10	9 - 11'	3.6	0.03	10.9	0.3 U	33	----	13 U	7.7 U	16
ICS-P17-SO-13	12 - 14'	----	----	----	----	----	----	----	----	----
ICS-P17-SO-16	15 - 17'	1.5	0.02 U	9.6	0.2 U	29	----	8.1 U	6.1 U	12 U
ICS-P17-SO-22	21 - 23'	----	----	----	----	----	----	----	----	----
ICS-P18-SO-4	3 - 5'	38.1	0.2	15.3	0.2 U	1230	----	46	840	740 F
ICS-P18-SO-7	6 - 8'	----	----	----	----	----	----	----	----	----
ICS-P18-SO-10	9 - 10'	68.5	0.22	23.2	0.2 U	205	----	150	210 F	410 F
ICS-P18-SO-13	12 - 14'	56.1	----	----	----	----	----	----	----	----
ICS-P18-SO-16	14 - 16'	950	4.8	17	0.3	680	----	190	2900 F	5500 F
ICS-P18-SO-22	21 - 23'	----	----	----	----	----	----	----	6.3 U	13 U
ICS-P18-SO-32	31 - 33'	1.2	0.03 U	7.3	0.2 U	21	----	8.8 U	6.1 U	12 U
ICS-P18-SO-42	41 - 43'	----	----	----	----	----	----	----	----	----
ICS-P19-SO-4	3 - 4'	60.5	0.1	23	0.2 U	73	----	12	300 F	1100 F
ICS-P19-SO-10	9 - 10'	2.9	0.03 U	13.8	0.3 U	32	----	12 U	29 F	50 F
ICS-P19-SO-13	12 - 14'	----	----	----	----	----	----	----	----	----
ICS-P19-SO-16	15 - 17'	6.2	0.04	9.2	0.3 U	30	----	8.5 U	7.6	19
ICS-P19-SO-22	21 - 23'	----	----	----	----	----	----	----	----	----
ICS-P20-SO-3	2 - 4'	2.6	0.03	8.5	0.2 U	39	----	7.7 U	11	11
ICS-P20-SO-10	9.5 - 11'	2.3	0.03	9.7	0.3 U	30	----	9.2 U	6.8 U	14 U
ICS-P20-SO-13	12 - 14'	----	----	----	----	----	----	----	----	----
ICS-P20-SO-16	15 - 17'	2.1	0.02 U	9.8	0.2 U	30	----	9.0 U	6.6 U	13 U
ICS-P21-SO-7	6 - 8'	127	0.23	21.3	0.2 U	82	----	94	270 F	500 F
ICS-P21-SO-13	12 - 14'	23.6	2.9	15	0.3 U	79	----	28	290 F	690 F
ICS-P21-SO-16	15 - 17'	2.3	0.04	9	0.3 U	25	----	8.9 U	6.7 U	13 U
ICS-P21-SO-22	21 - 23'	----	----	----	----	----	----	----	----	----
ICS-P21-SO-32	31 - 33'	1.3	0.03 U	7.3	0.2 U	21	----	8.7 U	6.1 U	12 U
ICS-P22-SO-4	3 - 4.5'	42.1	0.06	12	0.2 U	60	----	10	15	41
ICS-P22-SO-7	6 - 8'	----	----	----	----	----	----	----	----	----
ICS-P22-SO-10	9 - 11'	2.8	0.03	10.7	0.3 U	30	----	9.0 U	8.7	19
ICS-P22-SO-13	12 - 14'	----	----	----	----	----	----	----	----	----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	-----	100	2000 (DRO+RRO)	
ICS-P22-SO-16	15 - 17'	2.7	0.03 U	10.8	0.3 U	31	-----	10 U	6.7 U	13 U
ICS-P23-SO-3	2 - 4'	76.4	0.03	13	0.2 U	137	-----	9.3 U	5	22
ICS-P23-SO-10	9.5 - 11	2.6	0.03 U	16.2	0.3 U	32	-----	10 U	6.8 U	14 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	6.1 U	12 U
ICS-P23-SO-16	15 - 17'	1.9	0.03 U	9.8	0.3 U	27	-----	8.7 U	6.9 U	14 U
ICS-P24-SO-4	3 - 5'	21.3	0.05	13.3	0.2 U	89	-----	6.9 U	12	20
ICS-P24-SO-10	9 - 10.5'	34	2.1	11.6	0.3 U	82	-----	7.6 U	810 F	2000 F
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2	0.03 U	8.1	0.2 U	23	-----	8.6 U	6.2 U	12 U
ICS-P25-SO-3	1 - 3'	42.2	0.38	13.7	0.2 U	140	-----	8.6 U	27	53 F
ICS-P25-SO-10	9 - 11'	5.8	0.05	8.8	0.3 U	46	-----	8.5 U	14	37
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5	0.03 U	7.6	0.2 U	24	-----	8.1 U	12	13 U
ICS-P26-SO-4	3 - 5'	75.5	0.06	33.5	0.2 U	100	-----	9.9 U	28	86
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	2.8	0.03 U	11.7	0.3 U	33	-----	8.8 U	6.9 U	14 U
ICS-P26-SO-16	15 - 17'	2.8	0.03 U	12.4	0.3 U	37	-----	11 U	6.8 U	14 U
ICS-P27-SO-3	1 - 3'	388	0.24	24.4	0.9	910	-----	8.7 U	9	34
ICS-P27-SO-7	6 - 8'	4	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	52.0	0.06	13.9	0.3 U	690	-----	12 U	7.2 U	14 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.4	0.03 U	8.3	0.2 U	24	-----	6.7 U	6.2 U	12 U
ICS-P27-SO-32	31 - 33'	1.9	0.03 U	9.5	0.3 U	27	-----	7.7 U	8.8	13 U
ICS-P28-SO-4	3 - 5'	2.2	0.03 U	9.2	0.3 U	26	-----	9.2	13	13 U
ICS-P28-SO-10	8.5 - 10'	3.4	0.04 U	11.9	0.3 U	29	-----	19 U	9.4 U	25
ICS-P28-SO-16	15 - 17'	1.2	0.02 U	6.8	0.2 U	24	-----	9.2 U	6.0 U	12 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	0.8	0.02 U	4.9	0.2 U	15	-----	8.7 U	6.0 U	12 U
ICS-P29-SO-4	3 - 4'	4590	5.3	156	0.3	1390	-----	340	17000 F	48000 F
ICS-P29-SO-7	6 - 8'	13.3	-----	-----	-----	-----	-----	-----	8400	20000
ICS-P29-SO-10	9 - 10'	8.2	0.03 U	6.9	0.3	38	-----	32	110 F	220 F
ICS-P29-SO-16	15 - 17'	2.1	0.03	8.5	0.3 U	23	-----	44	32 F	34 F

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	-----	100	2000 (DRO+RRO)	
ICS-DUP2	P29-SO-16	2	0.04	8.8	0.2 U	23	-----	52	30 F	34 F
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	2.1	0.03	9.5	0.3 U	26	-----	9.6 U	6.4 U	13 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	71.1	0.26	34.8	0.2 U	96	-----	100	800	2500
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	100	260
ICS-P30-SO-13	12.5 - 13.5'	41.9	0.08	25	0.3	157	-----	40	230	810
ICS-P30-SO-16	15 - 16.5'	17.5	0.12	16.7	0.3 U	53	-----	16 U	16	31
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.3	0.02 U	8.2	0.2 U	24	-----	7.3 U	6.0 U	12 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	6.6	0.06	10.8	0.2 U	117	-----	8.5 U	6.5 U	13 U
ICS-P31-SO-10	9 - 11'	1.9	0.03 U	7.5	0.3 U	25	-----	8.5 U	6.8 U	14 U
ICS-P31-SO-16	15 - 17'	1.6	0.03 U	8.9	0.3 U	24	-----	10 U	6.8 U	14 U
ICS-P31-SO-32	31 - 33'	1.1	0.03 U	7.8	0.2 U	22	-----	9.1 U	6.2 U	12 U
ICS-P32-SO-16	16 - 17.5'	1.2	0.02 U	8	0.2 U	24	-----	8.8 U	6.2 U	12 U
ICS-SO-DUPL3	P32-SO-16	1.1	0.03 U	7	0.2 U	23	-----	9.1 U	6.0 U	12 U
ICS-P32-SO-32	31 - 33'	0.9	0.03 U	7.2	0.2 U	22	-----	10 U	5.8 U	12 U
ICS-P33-SO-16	15 - 17'	2.5	0.03 U	10.8	0.3 U	29	-----	8.6 U	6.7 U	14 U
ICS-P33-SO-32	31 - 33'	1.1	0.03 U	6.8	0.2 U	20	-----	7.4 U	6.2 U	12 U
ICS-P34-SO-4	3 - 5'	123	0.13	52.2	0.2 U	80	-----	8.0 U	16	67
ICS-P34-SO-10	9 - 11'	2.8	0.05	14.2	0.3 U	36	-----	12 U	6.8 U	14 U
ICS-P34-SO-16	15 - 17'	2.0	0.03 U	8.0	0.3 U	24	-----	11 U	6.6 U	19
ICS-P35-SO-4	3 - 5'	1.5	0.03 U	8.4	0.2 U	31	-----	8.0 U	5.3 U	11 U
ICS-P35-SO-10	9 - 11'	2.5	0.03 U	9.7	0.3 U	32	-----	11 U	7.0 U	14 U
ICS-P35-SO-16	15 - 17'	2.2	0.03 U	8.5	0.3 U	23	-----	9.8 U	6.9 U	14 U
ICS-P36-SO-4	3 - 4'	7.0	0.06	15.7	0.3 U	67	-----	13 U	6.0 U	12 U
ICS-P36-SO-10	10 - 12'	2.9	0.03	10.3	0.3 U	29	-----	12 U	7.0 U	14 U
ICS-P36-SO-16	15 - 17'	3.3	0.04	15.1	0.3 U	35	-----	11 U	6.7 U	13 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Lead	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons		
		mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	MO-range mg/kg, dry
Screening Level (a)		1000	2	70,000	17,500	1,050,000	-----	100	2000 (DRO+RRO)	
ICS-Ap-10-SO	9 - 10'	2.5	0.03 U	8.6	0.3 U	21	-----	12 U	7.0 U	14 U
ICS-Bp-10-SO	9 - 10'	2.2	0.02 U	11.2	0.2 U	24	-----	5.9 U	6.3 U	13 U
ICS-Cp-10-SO	9 - 10'	4.1	0.03	9.5	0.3 U	25	-----	12 U	11	25
ICS-Du-10-SO	9 - 10'	3.0	0.03	8.6	0.3 U	22	-----	10	16	32
ICS-Du-16-SO	15 - 17'	1.1	0.02 U	5.7	0.2 U	19	-----	4.6 J	6.1 U	12 U
ICS-FL-4-SO	3 - 5'	1.3	0.02 U	7.0	0.2 U	20	-----	4.2 J	5.3 U	10 U
ICS-FL-7-SO	6 - 8'	2.1	0.03 U	10.8	0.2 U	25	-----	6.4 J	6.2 U	12 U
ICS-FL-10-SO	9 - 10'	1.8	0.03 U	9.1	0.2 U	25	-----	6.3 U	6.0 U	12 U
ICS-FL-13-SO	12 - 14'	1.9	0.03 U	12.4	0.2 U	25	-----	8.5 U	6.5 U	13 U
ICS-FL-16-SO	15.5 - 17'	1.3	0.03 U	8.0	0.2 U	23	-----	7.8 U	6.1 U	12 U
ICS-FL-21-SO	20 - 22'	1.5	0.03 U	10.7	0.3 U	23	-----	9.1 U	6.4 U	13 U
ICS-Ju-4-SO	3 - 4'	48.6	0.10	22.2	0.2 U	66	-----	28	14,000	32,000
ICS-Ju-10-SO	10- 11'	401	0.07	16.4	0.4	193	-----	92	79	150
ICS-Ju-15-SO	15 - 16	2.3	0.03 U	14.7	0.3 U	29	-----	8.9 U	6.7 U	13 U
Number of Samples		140	137	137	137	137	1	116	140	140
Number of Detections		140	70	137	9	137	1	28	66	60
Percent Detected		100.0%	51.1%	100.0%	6.6%	100.0%	100.0%	24.1%	47.1%	42.9%
Highest Conc.		4590	8.7	156	0.9	2120	270	3000	19000	48000

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

F - profile resembles mineral oil or dielectric fluid

(a) - Based on industrial land use

MO - Motor Oil Range Hydrocarbons (RRO)

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Chloro- methane µg/kg, dry	Bromo- methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro- ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro- ethene µg/kg, dry	1,1-Dichloro- ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	3.8	680	20	1.7 U	3.1
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	2.3 U	99	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	2500 U	2500 U	2500 U	2500 U	5100 U	9900 J	2500 U	2500 U	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	110 U	110 U	110 U	110 U	86 J	430 J	130	110 U	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	4.9 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	160	1.9	1.2 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	2.5 U	65	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	0.9 U	0.9 U	1.9 U	4.7 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	48 JQ	5.4	1.1 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	100 JQ	1.0 J	1.3 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	5.3 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	5.3 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	5.6 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	2.1 U	21 JQ	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	3.1	150	3 JQ	1.3 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	1.1 U	1.1 U	1.6 JB	42	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	1.9 U	4.7 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 J	59 JQ	1.1 U	1.1 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	280 U	280 U	280 U	280 U	550 U	1400 U	280 U	280 U	280 U
ICS-DOF-MW6-B	6 - 8'	270 U	270 U	270 U	270 U	550 U	1400 U	270 U	270 U	270 U
ICS-DOF-DUP2	dup of MW6-B	270 U	270 U	270 U	270 U	540 U	1400 U	270 U	270 U	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Chloro- methane µg/kg, dry	Bromo- methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro- ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro- ethene µg/kg, dry	1,1-Dichloro- ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	3.3	220 JQ	4.9	1.6 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	91 U	91 U	91 U	91 U	180 U	460 U	91 U	91 U	91 U
ICS-DOF-MW7-B	7 - 8'	1.2 U	1.2 U	1.2 U	6.0	1.0 J	74 JQ	1.2 U	1.2 U	2.0
ICS-DOF-MW7-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.4	2.6 U	58 JQ	1.7	1.3 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	400 JQ	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.9	3.1	110 JQ	4.1	1.3 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	1.2 U	1.4	2.3 U	66 JQ	1.2 U	1.2 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	8.4 JB	55	2.7	1.6 U	1.6 U
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	1.9 U	1.9 U	6.8 JB	71	2.5	1.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	2.9 JB	23	1.0 J	1.2 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	46	2.7	1.6 U	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	28	1.0 J	1.8 U	1.8 U
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	1.8 U	1.8 U	6.7 JB	42	1.3 J	1.8 U	1.8 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	3.3 JB	7.9 U	1.1 J	1.6 U	1.6 U
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	1.4 U	1.4 U	4.4	63	1.4 U	1.4 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	1.5 U	1.5 U	6.8	70	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	1.5 U	1.5 U	6.4	40	5.7	1.5 U	1.5 U
ICS-P14-SO-4	3 - 5'	1.4 U	1.4 U	1.4 U	1.4 U	6.2 JB	44	7.6	1.4 U	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	1.4 U	0.7 J	1.4 U	4.2 JB	28	5.8	1.4 U	1.4 U
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	6.1 JB	16	2.1	1.4 U	1.4 U
ICS-P15-SO-4	3 - 5'	1.5 U	1.5 U	32	1.5 U	7.4 JB	19	2	1.5 U	180
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.8 U	1.8 U	1.8 U	1.8 U	6.4 JB	150	4.3	1.8 U	2.7
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	5.5 JB	24	4.3	1.6 U	1.6 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	0.8 U	0.8 U	2	14	0.8 U	0.8 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	6.2	79	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	2.3 U	2.3 U	9.6	43	2.5 JQ	2.3 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Chloro-methane µg/kg, dry	Bromo-methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro-ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro-ethene µg/kg, dry	1,1-Dichloro-ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-P17-SO-4	4.5 - 6.5'	1.4 U	98 JR	1.4 U	1.4 U	5.6	68	4.9	1.4 U	2.7
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	2.0 U	1 J	2.0 U	2.0 U	4.4	89	3	2.0 U	3.4
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	5.3	130	7.5	1.4 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	2.5 U	2.5 U	2.5 U	2.5 U	8.7	88 JQ	3	2.5 U	2.5 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	5.8	82 JQ	5.7	1.5 U	1.5 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	1.4 U	1.4 U	3.3 JB	7.1 U	3.1	1.4 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	5.9	7.1 U	3.8	1.4 U	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	1.8 U	1.8 U	1.8 U	1.8 U	5.4	70 JQ	2.1	1.8 U	0.9 J
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	1.9 U	1.9 U	7.2	43 JQ	5.5	1.9 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	4	49 JQ	1.5 J	1.6 U	0.9 J
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	6	7.8	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	3.5	14	1.3 U	1.3 U	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	5.9 J	2	1.5 U	1.5 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	4.6 JB	8.6 U	3.4	1.7 U	1.7 U
ICS-P21-SO-13	12 - 14'	2.2 U	2.2 U	2.2 U	2.2 U	5.2 JB	110	12	2.2 U	2.2 U
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	3.0 JB	65	3.6	1.4 U	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	39	2.2 JQ	1.2 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	2.4 U	2.4 U	2.4 U	2.4 U	9.9 JB	140	6	2.4 U	2.4 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	4.6 JB	6.5 U	1.3 U	1.3 U	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Chloro- methane µg/kg, dry	Bromo- methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro- ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro- ethene µg/kg, dry	1,1-Dichloro- ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-P22-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	5.0 JB	32	0.9 J	1.5 U	1.5 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	5	26	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	0.7 U	0.7 U	1.9	10	1.1	0.7 U	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	5.3	6.6 U	4	1.3 U	1.3 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	1.6 U	1.6 U	6.8	18	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	1.5 U	1.5 U	4.2	10	4.7	1.5 U	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	3.2	12	1.2	1.2 U	1.2 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	2.9 U	26	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	3.7	13	1.6	1.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	1.3 U	1.3 U	3.1	21	1.3 U	1.3 U	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U	19	1.9	1.6 U	1.6 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	3	14	1.4 U	1.4 U	1.4 U
ICS-P27-SO-3	1 - 3'	47	77	1.5 U	1.5 U	3.1	110	1.5 U	1.5 U	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	3.9	23	4.6	1.6 U	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	2.5	7.9	1.5	1.2 U	1.2 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	6.2 U	2.3	1.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	1.9 U	1.9 U	4.3 JB	19	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	2.6 U	2.6 U	2.6 U	2.6 U	5.8	59	5.6	2.6 U	3.5
ICS-P28-SO-16	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	2.5 JB	160	3.6	1.1 U	0.6 J
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	5	61	4.8	1.6 U	1.6 U
ICS-P29-SO-4	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	2.7	49	1.6 JQ	0.9 U	0.9 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	5.1	700	6.3 JQ	1.6 U	45
ICS-P29-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	6.1	80	5.7 JQ	1.6 U	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Chloro- methane µg/kg, dry	Bromo- methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro- ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro- ethene µg/kg, dry	1,1-Dichloro- ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-DUP2	P29-SO-16	2.1 U	2.1 U	2.1 U	2.1 U	8	120	6.5 JQ	2.1 U	1.4 J
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	4.1	25	2.3 JQ	1.6 U	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	1.0 U	1.0 U	1.0 U	1.0 U	3.4	120	5.7	1.0 U	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.5	1.0 U	1.0 U
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	2.8 U	2.8 U	6.7	95	11	2.8 U	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	6.8	17	4.3	1.4 U	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	2.9 JB	64	1.7 JQ	1.4 U	1.4 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	8.1	24	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	28	2.5 JQ	1.7 U	1.7 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	6.7 U	3.3 JQ	1.3 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	1.6 U	1.6 U	3.5 JB	29	4.1	1.6 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	3.0 U	3.0 U	9.6	77 JQ	6.6	3.0 U	3.0 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	4.6	48	8.6	1.6 U	1.6 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	7.1 U	1.9 JQ	1.4 U	1.4 U
ICS-P33-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	2.7 JB	22	6.0 JQ	1.3 U	1.3 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	1.8 U	1.8 U	3.7 U	33.0 JQ	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	52.0 JQ	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	29.0 JQ	3.2	1.8 U	1.8 U
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	1.7 U	1.7 U	3.6	14.0 JQ	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	25.0 JQ	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	2.5 J	31.0 JQ	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	17.0 JQ	1.9	1.5 U	1.5 U
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	1.6 U	1.6 U	3.7	43.0 JQ	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	2.4 J	35.0 JQ	1.7 U	1.7 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Chloro- methane µg/kg, dry	Bromo- methane µg/kg, dry	Vinyl chloride µg/kg, dry	Chloro- ethane µg/kg, dry	Methylene chloride µg/kg, dry	Acetone µg/kg, dry	Carbon disulfide µg/kg, dry	1,1-Dichloro- ethene µg/kg, dry	1,1-Dichloro- ethane µg/kg, dry
Screening Level (a)		-----	4900	87.5	-----	21,000	3,150,000	350,000	175,000	23,000
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	83	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO	9 - 10'	1.2 U	0.5 J	1.2 U	1.2 U	2.5 U	94	2.4	1.2 U	1.2 U
ICS-Cp-10-SO	9 - 10'	3.2	2.1	2.0 U	2.0 U	4.0 U	57	7.8	2.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	1.6 U	0.6 J	1.6 U	1.6 U	3.1 U	76	1.6 U	1.6 U	1.6 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	2.3 U	42	13	1.1 U	1.1 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	16	1.5 U	1.5 U	1.5 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	52	1.8 U	1.8 U	1.8 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	30	10	1.5 U	1.5 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	14	1.5 U	1.5 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	24	3.8	1.3 U	1.3 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	6.0 U	2.9	1.2 U	1.2 U
ICS-Ju-4-SO	3 - 4'	2.1 U	2.1 U	2.1 U	2.1 U	4.3 U	220	11	2.1 U	2.1 U
ICS-Ju-10-SO	10- 11'	6.2	2.4 U	2.4 U	2.4 U	4.7 U	120	9.9	2.4 U	2.4 U
ICS-Ju-15-SO	15 - 16	1.0 J	1.2 U	1.2 U	1.2 U	2.5 U	28	9.1	1.2 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128	128
Number of Detections		4	6	2	4	78	106	81	0	12
Percent Detected		3.1%	4.7%	1.6%	3.1%	60.9%	82.8%	63.3%	0.0%	9.4%
Highest Conc.		47	98	32	6	86	9900	130	0	180

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

 JB = estimate; associated value may be biased high due to contribution from laboratory background
 or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	140	1.7 U	1.7 U	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	20 JQ	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	2500 U	2400 J	2500 U	2500 U	13,000 U	2500 U	2500 U	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	110 U	110 U	110 U	110 U	550 U	110 U	110 U	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	1.0 U	1.0 U	4.9 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	30 JQ	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	14	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	1.1 U	1.1 U	8.5	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	1.3 U	1.3 U	29	1.3 U	1.3 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	1.4	1.1 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	3.3 J	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	23 JQ	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	1.1 U	1.1 U	11	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	10	1.1 U	1.1 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	280 U	280 U	280 U	280 U	1400 U	280 U	280 U	280 U
ICS-DOF-MW6-B	6 - 8'	270 U	270 U	270 U	270 U	1400 U	270 U	270 U	270 U
ICS-DOF-DUP2	dup of MW6-B	270 U	270 U	270 U	270 U	1400 U	270 U	270 U	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	48	1.6 U	1.6 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	91 U	130	91 U	91 U	460 U	91 U	91 U	91 U
ICS-DOF-MW7-B	7 - 8'	1.1 J	1.2 U	1.2 U	1.2 U	18	1.2 U	1.2 U	1.2 U
ICS-DOF-MW7-C	11 - 12'	1.3 U	4.3	1.3 U	1.3 U	16	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	39	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	21	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	1.2 U	1.2 U	19	1.2 U	1.2 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	6.1 J	1.6 U	1.6 U	1.6 U
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	1.9 U	1.9 U	18	1.9 U	1.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	3.8 J	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	4.5 J	1.6 U	1.6 U	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	8.9 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	1.8 U	1.8 U	7.1 J	1.8 U	1.8 U	1.8 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	1.6 U	1.6 U	1.6 U
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	1.4 U	1.4 U	8.9	1.4 U	1.4 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	1.5 U	1.5 U	11	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	1.5 U	1.5 U	5.9 J	1.5 U	1.5 U	1.5 U
ICS-P14-SO-4	3 - 5'	1.4 U	1.4 U	1.4 U	1.4 U	4.5 J	1.4 U	1.4 U	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	9.9	1.4 U	1.4 U	5.5 J	1.4 U	1.4 U	1.4 U
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4	3 - 5'	6.1	32	1.5 U	1.4 J	7.6 U	1.5 U	1.5 U	1.5 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.4 J	30	1.8 U	1.8 U	29	1.8 U	1.8 U	1.8 U
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	8.1 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	0.8 U	0.8 U	4.1 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	5.5 J	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	2.3 U	2.3 U	6.6 J	2.3 U	2.3 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-P17-SO-4	4.5 - 6.5'	1.4 U	8.3	1.4 U	1.4 U	7.0 U	1.4 U	1.4 U	1.4 U
ICS-P17-SO-7	6.7 - 8'	----	----	----	----	----	----	----	----
ICS-P17-SO-10	9 - 11'	1.8 J	2.0 U	2.0 U	2.0 U	17	2.0 U	2.0 U	2.0 U
ICS-P17-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	14	1.4 U	1.4 U	1.4 U
ICS-P17-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P18-SO-4	3 - 5'	2.5 U	2.3 J	2.5 U	2.5 U	29 JQ	2.5 U	2.5 U	2.5 U
ICS-P18-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P18-SO-10	9 - 10'	0.7 J	1.5 U	1.5 U	1.5 U	33 JQ	1.5 U	1.5 U	1.5 U
ICS-P18-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P19-SO-4	3 - 4'	1.8 U	1.8 U	1.8 U	1.8 U	24 JQ	1.8 U	1.8 U	1.8 U
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	1.9 U	1.9 U	5.2 J	1.9 U	1.9 U	1.9 U
ICS-P19-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P19-SO-16	15 - 17'	1.6 U	1.0 J	1.6 U	1.6 U	4.3 J	1.6 U	1.6 U	1.6 U
ICS-P19-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	7.7 U	1.5 U	1.5 U	1.5 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U
ICS-P21-SO-13	12 - 14'	5.9	45	2.2 U	2.2 U	14	2.2 U	2.2 U	2.2 U
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	6.0 J	1.4 U	1.4 U	1.4 U
ICS-P21-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	1.2 U	1.2 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	2.4 U	2.4 U	2.4 U	2.4 U	16	2.4 U	2.4 U	2.4 U
ICS-P22-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	6.5 U	1.3 U	1.3 U	1.3 U
ICS-P22-SO-13	12 - 14'	----	----	----	----	----	----	----	----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-P22-SO-16	15 - 17'	1.5 U	1.6	1.5 U	1.5 U	7.6 U	1.5 U	1.5 U	1.5 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	4.9 J	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	0.7 U	0.7 U	2.9 J	0.7 U	0.7 U	0.7 U
ICS-P23-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	1.3 U	1.3 U	1.3 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	1.6 U	1.6 U	9.1	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	1.5 U	1.5 U	13	1.5 U	1.5 U	1.5 U
ICS-P24-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	5.8 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	6.1 J	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P25-SO-16	15 - 17'	1.5 U	2	1.5 U	1.5 U	7.5 U	1.5 U	1.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	1.3 U	1.3 U	4.7 J	1.3 U	1.3 U	1.3 U
ICS-P26-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	4.8 J	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U
ICS-P27-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	19	1.5 U	1.5 U	1.5 U
ICS-P27-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	7.1 J	1.6 U	1.6 U	1.6 U
ICS-P27-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	6.0 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	1.2 U	1.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	11	48	2.6 U	2.6 U	19	2.6 U	2.6 U	2.6 U
ICS-P28-SO-16	15 - 17'	2	0.7 J	1.1 U	1.1 U	20	1.1 U	1.1 U	1.1 U
ICS-P28-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	4.5 J	1.6 U	1.6 U	1.6 U
ICS-P29-SO-4	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	4.6 U	0.9 U	0.9 U	0.9 U
ICS-P29-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P29-SO-10	9 - 10'	8.4	73	1.6 U	1.6 U	66	1.6 U	1.6 U	1.6 U
ICS-P29-SO-16	15 - 17'	2.7	11	1.6 U	1.6 U	8.1 U	1.6 U	1.6 U	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-DUP2	P29-SO-16	3.5	15	2.1 U	2.1 U	10 U	2.1 U	2.1 U	2.1 U
ICS-P29-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	8.0 U	1.6 U	1.6 U	1.6 U
ICS-P29-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P29-SO-50	49 - 50'	----	----	----	----	----	----	----	----
ICS-P30-SO-7	6 - 7'	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-10	9 - 10'	----	----	----	----	----	----	----	----
ICS-P30-SO-13	12.5 - 13.5'	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	2.8 U	2.8 U	10	2.8 U	2.8 U	2.8 U
ICS-P30-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U
ICS-P30-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P30-SO-50	49 - 50'	----	----	----	----	----	----	----	----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	5.7 J	1.4 U	1.4 U	1.4 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	6.7 U	1.3 U	1.3 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	3.0 U	3.0 U	17 JQ	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	10	1.6 U	1.6 U	1.6 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	5.3 J	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32	31 - 33'		1.3 U	1.3 U	1.3 U	6.5 U	1.3 U	1.3 U	1.3 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	1.8 U	1.8 U	9.2 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	2.1 U	2.1 U	6.2 J	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	1.8 U	1.8 U	9.0 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	1.7 U	1.7 U	8.5 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	8.9 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	4.3 J	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	1.6 U	1.6 U	4.2 J	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	<i>trans</i> -1,2-Dichloroethene µg/kg, dry	<i>cis</i> -1,2-Dichloroethene µg/kg, dry	Chloroform µg/kg, dry	1,2-Dichloroethane µg/kg, dry	2-Butanone µg/kg, dry	1,1,1-Tri-chloroethane µg/kg, dry	Carbon tetrachloride µg/kg, dry	Bromo-dichloromethane µg/kg, dry
Screening Level (a)		70,000	7000	4230	1440	2,100,000	7,000,000	1880	2120
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	17	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	9.7	1.2 U	1.2 U	1.2 U
ICS-Cp-10-SO	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	11	2.0 U	2.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	17	1.6 U	1.6 U	1.6 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	6.7	1.1 U	1.1 U	1.1 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	1.5 U	1.5 U	1.5 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	1.8 U	1.8 U	9.1 U	1.8 U	1.8 U	1.8 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	4.1 J	1.5 U	1.5 U	1.5 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	1.5 U	1.5 U	7.7 U	1.5 U	1.5 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	6.7 U	1.3 U	1.3 U	1.3 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	1.2 U	1.2 U	6.0 U	1.2 U	1.2 U	1.2 U
ICS-Ju-4-SO	3 - 4'	2.1 U	2.1 U	2.1 U	2.1 U	18	2.1 U	2.1 U	2.1 U
ICS-Ju-10-SO	10- 11'	2.4 U	2.4 U	2.4 U	2.4 U	25	2.4 U	2.4 U	2.4 U
ICS-Ju-15-SO	15 - 16	1.2 U	1.2 U	1.2 U	1.2 U	3.6 J	1.2 U	1.2 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128
Number of Detections		11	17	0	0	69	1	0	0
Percent Detected		8.6%	13.3%	0.0%	0.0%	53.9%	0.8%	0.0%	0.0%
Highest Conc.		11	2400	0	0	140	1.4	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis -1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans -1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.1 J	1.7 U	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	2500 U	2500 U	2000 J	2500 U	2500 U	1600 J	2500 U	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	110 U	110 U	200	110 U	110 U	78 J	110 U	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	4.2	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	280 U	280 U	280 U	280 U	280 U	280 U	280 U	280 U
ICS-DOF-MW6-B	6 - 8'	270 U	270 U	270 U	270 U	270 U	270 U	270 U	270 U
ICS-DOF-DUP2	dup of MW6-B	270 U	270 U	270 U	270 U	270 U	270 U	270 U	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis -1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans -1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.2	1.6 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	91 U	91 U	120	91 U	91 U	91 U	91 U	91 U
ICS-DOF-MW7-B	7 - 8'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.1	1.2 U	1.2 U
ICS-DOF-MW7-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.8 J	1.3 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	15	1.3 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	29	1.2 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1	1.6 U	1.6 U
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.7 J	1.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.5	1.6 U	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	20	1.8 U	1.8 U
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	5.7	1.8 U	1.8 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P14-SO-4	3 - 5'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	1.4 U	1.0 J	1.4 U	1.4 U	2.2	1.4 U	1.4 U
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4	3 - 5'	3.8	1.5 U	7.3	1.5 U	1.5 U	9.3	1.5 U	1.5 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.8 U	1.8 U	4	1.8 U	1.8 U	2.4	1.8 U	1.8 U
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis -1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans -1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-P17-SO-4	4.5 - 6.5'	1.4 U	1.4 U	2.2	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	15	2.0 U	2.0 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.7	1.4 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.4	2.5 U	2.5 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	4.8	1.5 U	1.5 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	6.3	1.4 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	6.2	1.8 U	1.8 U
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.6 U	1.6 U	1.1 J	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	17	1.7 U	1.7 U
ICS-P21-SO-13	12 - 14'	2.2 U	2.2 U	3.7	2.2 U	2.2 U	50	2.2 U	2.2 U
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	6.4	1.4 U	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	2.4 U	2.4 U	5.9	2.4 U	2.4 U	9.9	2.4 U	2.4 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	0.9 J	1.3 U	1.3 U	11	1.3 U	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis-1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans-1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-P22-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15	1.5 U	1.5 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2	1.4 U	1.4 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	2.7	1.5 U	1.5 U	3.9	1.5 U	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.8 J	1.5 U	1.5 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.2 J	1.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4	1.3 U	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P27-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	2.3	1.5 U	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	2.6 U	2.6 U	7.8	2.6 U	2.6 U	8.4	2.6 U	2.6 U
ICS-P28-SO-16	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	21	1.1 U	1.1 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	2.1	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U
ICS-P29-SO-4	3 - 4'	0.9 U	0.9 U	1	0.9 U	0.9 U	1.6	0.9 U	0.9 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	10	1.6 U	14	1.6 U	1.6 U	18	1.6 U	1.6 U
ICS-P29-SO-16	15 - 17'	1.6 U	1.6 U	4.8	1.6 U	1.6 U	8	1.6 U	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis-1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans-1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-DUP2	P29-SO-16	2.1 U	2.1 U	8.7	2.1 U	2.1 U	11	2.1 U	2.1 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	1.0 U	1.0 U	1.3	1.0 U	1.0 U	4.1	1.0 U	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	21	1.0 U	1.0 U
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8	2.8 U	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.2	1.4 U	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.8 J	1.5 U	1.5 U
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	1,2-Dichloro- propane µg/kg, dry	cis -1,3-Dichloro- propene µg/kg, dry	Trichloro- ethene µg/kg, dry	Dibromo- chloromethane µg/kg, dry	1,1,2-Trichloro- ethane µg/kg, dry	Benzene µg/kg, dry	trans -1,3- Dichloropropene µg/kg, dry	Bromoform µg/kg, dry
Screening Level (a)		-----	-----	1750	1560	2,300	2390	-----	16,600
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.7 J	1.2 U	1.2 U
ICS-Bp-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Cp-10-SO	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.0 J	1.3 U	1.3 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.5	1.2 U	1.2 U
ICS-Ju-4-SO	3 - 4'	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	3.9	2.1 U	2.1 U
ICS-Ju-10-SO	10- 11'	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.1	2.4 U	2.4 U
ICS-Ju-15-SO	15 - 16	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128
Number of Detections		2	0	20	0	0	55	0	0
Percent Detected		1.6%	0.0%	15.6%	0.0%	0.0%	43.0%	0.0%	0.0%
Highest Conc.		10	0	2000	0	0	1600	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

 JB = estimate; associated value may be biased high due to contribution from laboratory background
 or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetra-chloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	8.5 U	8.5 U	1.7 U	1.7 U	4.0	1.7 U	1.1 J	1.7 U	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	5.8 U	5.8 U	1.2 U	1.2 U	16	1.2 U	8.3	1.2 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	13,000 U	13,000 U	2500 U	2500 U	120,000	2500 U	130,000	2500 U	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	550 U	550 U	110 U	110 U	810	110 U	1800	100 J	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	4.9 U	4.9 U	0.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	6.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	6.3 U	6.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	4.7 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	6.5 U	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	5.3 U	5.3 U	0.6 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	5.3 U	5.3 U	0.8 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	5.6 U	5.6 U	1.9	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	5.2 U	5.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	6.6 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	5.6 U	5.6 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	4.7 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	1400 U	1400 U	280 U	280 U	2500	280 U	3300	280 U	280 U
ICS-DOF-MW6-B	6 - 8'	1400 U	1400 U	270 U	270 U	1700	270 U	2300	270 U	270 U
ICS-DOF-DUP2	dup of MW6-B	1400 U	1400 U	270 U	270 U	550	270 U	640	270 U	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetra-chloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-DOF-MW6-C	9 - 10'	8.0 U	8.0 U	1.6 U	1.6 U	4.2	1.6 U	4.1	1.6 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	460 U	460 U	91 U	91 U	1300	91 U	1500	91 U	91 U
ICS-DOF-MW7-B	7 - 8'	6.1 U	6.1 U	1.2 U	1.2 U	1.4	1.2 U	5.3	1.2 U	1.2 U
ICS-DOF-MW7-C	11 - 12'	6.6 U	6.6 U	1.3 U	1.3 U	6.6	1.3 U	6.7	1.3 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	5.0 J	9.8	1.0 U	1.0 U	3.8	1.0 U	10	1.0 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	6.7 U	6.7 U	1.3 U	1.3 U	1.8	3.1	22	1.3 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	5.8 U	5.8 U	1.2 U	1.2 U	1.2	2.5	0.9 J	1.2 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	8.1 U	8.1 U	1.6 U	1.6 U	3.5	1.6 U	7.1	1.6 U	1.6 U
ICS-P11-SO-10	9.5 - 11'	9.7 U	9.7 U	1.9 U	1.9 U	1.1 J	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	5.9 U	5.9 U	1.2 U	1.2 U	2	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	7.9 U	7.9 U	1.6 U	1.6 U	3.4	1.6 U	7.6	1.6 U	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	8.9 U	8.9 U	1.8 U	1.8 U	2	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-13	12 - 14'	8.8 U	8.8 U	1.8 U	1.8 U	0.9 J	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-16	15 - 17'	7.9 U	7.9 U	1.6 U	1.6 U	2	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P13-SO-4	4 - 6'	7.0 U	7.0 U	5.1	1.4 U	6.9	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	7.4 U	7.4 U	1.5 U	1.5 U	3.4	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	7.3 U	7.3 U	1.5 U	1.5 U	2.5	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P14-SO-4	3 - 5'	7.0 U	7.0 U	1.4 U	1.4 U	1.0 J	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	7.2 U	7.2 U	1.4 U	1.4 U	9.7	1.4 U	1.9	1.4 U	1.4 U
ICS-P14-SO-16	15 - 17'	7.1 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4	3 - 5'	7.6 U	7.6 U	0.8 J	1.5 U	17	1.5 U	48	1.5 U	1.5 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	8.9 U	8.9 U	1.7 J	1.8 U	73	1.8 U	50	1.8 U	1.8 U
ICS-P15-SO-16	15 - 17'	8.1 U	8.1 U	1.6 U	1.6 U	1.6	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4	3 - 4'	4.1 U	4.1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	10 U	10 U	1.8 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16	15 - 17'	11 U	11 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetra-chloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-P17-SO-4	4.5 - 6.5'	7.0 U	7.0 U	1.4 U	1.4 U	1.8	2.7	2.8	1.4 U	1.4 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	10 U	10 U	2.0 U	2.0 U	19	18	13	2.0 U	2.0 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	7.2 U	7.2 U	1.4 U	1.4 U	2.2	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	12 U	12 U	2.5 U	2.5 U	4.3	2.5 U	4.4	2.5 U	2.5 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	7.4 U	7.4 U	1.5 U	1.5 U	65	1.5 U	8.7	1.5 U	1.5 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	7.1 U	7.1 U	1.4 U	1.4 U	1.1 J	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	7.1 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	9.1 U	9.1 U	1.8 U	1.8 U	2.6	1.8 U	3.4	1.8 U	1.8 U
ICS-P19-SO-10	9 - 10'	9.5 U	9.5 U	1.9 U	1.9 U	1.1 J	3.1	1.9 U	1.9 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	7.9 J	7.9 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	7.6 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	6.6 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	7.7 U	7.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P21-SO-7	6 - 8'	8.6 U	8.6 U	1.7 U	1.7 U	3.9	1.7 U	1.6 J	1.7 U	1.7 U
ICS-P21-SO-13	12 - 14'	11 U	11 U	2.2 U	2.2 U	290	2.2 U	280	2.2 U	2.2 U
ICS-P21-SO-16	15 - 17'	7.2 U	7.2 U	1.4 U	1.4 U	2.9	1.4 U	0.9 J	1.4 U	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	5.9 U	5.9 U	1.2 U	1.2 U	1.3	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	12 U	12 U	2.4 U	2.4 U	7.6	2.4 U	170	2.4 U	2.4 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	6.5 U	6.5 U	1.3 U	1.3 U	1.2 J	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetra-chloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-P22-SO-16	15 - 17'	7.6 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P23-SO-3	2 - 4'	7.2 U	7.2 U	1.4 U	1.4 U	2	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10	9.5 - 11	3.6 U	3.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	6.6 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P24-SO-4	3 - 5'	7.9 U	7.9 U	2.4	1.6 U	0.8 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	7.6 U	7.6 U	1.5 U	1.5 U	2.4	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	5.8 U	5.8 U	1.2 U	1.2 U	0.8 J	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3	1 - 3'	7.3 U	7.3 U	1.5 U	1.5 U	1.0 J	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10	9 - 11'	7.2 U	7.2 U	1.4 U	1.4 U	1.1 J	1.2 J	1.4 U	1.4 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	7.5 U	7.5 U	1.5 U	1.5 U	0.9 J	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	6.4 U	6.4 U	0.7 J	1.3 U	2.2	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	8.2 U	8.2 U	1.6 U	1.6 U	1.3 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16	15 - 17'	7.1 U	7.1 U	1.4 U	1.4 U	1.0 J	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P27-SO-3	1 - 3'	7.4 U	7.4 U	1.5 U	1.5 U	2.3	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	7.8 U	7.8 U	1.6 U	1.6 U	1.8	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	6.0 U	6.0 U	1.2 U	1.2 U	0.6 J	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32	31 - 33'	6.2 U	6.2 U	1.2 U	1.2 U	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	9.5 U	9.5 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	13 U	13 U	2.6 U	2.6 U	84	25	67	2.6 U	2.6 U
ICS-P28-SO-16	15 - 17'	5.7 U	5.7 U	1.1 U	1.1 U	33	5.7	28	1.1 U	1.1 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	8.1 U	8.1 U	1.6 U	1.6 U	1.2 J	1.6 J	1.6 U	1.6 U	1.6 U
ICS-P29-SO-4	3 - 4'	4.6 U	4.6 U	0.9 U	0.9 U	3	0.9 U	1.9	0.9 U	0.9 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	8.1 U	8.1 U	5.8	1.6 U	1900	3.8	720	100	1.6 U
ICS-P29-SO-16	15 - 17'	8.1 U	8.1 U	1.6 U	1.6 U	110	1.6 U	66	1.3 J	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetra-chloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-DUP2	P29-SO-16	10 U	10 U	1.1 J	2.1 U	150	2.1 U	96	2.0 J	2.1 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	8.0 U	8.0 U	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	5.0 U	5.0 U	0.8	1.0 U	390	1.0 U	2700	87	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	5.0 U	5.0 U	1.0 U	1.0 U	4	1.0 U	2	0.7	1.0 U
ICS-P30-SO-16	15 - 16.5'	14 U	14 U	2.8 U	2.8 U	2.1	2.8 U	2.8 U	2.8 U	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	7.2 U	7.2 U	1.4 U	1.4 U	0.9	1.4 U	1.1	1.4 U	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	6.8 U	6.8 U	1.4 U	1.4 U	1.5	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-10	9 - 11'	8.2 U	8.2 U	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16	15 - 17'	8.6 U	8.6 U	1.7 U	1.7 U	1.1 J	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32	31 - 33'	6.7 U	6.7 U	1.3 U	1.3 U	0.9 J	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	7.9 U	7.9 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	15 U	15 U	3.0 U	3.0 U	7.7	3.0 U	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32	31 - 33'	8.2 U	8.2 U	1.6 U	1.6 U	1.0 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P33-SO-16	15 - 17'	7.1 U	7.1 U	1.4 U	1.4 U	0.7 J	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32	31 - 33'	6.5 U	6.5 U	1.3 U	1.3 U	0.8 J	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P34-SO-4	3 - 5'	9.2 U	9.2 U	1.8 U	1.8 U	1.7 J	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10	9 - 11'	10 U	10 U	2.1 U	2.1 U	1.2 J	2.1 U	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16	15 - 17'	9.0 U	9.0 U	1.8 U	1.8 U	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-4	3 - 5'	8.5 U	8.5 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10	9 - 11'	8.9 U	8.9 U	1.8 U	1.8 U	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16	15 - 17'	7.5 U	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4	3 - 4'	7.4 U	7.4 U	1.5 U	1.5 U	1.4 J	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-10	10 - 12'	7.9 U	7.9 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16	15 - 17'	8.6 U	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Methyl-2-pentanone µg/kg, dry	2-Hexanone µg/kg, dry	Tetrachloro-ethene µg/kg, dry	1,1,2,2-Tetrachloroethane µg/kg, dry	Toluene µg/kg, dry	Chloro-benzene µg/kg, dry	Ethyl-benzene µg/kg, dry	Styrene µg/kg, dry	Trichloro-fluoromethane µg/kg, dry
Screening Level (a)		-----	-----	21,000	656	280,000	70,000	350,000	700,000	1,050,000
ICS-Ap-10-SO	9 - 10'	6.0 U	6.0 U	1.2 U	1.2 U	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO	9 - 10'	6.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Cp-10-SO	9 - 10'	10 U	10 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	7.8 U	7.8 U	1.6 U	1.6 U	1.3 J	1.6 U	1.6 U	1.6 U	1.6 U
ICS-Du-16-SO	15 - 17'	5.7 U	5.7 U	1.1 U	1.1 U	0.7 J	1.1 U	1.1 U	1.1 U	1.1 U
ICS-FL-4-SO	3 - 5'	7.4 U	7.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-7-SO	6 - 8'	9.1 U	9.1 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-FL-10-SO	9 - 10'	7.6 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-13-SO	12 - 14'	7.7 U	7.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	6.7 U	6.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-FL-21-SO	20 - 22'	6.0 U	6.0 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ju-4-SO	3 - 4'	11 U	11 U	2.1 U	2.1 U	5.8	2.1 U	9.6	2.1 U	2.1 U
ICS-Ju-10-SO	10- 11'	12 U	12 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
ICS-Ju-15-SO	15 - 16	6.1 U	6.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128	128
Number of Detections		2	2	10	0	86	10	38	6	0
Percent Detected		1.6%	1.6%	7.8%	0.0%	67.2%	7.8%	29.7%	4.7%	0.0%
Highest Conc.		7.9	9.8	5.8	0	120000	25	130000	100	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	m - & p - Xylenes µg/kg, dry	o - Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	3.4 U	1.9	1.2 J	1.7 U	1.7 U	see SVOA's	85 U	3.4 U	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	2.3 U	7.1	1.4	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	5100 U	120,000	34,000	see SVOA's	see SVOA's	see SVOA's	130,000 U	5100 U	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	220 U	2900	550	150	see SVOA's	200	5500 U	220 U	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	49 U	2.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	2.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	62 U	2.5 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	2.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	63 U	2.5 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	1.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	47 U	1.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	55 U	2.2 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	53 U	2.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	53 U	2.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	56 U	2.2 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	2.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	52 U	2.1 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	56 U	2.2 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	1.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	47 U	1.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	55 U	2.2 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	550 U	7700	2500	660	770	2100	14,000 U	550 U	280 U
ICS-DOF-MW6-B	6 - 8'	550 U	5200	1700	490	640	1800	14,000 U	550 U	270 U
ICS-DOF-DUP2	dup of MW6-B	540 U	1500	500	200 J	320	870	14,000 U	540 U	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	<i>m</i> - & <i>p</i> - Xylenes µg/kg, dry	<i>o</i> -Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-DOF-MW6-C	9 - 10'	3.2 U	2.7	2.3	see SVOA's	see SVOA's	see SVOA's	80 U	3.2 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	180 U	2400	940	see SVOA's	see SVOA's	see SVOA's	4600 U	180 U	91 U
ICS-DOF-MW7-B	7 - 8'	2.4 U	3.4	1.4	see SVOA's	see SVOA's	see SVOA's	61 U	2.4 U	1.2 U
ICS-DOF-MW7-C	11 - 12'	2.6 U	25	4.4	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	2.1 U	17	5.0	1.0 U	1.0 U	1.0 U	51 U	2.1 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	2.7 U	160	1.3 U	1.5	1.3 U	1.3 U	67 U	2.7 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	2.3 U	28	1.0 J	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	3.2 U	8	2.7	1.6 U	1.6 U	1.6 U	81 U	3.2 U	1.6 U
ICS-P11-SO-10	9.5 - 11'	3.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	97 U	3.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	59 U	2.4 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	3.2 U	31	3.4	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	3.6 U	8.2	2.1	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P12-SO-13	12 - 14'	3.5 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	88 U	3.5 U	1.8 U
ICS-P12-SO-16	15 - 17'	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.1 U	1.6 U
ICS-P13-SO-4	4 - 6'	2.8 U	1.3 J	1.0 J	1.4 U	1.4 U	1.4 U	70 U	2.8 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	2.9 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	73 U	2.9 U	1.5 U
ICS-P14-SO-4	3 - 5'	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	70 U	2.8 U	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	2.9 U	5.5	1.3 J	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P14-SO-16	15 - 17'	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P15-SO-4	3 - 5'	3.1 U	33	35	1.5 U	1.5 U	1.5 U	76 U	3.1 U	1.5 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	3.6 U	110	30	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P15-SO-16	15 - 17'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	81 U	3.2 U	1.6 U
ICS-P16-SO-4	3 - 4'	1.7 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	41 U	1.7 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100 U	4.1 U	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	110 U	4.5 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	m - & p - Xylenes µg/kg, dry	o - Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-P17-SO-4	4.5 - 6.5'	2.8 U	3.8	3.3	8.9	470	520	70 U	2.8 U	1.4 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	4.1 U	19	7.8	2.0 U	2.0 U	2.0 U	100 U	4.1 U	2.0 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	2.9 U	1.1 J	0.7 J	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	4.9 U	8	3.2	2.4 J	2.5 U	2.5 U	120 U	4.9 U	2.5 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	2.9 U	480	220	17	1.5 U	1.5 U	74 U	2.9 U	1.5 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	2.8 U	1.4 J	4	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.9 U	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	3.6 U	2.8	2.5	1.8 U	1.8 U	1.8 U	91 U	3.6 U	1.8 U
ICS-P19-SO-10	9 - 10'	3.8 U	1.9 U	1.9 U	3.6	2.5	6.1	95 U	3.8 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	2.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.7 U	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	3.1 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	77 U	3.1 U	1.5 U
ICS-P21-SO-7	6 - 8'	3.5 U	5.4	2.1	1.7 U	1.7 U	1.7 U	86 U	3.5 U	1.7 U
ICS-P21-SO-13	12 - 14'	4.5 U	190	92	2.7	2.2 U	2.2 U	110 U	4.5 U	2.2 U
ICS-P21-SO-16	15 - 17'	2.9 U	30	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	59 U	2.4 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	4.9 U	57	19	1.8 J	2.4 U	2.4 U	120 U	4.9 U	2.4 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	2.6 U	1.7	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	<i>m</i> - & <i>p</i> - Xylenes µg/kg, dry	<i>o</i> -Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-P22-SO-16	15 - 17'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P23-SO-3	2 - 4'	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P23-SO-10	9.5 - 11	1.4 U	0.7 U	0.7 U	0.7 U	0.7 U	2.6	36 U	1.4 U	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U
ICS-P24-SO-4	3 - 5'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	3.0 U	1.5 J	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U
ICS-P25-SO-3	1 - 3'	2.9 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	73 U	2.9 U	1.5 U
ICS-P25-SO-10	9 - 11'	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	72 U	2.9 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	75 U	3.0 U	1.5 U
ICS-P26-SO-4	3 - 5'	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	64 U	2.6 U	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P26-SO-16	15 - 17'	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P27-SO-3	1 - 3'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	78 U	3.1 U	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	60 U	2.4 U	1.2 U
ICS-P27-SO-32	31 - 33'	2.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	62 U	2.5 U	1.2 U
ICS-P28-SO-4	3 - 5'	3.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	95 U	3.8 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	1.5 J	90	41	45	64	200	130 U	5.1 U	2.6 U
ICS-P28-SO-16	15 - 17'	2.3 U	26	9.6	1.1 U	1.1 U	0.6 J	57 U	2.3 U	1.1 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	2.5 J	1.6 U	1.6 U	1.6 U	1.6 U	0.9 J	81 U	3.2 U	1.6 U
ICS-P29-SO-4	3 - 4'	1.8 U	4.5	5.3	47	13	73	46 U	1.8 U	0.9 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	3.2 U	570	220	19	3.3	5.3	81 U	3.2 U	1.6 U
ICS-P29-SO-16	15 - 17'	3.2 U	120	51	1.8	1.6 U	1.6 U	81 U	3.2 U	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	<i>m</i> - & <i>p</i> - Xylenes µg/kg, dry	<i>o</i> -Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-DUP2	P29-SO-16	4.1 U	170	76	3.2	2.1 U	2.1 U	100 U	4.1 U	2.1 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	80 U	3.2 U	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	2.0 U	730	510	140	1.0 U	6	50 U	2.0 U	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	2.0 U	5.3	2.2	1.0 U	1.0 U	1.0 U	50 U	2.0 U	1.0 U
ICS-P30-SO-16	15 - 16.5'	5.6 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	140 U	5.6 U	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	2.9 U	3.4	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	2.7 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	68 U	2.7 U	1.4 U
ICS-P31-SO-10	9 - 11'	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P31-SO-16	15 - 17'	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	86 U	3.4 U	1.7 U
ICS-P31-SO-32	31 - 33'	2.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	67 U	2.7 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	6.1 U	3.8	3.0 U	3.0 U	3.0 U	3.0 U	150 U	6.1 U	3.0 U
ICS-P32-SO-32	31 - 33'	3.3 U	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P33-SO-16	15 - 17'	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P33-SO-32	31 - 33'	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U
ICS-P34-SO-4	3 - 5'	3.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	92 U	3.7 U	1.8 U
ICS-P34-SO-10	9 - 11'	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	100 U	4.2 U	2.1 U
ICS-P34-SO-16	15 - 17'	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	90 U	3.6 U	1.8 U
ICS-P35-SO-4	3 - 5'	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	85 U	3.4 U	1.7 U
ICS-P35-SO-10	9 - 11'	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P35-SO-16	15 - 17'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	75 U	3.0 U	1.5 U
ICS-P36-SO-4	3 - 4'	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P36-SO-10	10 - 12'	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P36-SO-16	15 - 17'	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	86 U	3.4 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	1,1,2-Trichloro-1,2,2-trifluoroethane µg/kg, dry	m - & p - Xylenes µg/kg, dry	o -Xylene µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Acrolein µg/kg, dry	Bromoethane µg/kg, dry	1,1-Dichloro-propene µg/kg, dry
Screening Level (a)		105,000,000	700,000 (total)		315,000	-----	24,300	1750	-----	-----
ICS-Ap-10-SO	9 - 10'	2.4 U	0.8 J	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	60 U	2.4 U	1.2 U
ICS-Bp-10-SO	9 - 10'	2.5 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	62 U	2.5 U	1.2 U
ICS-Cp-10-SO	9 - 10'	4.0 U	2.0 U	2.0 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	100 U	4.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	3.1 U	1.6 U	1.6 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	78 U	3.1 U	1.6 U
ICS-Du-16-SO	15 - 17'	2.3 U	1.1 U	1.1 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	57 U	2.3 U	1.1 U
ICS-FL-4-SO	3 - 5'	3.0 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	74 U	3.0 U	1.5 U
ICS-FL-7-SO	6 - 8'	3.6 U	1.8 U	1.8 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	91 U	3.6 U	1.8 U
ICS-FL-10-SO	9 - 10'	3.0 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	76 U	3.0 U	1.5 U
ICS-FL-13-SO	12 - 14'	3.1 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	77 U	3.1 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	2.7 U	1.3 U	1.3 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	67 U	2.7 U	1.3 U
ICS-FL-21-SO	20 - 22'	2.4 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	60 U	2.4 U	1.2 U
ICS-Ju-4-SO	3 - 4'	4.3 U	11	2.9	(see SVOC's)	(see SVOC's)	(see SVOC's)	110 U	4.3 U	2.1 U
ICS-Ju-10-SO	10- 11'	4.7 U	2.4 U	1.3 J	(see SVOC's)	(see SVOC's)	(see SVOC's)	120 U	4.7 U	2.4 U
ICS-Ju-15-SO	15 - 16	2.5 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	61 U	2.5 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128	128
Number of Detections		2	47	40	16	8	14	0	0	0
Percent Detected		1.6%	36.7%	31.3%	12.5%	6.3%	10.9%	0.0%	0.0%	0.0%
Highest Conc.		2.5	120000	34000	660	770	2100	0	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	<i>trans</i> -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	3.4 U	8.5 U	1.7 U	1.7 U	-----	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	2.3 U	5.8 U	1.2 U	1.2 U	-----	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	2500 U	2500 U	5100 U	13,000 U	7500	24,000	-----	2500 U
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	110 U	110 U	220 U	550 U	330	1500	-----	110 U
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	2.0 U	4.9 U	1.0 U	1.0 U	-----	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	2.5 U	62 U	1.2 U	1.2 U	-----	1.2 U
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	2.5 U	63 U	1.3 U	1.3 U	-----	1.3 U
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	1.9 U	4.7 U	0.9 U	0.9 U	-----	0.9 U
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	2.2 U	5.5 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	2.6 U	6.5 U	1.3 U	1.3 U	-----	1.3 U
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	2.1 U	5.3 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	2.1 U	5.3 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	2.2 U	5.6 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	2.1 U	5.2 U	1.0 U	1.0 U	-----	1.0 U
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	2.6 U	6.6 U	1.3 U	1.3 U	-----	1.3 U
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	2.2 U	5.6 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	1.9 U	4.7 U	0.9 U	0.9 U	-----	0.9 U
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	2.2 U	5.5 U	1.1 U	1.1 U	-----	1.1 U
ICS-DOF-MW6-A	3 - 5'	280 U	280 U	550 U	1400 U	4600	13,000	-----	280 U
ICS-DOF-MW6-B	6 - 8'	270 U	270 U	550 U	1400 U	3100	8600	-----	270 U
ICS-DOF-DUP2	dup of MW6-B	270 U	270 U	540 U	1400 U	1000	2800	-----	270 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	<i>trans</i> -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	3.2 U	8.0 U	1.6 U	1.2 J	-----	1.6 U
ICS-DOF-MW7-A	3 - 4'	91 U	91 U	180 U	460 U	130	380	-----	91 U
ICS-DOF-MW7-B	7 - 8'	1.2 U	1.2 U	2.4 U	6.1 U	1.2 U	1.2 U	-----	1.2 U
ICS-DOF-MW7-C	11 - 12'	1.3 U	1.3 U	2.6 U	6.6 U	1.5	2.3	-----	1.3 U
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	2.1 U	5.1 U	1.7	4.3	-----	1.0 U
ICS-DOF-MW8-B	7 - 8'	1.3 U	1.3 U	2.7 U	6.7 U	4.7	17	-----	1.3 U
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	2.3 U	5.8 U	1.2 U	0.6 J	-----	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	1.6 U	1.6 U	3.2 U	8.1 U	2.1	11	(see Cl pest.)	1.6 U
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	3.9 U	9.7 U	1.9 U	1.9 U	(see Cl pest.)	1.9 U
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	2.4 U	5.9 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-P12-SO-4	3 - 4.5'	1.6 U	1.6 U	3.2 U	7.9 U	2.4	17	(see Cl pest.)	1.6 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	3.5 U	8.8 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	3.1 U	7.9 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	2.8 U	7.0 U	2	5.7	(see Cl pest.)	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	2.1	(see Cl pest.)	1.5 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	2.9 U	7.3 U	1.5 U	1.3 J	(see Cl pest.)	1.5 U
ICS-P14-SO-4	3 - 5'	1.4 U	1.4 U	2.8 U	7.0 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P15-SO-4	3 - 5'	1.5 U	1.5 U	3.1 U	7.6 U	4.4	12	(see Cl pest.)	1.5 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	3.2 U	8.1 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	1.7 U	4.1 U	0.8 U	0.8 U	4.1 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	4.1 U	10 U	2.0 U	2.0 U	(see Cl pest.)	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	4.5 U	11 U	2.3 U	2.3 U	(see Cl pest.)	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	trans -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-P17-SO-4	4.5 - 6.5'	1.4 U	1.4 U	2.8 U	7.0 U	1.4 U	5	7.0 U	1.4 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	2.0 U	2.0 U	4.1 U	10 U	2.0 U	2.7	10 U	2.0 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	7.2 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	2.5 U	2.5 U	4.9 U	12 U	5.5	52	(see Cl pest.)	2.5 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	1.5 U	1.5 U	2.9 U	7.4 U	75	440 JM	(see Cl pest.)	1.5 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	8.3	7.1 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	2.9 U	7.1 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	1.8 U	1.8 U	3.6 U	9.1 U	1.8 U	3	(see Cl pest.)	1.8 U
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	3.8 U	9.5 U	1.9 U	1.9 U	9.5 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	7.6 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	2.7 U	6.6 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	3.1 U	7.7 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	3.5 U	8.6 U	1.7 J	2.7	8.6 U	1.7 U
ICS-P21-SO-13	12 - 14'	2.2 U	2.2 U	4.5 U	11 U	11	32	(see Cl pest.)	2.2 U
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	34	(see Cl pest.)	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	2.4 U	5.9 U	1.2 U	0.9 J	(see Cl pest.)	1.2 U
ICS-P22-SO-4	3 - 4.5'	2.4 U	2.4 U	4.9 U	12 U	8.4	32	(see Cl pest.)	2.4 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	2.6 U	6.5 U	1.3 U	0.8 J	(see Cl pest.)	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	trans -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-P22-SO-16	15 - 17'	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	1.4 U	3.6 U	0.7 U	0.7 U	(see Cl pest.)	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	2.6 U	6.6 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	2.3 U	5.8 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	2.9 U	7.3 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	7.2 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5 U	1.5 U	3.0 U	7.5 U	1.5 U	1.5 U	7.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	2.6 U	6.4 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P27-SO-3	1 - 3'	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	3.1 U	7.8 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	2.5 U	6.2 U	1.2 U	1.2 U	6.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	3.8 U	9.5 U	1.9 U	1.9 U	(see Cl pest.)	1.9 U
ICS-P28-SO-10	8.5 - 10'	2.6 U	2.6 U	5.1 U	13 U	17	140	(see Cl pest.)	2.6 U
ICS-P28-SO-16	15 - 17'	1.1 U	1.1 U	2.3 U	5.7 U	1.1 U	1.7	(see Cl pest.)	1.1 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	3.2 U	8.1 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P29-SO-4	3 - 4'	0.9 U	0.9 U	1.8 U	4.6 U	0.9 U	6.5	4.6 U	0.9 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	1.6 U	1.6 U	3.2 U	8.1 U	120	410	8.1 U	1.6 U
ICS-P29-SO-16	15 - 17'	1.6 U	1.6 U	3.2 U	8.1 U	22	55	(see Cl pest.)	1.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	<i>trans</i> -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-DUP2	P29-SO-16	2.1 U	2.1 U	4.1 U	10 U	37	95	(see Cl pest.)	2.1 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	3.2 U	8.0 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	1.0 U	1.0 U	2.0 U	5.0 U	250	1700	(see Cl pest.)	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	1.0 U	1.0 U	2.0 U	5.0 U	1.3	3.5	(see Cl pest.)	1.0 U
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	5.6 U	14 U	2.8 U	2.8 U	(see Cl pest.)	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	2.1	(see Cl pest.)	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	2.7 U	6.8 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	3.4 U	8.6 U	1.7 U	1.7 U	(see Cl pest.)	1.7 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	2.7 U	6.7 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	6.1 U	15 U	3.0 U	3.0 U	(see Cl pest.)	3.0 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see Cl pest.)	1.4 U
ICS-P33-SO-32	31 - 33'	1.3 U	1.3 U	2.6 U	6.5 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	3.7 U	9.2 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	4.2 U	10 U	2.1 U	2.1 U	(see Cl pest.)	2.1 U
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	3.6 U	9.0 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	3.4 U	8.5 U	1.7 U	1.7 U	(see Cl pest.)	1.7 U
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	3.0 U	7.5 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	3.4 U	8.6 U	1.7 U	1.7 U	(see Cl pest.)	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dibromo- methane µg/kg, dry	1,1,1,2-Tetra- chloroethane µg/kg, dry	1,2,3-Trichloro- propane µg/kg, dry	<i>trans</i> -1,4-Dichloro- 2-butene µg/kg, dry	1,3,5-Trimethyl- benzene µg/kg, dry	1,2,4-Trimethyl- benzene µg/kg, dry	Hexachloro- butadiene µg/kg, dry	Ethylene dibromide µg/kg, dry
Screening Level (a)		-----	5050	4.4	-----	35,000	-----	1680	65.6
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-Bp-10-SO	9 - 10'	1.2 U	1.2 U	2.5 U	6.2 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-Cp-10-SO	9 - 10'	2.0 U	2.0 U	4.0 U	10 U	2.0 U	2.0 U	(see Cl pest.)	2.0 U
ICS-Du-10-SO	9 - 10'	1.6 U	1.6 U	3.1 U	7.8 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	2.3 U	5.7 U	1.1 U	1.1 U	(see Cl pest.)	1.1 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	3.6 U	9.1 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	3.1 U	7.7 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	2.7 U	6.7 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
ICS-Ju-4-SO	3 - 4'	2.1 U	2.1 U	4.3 U	11 U	2.1 U	5.8	(see Cl pest.)	2.1 U
ICS-Ju-10-SO	10- 11'	2.4 U	2.4 U	4.7 U	12 U	2.4 U	3.0	(see Cl pest.)	2.4 U
ICS-Ju-15-SO	15 - 16	1.2 U	1.2 U	2.5 U	6.1 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U
Number of Samples		128	128	128	128	128	128	13	128
Number of Detections		0	0	0	0	24	40	0	0
Percent Detected		0.0%	0.0%	0.0%	0.0%	18.8%	31.3%	0.0%	0.0%
Highest Conc.		0	0	0	0	7500	24000	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background
or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro- methane µg/kg, dry	2,2-Dichloro- propane µg/kg, dry	1,3- Dichloro- propane µg/kg, dry	Isopropyl- benzene µg/kg, dry	n-Propyl- benzene µg/kg, dry	Bromo- benzene µg/kg, dry	2-Chloro- toluene µg/kg, dry	4-Chloro- toluene µg/kg, dry	<i>tert</i> -Butyl- benzene µg/kg, dry	<i>sec</i> -Butyl- benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 J	1.7 U	1.7 U	1.7 U
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-B	6 - 8'	2500 U	2500 U	2500 U	2000 J	4100	2500 U	2500 U	2500 U	2500 U	1500 J
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-LP4-SO-B	10 - 12'	110 U	110 U	110 U	110	310	110 U	110 U	110 U	110 U	58 J
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW6-A	3 - 5'	280 U	280 U	280 U	1300	2400	280 U	280 U	280 U	280 U	2100
ICS-DOF-MW6-B	6 - 8'	270 U	270 U	270 U	920	1600	270 U	270 U	270 U	270 U	1400
ICS-DOF-DUP2	dup of MW6-B	270 U	270 U	270 U	280	510	270 U	270 U	270 U	270 U	480

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro- methane µg/kg, dry	2,2-Dichloro- propane µg/kg, dry	1,3- Dichloro- propane µg/kg, dry	Isopropyl- benzene µg/kg, dry	n-Propyl- benzene µg/kg, dry	Bromo- benzene µg/kg, dry	2-Chloro- toluene µg/kg, dry	4-Chloro- toluene µg/kg, dry	<i>tert</i> -Butyl- benzene µg/kg, dry	<i>sec</i> -Butyl- benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-DOF-MW7-A	3 - 4'	91 U	91 U	91 U	91 U	91 U	91 U	91 U	91 U	91 U	91 U
ICS-DOF-MW7-B	7 - 8'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW7-C	11 - 12'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B	7 - 8'	1.3 U	1.3 U	1.3 U	4.4	2.1	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	1.2 U	2.4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.6 J	3.2	1.6 U	1.6 U	1.6 U	1.6 U	1.0 J
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4	3 - 4.5'	1.6 U	1.6 U	1.6 U	1.4 J	2.5	1.6 U	1.6 U	1.6 U	1.6 U	0.9 J
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	1.4 U	1.4 U	1.3 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P14-SO-4	3 - 5'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	8.1
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4	3 - 5'	1.5 U	1.5 U	1.5 U	1.3 J	1.4 J	1.5 U	1.5 U	1.5 U	1.5 U	0.9 J
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro- methane µg/kg, dry	2,2-Dichloro- propane µg/kg, dry	1,3- Dichloro- propane µg/kg, dry	Isopropyl- benzene µg/kg, dry	n-Propyl- benzene µg/kg, dry	Bromo- benzene µg/kg, dry	2-Chloro- toluene µg/kg, dry	4-Chloro- toluene µg/kg, dry	<i>tert</i> -Butyl- benzene µg/kg, dry	<i>sec</i> -Butyl- benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-P17-SO-4	4.5 - 6.5'	1.4 U	1.4 U	1.4 U	110	95	1.4 U	1.4 U	1.4 U	1.4 U	83 J
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	2.0 U	2.0 U	2.0 U	1.8 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	2.5 U	2.5 U	2.5 U	2.4 J	5.6	2.5 U	2.5 U	2.5 U	2.5 U	6.4
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	1.5 U	1.5 U	1.5 U	14	24	1.5 U	1.5 U	1.5 U	1.5 U	17
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	1.7 U	3.8	1.7 J	1.7 U	1.7 U	1.7 U	1.1 J	2.6
ICS-P21-SO-13	12 - 14'	2.2 U	2.2 U	2.2 U	5.2	3.2	2.2 U	2.4	2.2 U	2.2 U	2.2 U
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	3.1	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P22-SO-4	3 - 4.5'	2.4 U	2.4 U	2.4 U	5.3	4.9	2.4 U	2.4 U	2.4 U	2.4 U	3.3
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	1.3 U	0.8 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro- methane µg/kg, dry	2,2-Dichloro- propane µg/kg, dry	1,3- Dichloro- propane µg/kg, dry	Isopropyl- benzene µg/kg, dry	n-Propyl- benzene µg/kg, dry	Bromo- benzene µg/kg, dry	2-Chloro- toluene µg/kg, dry	4-Chloro- toluene µg/kg, dry	<i>tert</i> -Butyl- benzene µg/kg, dry	<i>sec</i> -Butyl- benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-P22-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P27-SO-3	1 - 3'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10	8.5 - 10'	2.6 U	2.6 U	2.6 U	17	28	2.6 U	2.6 U	2.6 U	2.6 U	15
ICS-P28-SO-16	15 - 17'	1.1 U	1.1 U	1.1 U	0.6 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P29-SO-4	3 - 4'	0.9 U	0.9 U	0.9 U	16	34	0.9 U	0.9 U	0.9 U	0.9 U	21
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	1.6 U	1.6 U	1.6 U	13	31	1.6 U	1.6 U	1.6 U	1.6 U	10
ICS-P29-SO-16	15 - 17'	1.6 U	1.6 U	1.6 U	5.5	7.3	1.6 U	1.6 U	1.6 U	1.6 U	4.3

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro- methane µg/kg, dry	2,2-Dichloro- propane µg/kg, dry	1,3- Dichloro- propane µg/kg, dry	Isopropyl- benzene µg/kg, dry	n-Propyl- benzene µg/kg, dry	Bromo- benzene µg/kg, dry	2-Chloro- toluene µg/kg, dry	4-Chloro- toluene µg/kg, dry	<i>tert</i> -Butyl- benzene µg/kg, dry	<i>sec</i> -Butyl- benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-DUP2	P29-SO-16	2.1 U	2.1 U	2.1 U	8.1	12	2.1 U	2.1 U	2.1 U	2.1 U	7.5
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	1.0 U	1.0 U	1.0 U	140	270	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	1.0 U	1.0 U	1.0 U	0.9	0.8	1.0 U	1.0 U	1.0 U	1.0 U	1.3
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32	31 - 33'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Bromochloro-methane µg/kg, dry	2,2-Dichloro-propane µg/kg, dry	1,3-Dichloro-propane µg/kg, dry	Isopropyl-benzene µg/kg, dry	n-Propyl-benzene µg/kg, dry	Bromo-benzene µg/kg, dry	2-Chloro-toluene µg/kg, dry	4-Chloro-toluene µg/kg, dry	tert -Butyl-benzene µg/kg, dry	sec -Butyl-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	-----	350,000	-----	70000	70000	350,000	350,000
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO	9 - 10'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Cp-10-SO	9 - 10'	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-Du-10-SO	9 - 10'	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ju-4-SO	3 - 4'	2.1 U	2.1 U	2.1 U	2.3	1.7 J	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-Ju-10-SO	10- 11'	2.4 U	2.4 U	2.4 U	2.4 U	2.2 J	2.4 U	2.4 U	2.4 U	2.4 U	3.1
ICS-Ju-15-SO	15 - 16	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Number of Samples		128	128	128	128	128	128	128	128	128	128
Number of Detections		0	0	0	28	25	0	2	0	1	21
Percent Detected		0.0%	0.0%	0.0%	21.9%	19.5%	0.0%	1.6%	0.0%	0.8%	16.4%
Highest Conc.		0	0	0	2000	4100	0	2.4	0	1.1	2100

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-LP1-SO-A	3 - 5'	-----	-----	-----	18 U	18 U	4.4 U	4.4 U	18 U	4.4 U
ICS-LP1-SO-B	6.5 - 8'	1.7 U	1.7 U	-----	72	63 U	see VOA's	11 J	63 U	see VOA's
ICS-LP1-SO-C	10.5 - 12'	-----	-----	-----	9.5 JB	19 U	4.7 U	4.7 U	12 J	4.7 U
ICS-LP2-SO-A	3 - 5'	-----	-----	-----	18 U	18 U	4.6 U	4.6 U	18 U	4.6 U
ICS-LP2-SO-B	5.5 - 7.5'	1.2 U	1.2 U	-----	19 U	19 U	see VOA's	see VOA's	9.0 J	see VOA's
ICS-LP2-SO-C	8 - 10'	-----	-----	-----	19 U	19 U	4.8 U	4.8 U	19	4.8 U
ICS-LP3-SO-A	3 - 5'	-----	-----	-----	31	19 U	4.7 U	4.7 U	19 U	3.4 J
ICS-LP3-SO-B	6 - 8'	2300 J	2600	-----	2800	670 U	77 J	470	340 U	1800
ICS-LP3-SO-C	10 - 12'	-----	-----	-----	38	18 U	7.5	21	18 U	37
ICS-LP3-SO-D	15 - 16'	-----	-----	-----	36	19 U	4.8 U	4.5 J	19 U	14
ICS-LP4-SO-A	8 - 10'	-----	-----	-----	74	57 U	11 J	11 J	57 U	45
ICS-LP4-SO-B	10 - 12'	150	110	-----	250	19 U	2.7 J	see VOA's	19 U	see VOA's
ICS-LP4-SO-C	14 - 15'	-----	-----	-----	18 U	18 U	4.5 U	4.5 U	18 U	2.6 J
ICS-DOF-MW1-A	4 - 5'	1.0 U	1.0 U	-----	20 U	20 U	see VOA's	see VOA's	20 U	see VOA's
ICS-DOF-MW1-B	6.5 - 7.5'	1.2 U	1.2 U	-----	14 JB	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW1-C	11 - 12'	1.3 U	1.3 U	-----	12 JB	19 U	see VOA's	see VOA's	25	4.2 J
ICS-DOF-MW2-A	2 - 3'	0.9 U	0.9 U	-----	18 U	18 U	see VOA's	see VOA's	18 U	see VOA's
ICS-DOF-MW2-B	8 - 9'	1.1 U	1.1 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW2-C	12 - 13'	1.3 U	1.3 U	-----	20 U	20 U	see VOA's	see VOA's	20 U	see VOA's
ICS-DOF-MW3-A	2 - 4'	1.1 U	1.1 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-DUP1	dup of MW3-A	1.1 U	1.1 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW3-B	7 - 8'	1.1 U	1.1 U	-----	20 U	20 U	see VOA's	see VOA's	20 U	see VOA's
ICS-DOF-MW4-A	3 - 4'	1.0 U	1.0 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW4-B	7 - 8'	1.3 U	1.3 U	-----	19 U	19 U	see VOA's	see VOA's	9.1 J	see VOA's
ICS-DOF-MW4-C	10 - 11'	1.1 U	1.1 U	-----	14 J	20 U	see VOA's	see VOA's	42	see VOA's
ICS-DOF-MW5-A	3 - 4'	0.9 U	0.9 U	-----	18 U	18 U	see VOA's	see VOA's	18 U	see VOA's
ICS-DOF-MW5-B	7 - 8'	1.1 U	1.1 U	-----	20 U	20 U	see VOA's	see VOA's	17 J	see VOA's
ICS-DOF-MW6-A	3 - 5'	4000	4400	-----	100 U	100 U	see VOA's	see VOA's	100 U	see VOA's
ICS-DOF-MW6-B	6 - 8'	2600	2900	-----	44 U	44 U	see VOA's	see VOA's	44 U	see VOA's
ICS-DOF-DUP2	dup of MW6-B	890	1000	-----	61 U	61 U	see VOA's	see VOA's	61 U	see VOA's

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-DOF-MW6-C	9 - 10'	1.6 U	1.6 U	-----	650	19 U	26	120	19 U	7.2
ICS-DOF-MW7-A	3 - 4'	91 U	91 U	-----	260	19 U	19 U	19 U	19 U	17 J
ICS-DOF-MW7-B	7 - 8'	1.2 U	1.2 U	-----	19 U	19 U	2.8 J	4.7 J	19 U	6.8
ICS-DOF-MW7-C	11 - 12'	1.3 U	1.3 U	-----	9.4 J	19 U	see VOA's	see VOA's	15 J	see VOA's
ICS-DOF-MW8-A	3 - 4'	1.0 U	1.0 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW8-B	7 - 8'	9.0	1.3 U	-----	19 U	19 U	see VOA's	see VOA's	19 U	see VOA's
ICS-DOF-MW8-C	11 - 12'	1.2 U	1.2 U	-----	20 U	20 U	see VOA's	see VOA's	14 J	see VOA's
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	0.9 J	0.8 J	8.1 U	19 U	19 U	6.2	7.4	19 U	8.1
ICS-P11-SO-10	9.5 - 11'	1.9 U	1.9 U	9.7 U	180	19 U	4.2 J	4.2 J	19 U	4.2 J
ICS-P11-SO-16	15 - 17'	1.2 U	1.2 U	5.9 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P12-SO-4	3 - 4.5'	2.3	1.6 U	7.9 U	20 U	20 U	4.9 U	4.9 U	20 U	2.9 J
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	1.8 U	1.8 U	8.9 U	23	19 U	2.9 J	3.0 J	19 U	3.3 J
ICS-P12-SO-13	12 - 14'	1.8 U	1.8 U	8.8 U	20 U	20 U	4.9 U	4.9 U	20 U	4.9 U
ICS-P12-SO-16	15 - 17'	1.6 U	1.6 U	7.9 U	19 U	19 U	4.7 U	4.7 U	19 U	2.3 J
ICS-P13-SO-4	4 - 6'	1.4 U	1.4 U	7.0 U	620	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	1.5 U	1.5 U	7.4 U	9.8 J	20 U	4.9 U	4.9 U	20 U	4.9 U
ICS-P13-SO-17	16.5 - 18'	1.5 U	1.5 U	7.3 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P14-SO-4	3 - 5'	1.4 U	2	7.0 U	25 JQ	19 U	7.5	11	19 U	16
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	1.4 U	1.4 U	7.2 U	28 JQ	19 U	4.4 J	5.1	19 U	5
ICS-P14-SO-16	15 - 17'	1.4 U	1.4 U	7.1 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P15-SO-4	3 - 5'	2.1	1.5 U	7.6 U	21 JQ	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.8 U	1.8 U	8.9 U	1200	20 U	4.9 U	6.3	20 U	3.2 J
ICS-P15-SO-16	15 - 17'	1.6 U	1.6 U	8.1 U	14 J	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P16-SO-4	3 - 4'	0.8 U	0.8 U	4.1 U	120 JB	20 U	4.9 U	70	20 U	4.9 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	2.0 U	2.0 U	10 U	85 JB	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P16-SO-16	15 - 17'	2.3 U	2.3 U	11 U	94 JB	20 U	4.9 U	4.9 U	15 J	4.9 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-P17-SO-4	4.5 - 6.5'	48 J	130	2300	27	19 U	240	370	19 U	18
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	2.0 U	2.0 U	10 U	110	19 U	110	320	19 U	14
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	1.4 U	1.4 U	7.2 U	10 J	19 U	2.4 J	3.2 J	19 U	4.7 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	4	8.8	12 U	200 U	200 U	4.9 U	3.6 J	20 U	21
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	29	23	7.4 U	46	39 U	4.8 U	4.8 U	19 U	74
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	1.4 U	1.4 U	7.1 U	110	84 U	19 J	32	84 U	110
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	1.4 U	1.4 U	7.1 U	15 J	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	1.1 J	1.8 U	9.1 U	22	22 U	5.4 U	2.7 J	22 U	3.8 J
ICS-P19-SO-10	9 - 10'	1.9 U	1.9 U	9.5 U	20	19 U	3.6 J	9.1	19 U	5.5
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.6 U	1.6 U	7.9 U	20	20 U	3.2 J	8.9	20 U	4.9 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	1.5 U	1.5 U	7.6 U	19 U	19 U	4.8 U	2.6 J	19 U	4.8 U
ICS-P20-SO-10	9.5 - 11'	1.3 U	1.3 U	6.6 U	9.7 J	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	1.5 U	1.5 U	7.7 U	10 J	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P21-SO-7	6 - 8'	1.7 U	1.7 U	8.6 U	150 JB	37 U	9.4	8.2	18 U	29
ICS-P21-SO-13	12 - 14'	10	2.2 U	11 U	210 JB	34 U	6.4 J	6.9 J	34 U	22
ICS-P21-SO-16	15 - 17'	1.4 U	1.4 U	7.2 U	88 JB	19 U	4.8 U	4.8 U	19 U	3.7 J
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	1.2 U	1.2 U	5.9 U	83 JB	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P22-SO-4	3 - 4.5'	3.7	2.2 J	12 U	10 J	19 U	4.7 U	4.7 U	19 U	8.5
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	1.3 U	1.3 U	6.5 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-P22-SO-16	15 - 17'	1.5 U	1.5 U	7.6 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P23-SO-3	2 - 4'	1.4 U	1.4 U	7.2 U	19 U	19 U	4.9 U	4.9 U	19 U	4.9 U
ICS-P23-SO-10	9.5 - 11	0.7 U	0.7 U	3.6 U	13 J	19 U	4.8 U	110	19 U	4.8 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	1.3 U	1.3 U	6.6 U	20	20 U	5.0 U	5.0 U	13 J	5.0 U
ICS-P24-SO-4	3 - 5'	1.6 U	1.6 U	7.9 U	18 U	18 U	4.6 U	4.6 U	18 U	4.6 U
ICS-P24-SO-10	9 - 10.5'	1.5 U	1.5 U	7.6 U	19	19 U	4.8 U	4.8 U	19 U	19
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	1.2 U	1.2 U	5.8 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P25-SO-3	1 - 3'	1.5 U	1.5 U	7.3 U	13 J	19 U	13	45	19 U	4.8 U
ICS-P25-SO-10	9 - 11'	1.4 U	1.4 U	7.2 U	19 U	19 U	20	44	19 U	3.7 J
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	1.5 U	1.5 U	7.5 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P26-SO-4	3 - 5'	1.3 U	1.3 U	6.4 U	24	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	1.6 U	1.6 U	8.2 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P26-SO-16	15 - 17'	1.4 U	1.4 U	7.1 U	20 U	20 U	4.9 U	4.9 U	15 J	4.9 U
ICS-P27-SO-3	1 - 3'	1.5 U	1.5 U	7.4 U	16 J	19 U	4.8 U	2.7 J	19 U	4.8 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	1.6 U	1.6 U	7.8 U	24	19 U	4.8 U	4.8 U	22	4.8 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	1.2 U	1.2 U	6.0 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P27-SO-32	31 - 33'	1.2 U	1.2 U	6.2 U	9.3 J	19 U	4.6 U	4.6 U	19 U	4.6 U
ICS-P28-SO-4	3 - 5'	1.9 U	1.9 U	9.5 U	12 J	20 U	34	97	20 U	23
ICS-P28-SO-10	8.5 - 10'	27	19	13 U	390	20 U	6.7	22	20 U	4.9 U
ICS-P28-SO-16	15 - 17'	1.1 U	1.1 U	5.7 U	13 J	18 U	4.6 U	4.6 U	18 U	4.6 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	1.6 U	1.6 U	8.1 U	9.3 J	19 U	4.6 U	4.6 U	19 U	4.6 U
ICS-P29-SO-4	3 - 4'	27	0.9 U	4.6 U	1600 JB	230 U	100	520	230 U	360
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	17	16	12	140 JB	19 U	6	7.6	19 U	20
ICS-P29-SO-16	15 - 17'	8.1	7.3	8.1 U	110 JB	19 U	4.7 U	4.7 U	19 U	5.6

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-DUP2	P29-SO-16	15	13	10 U	98 JB	19 U	4.7 U	4.7 U	19 U	5.3
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	1.6 U	1.6 U	8.0 U	100 JB	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	100	150	5.0 U	120	44 U	5.3	7.9	22 U	31
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	0.7	1.0 U	5.0 U	110	20 U	4.8	4.4	20 U	14
ICS-P30-SO-16	15 - 16.5'	2.8 U	2.8 U	14 U	61	20 U	4.9 U	4.9 U	20 U	4.9 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	1.4 U	1.4 U	7.2 U	71	18 U	4.6 U	4.6 U	18 U	4.6 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	1.4 U	1.4 U	6.8 U	59 JB	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-P31-SO-10	9 - 11'	1.6 U	1.6 U	8.2 U	51 JB	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P31-SO-16	15 - 17'	1.7 U	1.7 U	8.6 U	69 JB	20 U	4.9 U	4.9 U	39	4.9 U
ICS-P31-SO-32	31 - 33'	1.3 U	1.3 U	6.7 U	77 JB	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P32-SO-16	16 - 17.5'	1.6 U	1.6 U	7.9 U	8.6 J	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-SO-DUPL3	P32-SO-16	3.0 U	3.0 U	15 U	10 J	18 U	4.6 U	4.6 U	18 U	4.6 U
ICS-P32-SO-32	31 - 33'	1.6 U	1.6 U	8.2 U	8.7 J	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P33-SO-16	15 - 17'	1.4 U	1.4 U	7.1 U	88 JB	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P33-SO-32	31 - 33'	1.3 U	1.3 U	6.5 U	86 JB	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-P34-SO-4	3 - 5'	1.8 U	1.8 U	9.2 U	19 U	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P34-SO-10	9 - 11'	2.1 U	2.1 U	10 U	20	20 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P34-SO-16	15 - 17'	1.8 U	1.8 U	9.0 U	14 J	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P35-SO-4	3 - 5'	1.7 U	1.7 U	8.5 U	17 J	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P35-SO-10	9 - 11'	1.8 U	1.8 U	8.9 U	14 J	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P35-SO-16	15 - 17'	1.5 U	1.5 U	7.5 U	18 J	20 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P36-SO-4	3 - 4'	1.5 U	1.5 U	7.4 U	14 J	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P36-SO-10	10 - 12'	1.6 U	1.6 U	7.9 U	25	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)
ICS-P36-SO-16	15 - 17'	1.7 U	1.7 U	8.6 U	11 J	19 U	(see VOCst.)	(see VOCst.)	R	(see VOCst.)

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4-Isopropyl-toluene µg/kg, dry	n-Butyl-benzene µg/kg, dry	1,2,3-Trichloro-benzene µg/kg, dry	Phenol µg/kg, dry	2-Chloro-phenol µg/kg, dry	1,3-Dichloro-benzene µg/kg, dry	1,4-Dichloro-benzene µg/kg, dry	Benzyl alcohol µg/kg, dry	1,2-Dichloro-benzene µg/kg, dry
Screening Level (a)		-----	-----	-----	1,050,000	17,500	-----	24,300	350,000	315,000
ICS-Ap-10-SO	9 - 10'	1.2 U	1.2 U	6.0 U	13 J	19 U	8.3	26	19 U	3.8 J
ICS-Bp-10-SO	9 - 10'	1.2 U	1.2 U	6.2 U	12 J	20 U	4.9 U	4.9 U	20 U	4.9 U
ICS-Cp-10-SO	9 - 10'	2.0 U	2.0 U	10 U	38	19 U	4.8 U	4.8 U	66	4.8 U
ICS-Du-10-SO	9 - 10'	1.6 U	1.6 U	7.8 U	16 J	19 U	4.0 J	11	19 U	4.7 U
ICS-Du-16-SO	15 - 17'	1.1 U	1.1 U	5.7 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-FL-4-SO	3 - 5'	1.5 U	1.5 U	7.4 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U
ICS-FL-7-SO	6 - 8'	1.8 U	1.8 U	9.1 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-FL-10-SO	9 - 10'	1.5 U	1.5 U	7.6 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-FL-13-SO	12 - 14'	1.5 U	1.5 U	7.7 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U
ICS-FL-16-SO	15.5 - 17'	1.3 U	1.3 U	6.7 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U
ICS-FL-21-SO	20 - 22'	1.2 U	1.2 U	6.0 U	20 U	20 U	4.9 U	4.9 U	R	4.9 U
ICS-Ju-4-SO	3 - 4'	4.4	2.1 U	11 U	1500	120 U	32	150	120 U	950
ICS-Ju-10-SO	10- 11'	1.5 J	2.9	12 U	28	20 U	2.9 J	5.8 J	20 U	5.8 J
ICS-Ju-15-SO	15 - 16	1.2 U	1.2 U	6.1 U	8.7 J	19 U	4.8 U	4.8 J	19 U	2.9 J
Number of Samples		128	128	128	137	137	118	118	137	118
Number of Detections		24	17	2	87	0	31	40	15	42
Percent Detected		18.8%	13.3%	1.6%	63.5%	0.0%	26.3%	33.9%	10.9%	35.6%
Highest Conc.		4000	4400	2300	2800	0	240	520	66	1800

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry	N-Nitrosodi-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-LP1-SO-A	3 - 5'	4.4 U	35 U	18 U	18 U	18 U	18 U	8.7 J	350 U
ICS-LP1-SO-B	6.5 - 8'	9.1 J	120 J	63 U	63 U	63 U	63 U	15 J	1300 U
ICS-LP1-SO-C	10.5 - 12'	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-LP2-SO-A	3 - 5'	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U
ICS-LP2-SO-B	5.5 - 7.5'	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-LP2-SO-C	8 - 10'	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-LP3-SO-A	3 - 5'	7.5	12 J	19 U	19 U	19 U	19 U	3.4 J	370 U
ICS-LP3-SO-B	6 - 8'	3200	4900	670 U	670 U	670 U	670 U	2000	13,000 U
ICS-LP3-SO-C	10 - 12'	28	68	18 U	18 U	18 U	18 U	120	370 U
ICS-LP3-SO-D	15 - 16'	21	40	19 U	19 U	19 U	19 U	34	190 U
ICS-LP4-SO-A	8 - 10'	33	54 J	57 U	57 U	57 U	57 U	18 J	1100 U
ICS-LP4-SO-B	10 - 12'	81	700	19 U	19 U	19 U	19 U	2600	380 U
ICS-LP4-SO-C	14 - 15'	4.5 U	36 U	18 U	18 U	18 U	18 U	18 J	360 U
ICS-DOF-MW1-A	4 - 5'	4.9 U	39 U	20 U	20 U	20 U	20 U	20 U	390 U
ICS-DOF-MW1-B	6.5 - 7.5'	4.7 U	9.4 J	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-MW1-C	11 - 12'	4.6 U	37 U	19 U	19 U	19 U	19 U	19 U	370 U
ICS-DOF-MW2-A	2 - 3'	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U
ICS-DOF-MW2-B	8 - 9'	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-MW2-C	12 - 13'	4.9 U	39 U	20 U	20 U	20 U	20 U	20 U	390 U
ICS-DOF-MW3-A	2 - 4'	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-DUP1	dup of MW3-A	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-MW3-B	7 - 8'	5.0 U	40 U	20 U	20 U	20 U	20 U	20 U	400 U
ICS-DOF-MW4-A	3 - 4'	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-MW4-B	7 - 8'	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U
ICS-DOF-MW4-C	10 - 11'	5.0 U	14 J	20 U	20 U	20 U	20 U	20 U	120 J
ICS-DOF-MW5-A	3 - 4'	4.5 U	36 U	18 U	18 U	18 U	18 U	18 U	360 U
ICS-DOF-MW5-B	7 - 8'	5.0 U	14 J	20 U	20 U	20 U	20 U	20 U	400 U
ICS-DOF-MW6-A	3 - 5'	45	210 U	100 U	100 U	100 U	100 U	210 U	2100 U
ICS-DOF-MW6-B	6 - 8'	17	89 U	44 U	44 U	44 U	44 U	89 U	890 U
ICS-DOF-DUP2	dup of MW6-B	27	120 U	61 U	61 U	61 U	61 U	120 U	1200 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry	N-Nitrosodi-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-DOF-MW6-C	9 - 10'	8.8	42	19 U	19 U	19 U	19 U	350	370 U
ICS-DOF-MW7-A	3 - 4'	36	520	19 U	19 U	19 U	19 U	200	370 U
ICS-DOF-MW7-B	7 - 8'	7.6	80	19 U	19 U	19 U	19 U	26	380 U
ICS-DOF-MW7-C	11 - 12'	12	58	19 U	19 U	19 U	19 U	33	380 U
ICS-DOF-MW8-A	3 - 4'	4.2 J	31 J	19 U	19 U	19 U	19 U	3.4 J	380 U
ICS-DOF-MW8-B	7 - 8'	4.8 U	38 U	19 U	19 U	19 U	19 U	14 J	380 U
ICS-DOF-MW8-C	11 - 12'	4.9 U	11 J	20 U	20 U	20 U	20 U	4.7 J	390 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	6	19 U	19 U	19 U	19 U	19 U	12 J	190 U
ICS-P11-SO-10	9.5 - 11'	16	33	19 U	19 U	19 U	19 U	20 J	1400
ICS-P11-SO-16	15 - 17'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-P12-SO-4	3 - 4.5'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	200 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	4.1 J	19 U	19 U	19 U	19 U	19 U	9.7 J	160 J
ICS-P12-SO-13	12 - 14'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	60 J
ICS-P12-SO-16	15 - 17'	3.2 J	19 U	19 U	19 U	19 U	19 U	23 U	88 J
ICS-P13-SO-4	4 - 6'	5.0 U	20 U	20 U	20 U	20 U	96	25 U	120 J
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	4.9 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-P13-SO-17	16.5 - 18'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P14-SO-4	3 - 5'	29	62	19 U	19 U	19 U	19 U	26	92 J
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	8.1	170	19 U	19 U	19 U	10 J	24	120 J
ICS-P14-SO-16	15 - 17'	5.1	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P15-SO-4	3 - 5'	37	46	20 U	20 U	20 U	20 U	44	200 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	2100	4300	20 U	20 U	20 U	20 U	3300 JQ	1200
ICS-P15-SO-16	15 - 17'	11	30	19 U	19 U	19 U	19 U	17 J	190 U
ICS-P16-SO-4	3 - 4'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	200 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	65 J
ICS-P16-SO-16	15 - 17'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	67 J

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol	4-Methyl-phenol	N-Nitrosodi-n-propylamine	Hexachloro-ethane	Nitrobenzene	Isophorone	2,4-Dimethyl-phenol	Benzoic acid
		µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-P17-SO-4	4.5 - 6.5'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	4.5 J	48	19 U	19 U	19 U	19 U	970	350
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	4.8 J	200 U	200 U	200 U	200 U	200 U	21 J	2000 U
ICS-P18-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	10	100	39 U	39 U	39 U	39 U	280	390 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	21 U	84	84 U	84 U	84 U	84 U	660	840 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	5.4 U	16 J	22 U	22 U	22 U	22 U	27 U	220 U
ICS-P19-SO-10	9 - 10'	4.7 U	19 U	19 U	19 U	19 U	19 U	28 J	190 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	4.9 U	20 U	20 U	20 U	20 U	20 U	16 J	62 J
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P20-SO-10	9.5 - 11'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	2.8 J	19 U	19 U	19 U	19 U	19 U	24 U	65 J
ICS-P21-SO-7	6 - 8'	10 JQ	70	37 U	37 U	37 U	37 U	31	370 U
ICS-P21-SO-13	12 - 14'	38	160	34 U	34 U	34 U	34 U	5400 JQ	230 J
ICS-P21-SO-16	15 - 17'	4.8 U	18 J	19 U	19 U	19 U	19 U	94	190 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P22-SO-4	3 - 4.5'	3.3 J	15 J	19 U	19 U	19 U	19 U	9.7 J	190 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	4.8 U	19 U	19 U	19 U	19 U	19 U	26 J	80 J
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry	N-Nitrosodi-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-P22-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	82 J
ICS-P23-SO-3	2 - 4'	4.9 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P23-SO-10	9.5 - 11'	4.8 U	19 U	19 U	19 U	19 U	19 U	13 J	190 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	76 J
ICS-P24-SO-4	3 - 5'	4.6 U	18 U	18 U	18 U	18 U	18 U	23 U	180 U
ICS-P24-SO-10	9 - 10.5'	4.0 J	38	19 U	19 U	19 U	19 U	260	68 J
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P25-SO-3	1 - 3'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	59 J
ICS-P25-SO-10	9 - 11'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P26-SO-4	3 - 5'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	120 J
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-P26-SO-16	15 - 17'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	200 U
ICS-P27-SO-3	1 - 3'	2.8 J	19 U	19 U	19 U	19 U	19 U	24 U	130 J
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	3.4 J	19 U	19 U	19 U	19 U	19 U	24 U	170 J
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P27-SO-32	31 - 33'	4.6 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P28-SO-4	3 - 5'	2.7 J	20 U	20 U	20 U	20 U	20 U	27 J	78 J
ICS-P28-SO-10	8.5 - 10'	14	72	20 U	20 U	20 U	20 U	200	200 U
ICS-P28-SO-16	15 - 17'	4.6 U	18 U	18 U	18 U	18 U	18 U	23 U	180 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	4.6 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-P29-SO-4	3 - 4'	150	200 J	230 U	230 U	230 U	230 U	290 U	2300 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	25	44	19 U	19 U	19 U	19 U	32	190 U
ICS-P29-SO-16	15 - 17'	12	29	19 U	19 U	19 U	19 U	27	190 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry	N-Nitrosodi-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-DUP2	P29-SO-16	9.9	25	19 U	19 U	19 U	19 U	22 J	190 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	8.8	44 U	44 U	44 U	44 U	44 U	22	440 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	7	28	20 U	20 U	20 U	20 U	20	200 U
ICS-P30-SO-16	15 - 16.5'	4.3	20 U	20 U	20 U	20 U	20 U	12	200 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	4.6 U	18 U	18 U	18 U	18 U	18 U	23 U	180 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	62 J
ICS-P31-SO-10	9 - 11'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	67 J
ICS-P31-SO-16	15 - 17'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	120 J
ICS-P31-SO-32	31 - 33'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P32-SO-16	16 - 17.5'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-SO-DUPL3	P32-SO-16	4.6 U	18 U	18 U	18 U	18 U	18 U	23 U	180 U
ICS-P32-SO-32	31 - 33'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P33-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	74 J
ICS-P33-SO-32	31 - 33'	4.8 U	19 U	19 U	19 U	19 U	19 U	9.8 J	190 U
ICS-P34-SO-4	3 - 5'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P34-SO-10	9 - 11'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	130 J
ICS-P34-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	83 J
ICS-P35-SO-4	3 - 5'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-P35-SO-10	9 - 11'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	88 J
ICS-P35-SO-16	15 - 17'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	90 J
ICS-P36-SO-4	3 - 4'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	69 J
ICS-P36-SO-10	10 - 12'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	180 J
ICS-P36-SO-16	15 - 17'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	66 J

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2-Methyl-phenol µg/kg, dry	4-Methyl-phenol µg/kg, dry	N-Nitrosodi-n-propylamine µg/kg, dry	Hexachloro-ethane µg/kg, dry	Nitrobenzene µg/kg, dry	Isophorone µg/kg, dry	2,4-Dimethyl-phenol µg/kg, dry	Benzoic acid µg/kg, dry
Screening Level (a)		-----	-----	18.8	2450	7000	138,000	70,000	14,000,000
ICS-Ap-10-SO	9 - 10'	3.1 J	19 U	19 U	19 U	19 U	19 U	23 U	220
ICS-Bp-10-SO	9 - 10'	4.9 U	20 U	20 U	20 U	20 U	20 U	24 U	200 U
ICS-Cp-10-SO	9 - 10'	4.8	32	19 U	19 U	19 U	19 U	24 U	390
ICS-Du-10-SO	9 - 10'	4.7 U	19 U	19 U	19 U	19 U	19 U	11 J	99 J
ICS-Du-16-SO	15 - 17'	4.7 U	19 U	19 U	19 U	19 U	19 U	23 U	190 U
ICS-FL-4-SO	3 - 5'	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-FL-7-SO	6 - 8'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-FL-10-SO	9 - 10'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-FL-13-SO	12 - 14'	5.0 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-FL-16-SO	15.5 - 17'	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
ICS-FL-21-SO	20 - 22'	4.9 U	20 U	20 U	20 U	20 U	20 U	25 U	200 U
ICS-Ju-4-SO	3 - 4'	1000	7700	120 U	120 U	120 U	120 U	830	1200 U
ICS-Ju-10-SO	10- 11'	4.9 U	67	20 U	20 U	20 U	20 U	24 U	140 J
ICS-Ju-15-SO	15 - 16	4.8 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U
Number of Samples		137	137	137	137	137	137	137	137
Number of Detections		47	40	0	0	0	2	48	39
Percent Detected		34.3%	29.2%	0.0%	0.0%	0.0%	1.5%	35.0%	28.5%
Highest Conc.		3200	7700	0	0	0	96	5400	1400

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-LP1-SO-A	3 - 5'	180 U	4.4 U	45	87 U	31	87 U	87 U	18 U
ICS-LP1-SO-B	6.5 - 8'	630 U	10 J	91	320 U	66	320 U	320 U	63 U
ICS-LP1-SO-C	10.5 - 12'	190 U	4.7 U	19 U	95 U	19 U	95 U	95 U	19 U
ICS-LP2-SO-A	3 - 5'	180 U	18 U	28	92 U	14 J	92 U	92 U	18 U
ICS-LP2-SO-B	5.5 - 7.5'	190 U	4.7 U	18 J	95 U	13 J	95 U	95 U	19 U
ICS-LP2-SO-C	8 - 10'	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-LP3-SO-A	3 - 5'	190 U	4.7 U	210	93 U	90	93 U	93 U	19 U
ICS-LP3-SO-B	6 - 8'	6700 U	340	51,000	3400 U	34,000	3400 U	1000 J	670 U
ICS-LP3-SO-C	10 - 12'	180 U	38	190	150	160	91 U	91 U	18 U
ICS-LP3-SO-D	15 - 16'	96 U	7.0	180	96 U	180	-----	96 U	19 U
ICS-LP4-SO-A	8 - 10'	570 U	170	770	280 U	540	280 U	280 U	57 U
ICS-LP4-SO-B	10 - 12'	170 J	19	560	1200	240	94 U	52 J	760
ICS-LP4-SO-C	14 - 15'	180 U	4.5 U	18 U	90 U	18 U	90 U	90 U	18 U
ICS-DOF-MW1-A	4 - 5'	200 U	4.9 U	840	98 U	89	98 U	98 U	20 U
ICS-DOF-MW1-B	6.5 - 7.5'	190 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-DOF-MW1-C	11 - 12'	190 U	4.6 U	19 U	93 U	19 U	93 U	93 U	19 U
ICS-DOF-MW2-A	2 - 3'	180 U	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U
ICS-DOF-MW2-B	8 - 9'	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-DOF-MW2-C	12 - 13'	200 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U
ICS-DOF-MW3-A	2 - 4'	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-DOF-DUP1	dup of MW3-A	190 U	4.7 U	19 U	94 U	12 J	94 U	94 U	19 U
ICS-DOF-MW3-B	7 - 8'	200 U	5.0 U	12 J	100 U	23	100 U	100 U	20 U
ICS-DOF-MW4-A	3 - 4'	190 U	4.8 U	19 U	95 U	9.5 J	95 U	95 U	19 U
ICS-DOF-MW4-B	7 - 8'	190 U	4.7 U	19	95 U	36	95 U	95 U	19 U
ICS-DOF-MW4-C	10 - 11'	200 U	5.0 U	24	99 U	24	99 U	99 U	20 U
ICS-DOF-MW5-A	3 - 4'	180 U	4.5 U	14 J	90 U	25	90 U	90 U	18 U
ICS-DOF-MW5-B	7 - 8'	200 U	5.0 U	46	99 U	56	99 U	99 U	20 U
ICS-DOF-MW6-A	3 - 5'	1000 U	1100	10,000	520 U	62,000	520 U	520 U	100 U
ICS-DOF-MW6-B	6 - 8'	440 U	200	2900	220 U	17,000	220 U	220 U	44 U
ICS-DOF-DUP2	dup of MW6-B	610 U	460	5200	300 U	33,000	300 U	300 U	61 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-DOF-MW6-C	9 - 10'	190 U	4.7 U	49	93 U	98	93 U	93 U	19 U
ICS-DOF-MW7-A	3 - 4'	32 J	240	680	93 U	91,000	93 U	93 U	19 U
ICS-DOF-MW7-B	7 - 8'	190 U	11	19 U	95 U	93	95 U	95 U	19 U
ICS-DOF-MW7-C	11 - 12'	190 U	19 U	55	94 U	470	94 U	94 U	19 U
ICS-DOF-MW8-A	3 - 4'	190 U	4.7 U	11 J	95 U	16 J	95 U	95 U	19 U
ICS-DOF-MW8-B	7 - 8'	190 U	4.8 U	64	95 U	150	95 U	95 U	19 U
ICS-DOF-MW8-C	11 - 12'	200 U	4.9 U	24	98 U	240	98 U	98 U	20 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	94 U	7.4	22	94 U	35	94 U	94 U	19 U
ICS-P11-SO-10	9.5 - 11'	96 U	6.4	19	96 U	11 J	96 U	96 U	19 U
ICS-P11-SO-16	15 - 17'	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U
ICS-P12-SO-4	3 - 4.5'	98 U	4.9 U	17 J	98 U	11 J	98 U	98 U	20 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	94 U	3.8 J	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P12-SO-13	12 - 14'	97 U	4.9 U	20 U	97 U	20 U	97 U	97 U	20 U
ICS-P12-SO-16	15 - 17'	93 U	2.9 J	19 U	93 U	19 U	93 U	93 U	19 U
ICS-P13-SO-4	4 - 6'	99 U	5.0 U	43	99 U	30	99 U	99 U	20 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U
ICS-P13-SO-17	16.5 - 18'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P14-SO-4	3 - 5'	95 U	12	57	29 J	32	95 U	95 U	19 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	96 U	5.6	16 J	96 U	14 J	96 U	96 U	19 U
ICS-P14-SO-16	15 - 17'	94 U	3.1 J	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P15-SO-4	3 - 5'	100 U	5.0 U	30	100 U	40	100 U	100 U	20 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	49 J	4.9 U	160	99 U	20 U	99 U	99 U	20 U
ICS-P15-SO-16	15 - 17'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P16-SO-4	3 - 4'	98 U	4.9 U	13 J	98 U	13 J	98 U	98 U	20 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U
ICS-P16-SO-16	15 - 17'	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-P17-SO-4	4.5 - 6.5'	94 U	20000	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	96 U	73	24	96 U	19 U	96 U	96 U	19 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	94 U	39	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	980 U	8.8	2200	980 U	2800	980 U	980 U	200 U
ICS-P18-SO-7	6 - 8'	-----	-----	3100	-----	1600	-----	-----	-----
ICS-P18-SO-10	9 - 10'	190 U	5.6	1200	190 U	2000	190 U	190 U	39 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	420 U	47	880	420 U	920	420 U	420 U	84 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	110 U	7.6	260	110 U	110	110 U	110 U	22 U
ICS-P19-SO-10	9 - 10'	95 U	3.5 J	19 U	95 U	19	95 U	95 U	19 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	97 U	4.9 U	20 U	97 U	12 J	97 U	97 U	20 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	97 U	36	14 J	97 U	22	97 U	97 U	19 U
ICS-P20-SO-10	9.5 - 11'	97 U	19	19 U	97 U	19 U	97 U	97 U	19 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	94 U	16	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P21-SO-7	6 - 8'	180 U	120	1900	180 U	1400	180 U	180 U	37 U
ICS-P21-SO-13	12 - 14'	170 U	22	260	890 JQ	150	170 U	170 U	110
ICS-P21-SO-16	15 - 17'	96 U	4.8 U	15 J	96 U	11 J	96 U	96 U	19 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	93 U	4.7 U	11 J	93 U	11 J	93 U	93 U	19 U
ICS-P22-SO-4	3 - 4.5'	94 U	3.5 J	610	94 U	60	94 U	94 U	19 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	96 U	4.8 U	19	96 U	19 U	96 U	96 U	19 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-P22-SO-16	15 - 17'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P23-SO-3	2 - 4'	97 U	13	19 U	97 U	19 U	97 U	97 U	19 U
ICS-P23-SO-10	9.5 - 11	97 U	12	19 U	97 U	19 U	97 U	97 U	19 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	99 U	11	20 U	99 U	20 U	99 U	99 U	20 U
ICS-P24-SO-4	3 - 5'	92 U	4.6 U	54	92 U	18	92 U	92 U	18 U
ICS-P24-SO-10	9 - 10.5'	97 U	7	920	97 U	130	97 U	97 U	19 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P25-SO-3	1 - 3'	95 U	25	26	95 U	13 J	95 U	95 U	19 U
ICS-P25-SO-10	9 - 11'	93 U	30	19 U	93 U	19 U	93 U	93 U	19 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	94 U	38	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P26-SO-4	3 - 5'	94 U	4.8	24	94 U	38	94 U	94 U	19 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	100 U	5.0 U	20 U	100 U	20 U	100 U	100 U	20 U
ICS-P26-SO-16	15 - 17'	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U
ICS-P27-SO-3	1 - 3'	97 U	2.6 J	33	97 U	14 J	97 U	97 U	19 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	96 U	2.6 J	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	95 U	3.8 J	19 U	95 U	19 U	95 U	95 U	19 U
ICS-P27-SO-32	31 - 33'	93 U	5.2	19 U	93 U	19 U	93 U	93 U	19 U
ICS-P28-SO-4	3 - 5'	98 U	5.4	230	98 U	660	98 U	98 U	20 U
ICS-P28-SO-10	8.5 - 10'	98 U	4.9 U	28	98 U	68	98 U	98 U	20 U
ICS-P28-SO-16	15 - 17'	92 U	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	93 U	4.6 U	19 U	93 U	19 U	93 U	93 U	19 U
ICS-P29-SO-4	3 - 4'	1200 U	270	350	1200 U	2200	1200 U	1200 U	230 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	93 U	210	220	93 U	2700	93 U	93 U	19 U
ICS-P29-SO-16	15 - 17'	94 U	3.6 J	530	94 U	410	94 U	94 U	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-DUP2	P29-SO-16	95 U	3.5 J	480	95 U	380	95 U	95 U	19 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	220 U	36	600	220 U	510	220 U	220 U	44 U
ICS-P30-SO-10	9 - 10'	-----	-----	550	-----	140	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	100 U	41	370	100 U	200	100 U	100 U	20 U
ICS-P30-SO-16	15 - 16.5'	98 U	4.9 U	21	98 U	26	98 U	98 U	20 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	92 U	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-P31-SO-10	9 - 11'	97 U	4.8 U	19 U	97 U	19 U	97 U	97 U	19 U
ICS-P31-SO-16	15 - 17'	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U
ICS-P31-SO-32	31 - 33'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P32-SO-16	16 - 17.5'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-SO-DUPL3	P32-SO-16	93 U	4.6 U	18 U	93 U	18 U	93 U	93 U	18 U
ICS-P32-SO-32	31 - 33'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P33-SO-16	15 - 17'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-P33-SO-32	31 - 33'	95 U	4.8 U	19 U	95 U	19 U	95 U	95 U	19 U
ICS-P34-SO-4	3 - 5'	95 U	4.8 U	8.6 J	95 U	7.6 J	95 U	95 U	19 U
ICS-P34-SO-10	9 - 11'	98 U	4.9 U	10 U	98 U	20 U	98 U	98 U	20 U
ICS-P34-SO-16	15 - 17'	97 U	4.8 U	9.0 U	97 U	19 U	97 U	97 U	19 U
ICS-P35-SO-4	3 - 5'	96 U	4.8 U	8.5 U	96 U	19 U	96 U	96 U	19 U
ICS-P35-SO-10	9 - 11'	93 U	4.7 U	8.9 U	93 U	19 U	93 U	93 U	19 U
ICS-P35-SO-16	15 - 17'	98 U	4.9 U	7.5 U	98 U	20 U	98 U	98 U	20 U
ICS-P36-SO-4	3 - 4'	94 U	4.7 U	7.4 U	94 U	19 U	94 U	94 U	19 U
ICS-P36-SO-10	10 - 12'	94 U	4.7 U	7.9 U	94 U	19 U	94 U	94 U	19 U
ICS-P36-SO-16	15 - 17'	95 U	4.8 U	8.6 U	95 U	19 U	95 U	95 U	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	2,4-Dichloro-phenol µg/kg, dry	1,2,4-Trichloro-benzene µg/kg, dry	Naphthalene µg/kg, dry	4-Chloro-3-methylphenol µg/kg, dry	2-Methyl-naphthalene µg/kg, dry	2,4,6-Trichloro-phenol µg/kg, dry	2,4,5-Trichloro-phenol µg/kg, dry	2-Chloro-naphthalene µg/kg, dry
Screening Level (a)		10,500	4530	70,000	-----	14,000	3,500	350,000	-----
ICS-Ap-10-SO	9 - 10'	94 U	4.7 U	5.6 J	94 U	5.6 J	94 U	94 U	19 U
ICS-Bp-10-SO	9 - 10'	97 U	4.9 U	20 U	97 U	7.8 J	97 U	97 U	20 U
ICS-Cp-10-SO	9 - 10'	96 U	4.8 U	36	96 U	16 J	96 U	96 U	19 U
ICS-Du-10-SO	9 - 10'	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-Du-16-SO	15 - 17'	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-FL-4-SO	3 - 5'	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U
ICS-FL-7-SO	6 - 8'	95 U	4.7 U	19 U	95 U	19 U	95 U	95 U	19 U
ICS-FL-10-SO	9 - 10'	100 U	5.0 U	14 J	100 U	16 J	100 U	100 U	20 U
ICS-FL-13-SO	12 - 14'	100 U	5.0 U	20 U	100 U	20 U	100 U	100 U	20 U
ICS-FL-16-SO	15.5 - 17'	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U
ICS-FL-21-SO	20 - 22'	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U
ICS-Ju-4-SO	3 - 4'	1100	430	4400	590 U	4900	590 U	590 U	120 U
ICS-Ju-10-SO	10- 11'	97 U	2.4 J	55	97 U	32	97 U	97 U	20 U
ICS-Ju-15-SO	15 - 16	96 U	4.8 U	7.7 J	96 U	7.7 J	96 U	96 U	19 U
Number of Samples		137	137	140	137	139	137	137	137
Number of Detections		4	53	69	4	72	0	2	2
Percent Detected		2.9%	38.7%	49.3%	2.9%	51.8%	0.0%	1.5%	1.5%
Highest Conc.		1100	20000	51000	1200	91000	0	1000	760

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-LP1-SO-A	3 - 5'	18 U	23	18 U	18 U	87 U	87 U	44 U	18 U
ICS-LP1-SO-B	6.5 - 8'	63 U	63 U	50 J	63 U	320 U	320 U	160 U	63 U
ICS-LP1-SO-C	10.5 - 12'	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U
ICS-LP2-SO-A	3 - 5'	18 U	18 U	18 U	18 U	92 U	92 U	46 U	18 U
ICS-LP2-SO-B	5.5 - 7.5'	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U
ICS-LP2-SO-C	8 - 10'	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U
ICS-LP3-SO-A	3 - 5'	460	18 J	23	48	93 U	93 U	1300	19 U
ICS-LP3-SO-B	6 - 8'	540 J	670 U	9700	7100	3400 U	3400 U	2200	670 U
ICS-LP3-SO-C	10 - 12'	18 U	18 U	46	36	91 U	91 U	34 J	18 U
ICS-LP3-SO-D	15 - 16'	19 U	19 U	42	32	96 U	96 U	39 J	19 U
ICS-LP4-SO-A	8 - 10'	57 U	57 U	250	190	280 U	280 U	140 U	57 U
ICS-LP4-SO-B	10 - 12'	19 U	19 U	20	24	94 U	94 U	47 U	19 U
ICS-LP4-SO-C	14 - 15'	18 U	18 U	18 U	18 U	90 U	90 U	45 U	18 U
ICS-DOF-MW1-A	4 - 5'	20 U	20 U	20 U	19 J	98 U	98 U	49 U	20 U
ICS-DOF-MW1-B	6.5 - 7.5'	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U
ICS-DOF-MW1-C	11 - 12'	19 U	19 U	19 U	19 U	93 U	93 U	46 U	19 U
ICS-DOF-MW2-A	2 - 3'	18 U	18 U	18 U	18 U	92 U	92 U	46 U	18 U
ICS-DOF-MW2-B	8 - 9'	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U
ICS-DOF-MW2-C	12 - 13'	20 U	20 U	20 U	20 U	98 U	98 U	49 U	20 U
ICS-DOF-MW3-A	2 - 4'	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U
ICS-DOF-DUP1	dup of MW3-A	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U
ICS-DOF-MW3-B	7 - 8'	20 U	20 U	20 U	20 U	100 U	100 U	50 U	20 U
ICS-DOF-MW4-A	3 - 4'	19 U	19 U	19 U	19 U	95 U	95 U	48 U	19 U
ICS-DOF-MW4-B	7 - 8'	19 U	19 U	19 U	15 J	95 U	95 U	47 U	19 U
ICS-DOF-MW4-C	10 - 11'	20 U	20 U	16 J	22	99 U	99 U	50 U	20 U
ICS-DOF-MW5-A	3 - 4'	18 U	18 U	18 U	12 J	90 U	90 U	45 U	18 U
ICS-DOF-MW5-B	7 - 8'	20 U	20 U	11 J	24	99 U	99 U	50 U	20 U
ICS-DOF-MW6-A	3 - 5'	100 U	100 U	3200	100 U	520 U	520 U	260 U	100 U
ICS-DOF-MW6-B	6 - 8'	44 U	44 U	620	330	220 U	220 U	110 U	44 U
ICS-DOF-DUP2	dup of MW6-B	61 U	61 U	1500	61 U	300 U	300 U	150 U	61 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-DOF-MW6-C	9 - 10'	19 U	19 U	19 U	19 U	93 U	93 U	47 U	19 U
ICS-DOF-MW7-A	3 - 4'	19 U	73	420	72	93 U	93 U	47 U	19 U
ICS-DOF-MW7-B	7 - 8'	19 U	19 U	19 U	19 U	95 U	95 U	48 U	19 U
ICS-DOF-MW7-C	11 - 12'	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U
ICS-DOF-MW8-A	3 - 4'	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U
ICS-DOF-MW8-B	7 - 8'	19 U	27	110	160	95 U	95 U	48 U	19 U
ICS-DOF-MW8-C	11 - 12'	20 U	20 U	20 U	20 U	98 U	98 U	49 U	20 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	19 U	19 U	13 J	11 J	94 U	94 U	20	19 U
ICS-P11-SO-10	9.5 - 11'	19 U	19 U	19 U	19 U	96 U	96 U	19	19 U
ICS-P11-SO-16	15 - 17'	20 U	20 U	20 U	20 U	99 U	99 U	20 U	20 U
ICS-P12-SO-4	3 - 4.5'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P12-SO-13	12 - 14'	20 U	20 U	20 U	20 U	97 U	97 U	20 U	20 U
ICS-P12-SO-16	15 - 17'	19 U	19 U	19 U	19 U	93 U	93 U	19 U	19 U
ICS-P13-SO-4	4 - 6'	20 U	20 U	20	220	99 U	99 U	24 JB	20 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	20 U	20 U	20 U	20 U	98 U	98 U	20 JB	20 U
ICS-P13-SO-17	16.5 - 18'	19 U	19 U	19 U	19 U	96 U	96 U	21 JB	19 U
ICS-P14-SO-4	3 - 5'	8.6 J	12 J	14 J	17 J	95 U	95 U	19 U	19 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	19 U	19 U	16 J	15 J	96 U	96 U	19 U	19 U
ICS-P14-SO-16	15 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P15-SO-4	3 - 5'	20 U	20 U	20 U	20 U	100 U	100 U	21 JQ	20 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	20 U	20 U	20 U	40	99 U	99 U	20 U	20 U
ICS-P15-SO-16	15 - 17'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P16-SO-4	3 - 4'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	20 U	20 U	20 U	20 U	99 U	99 U	20 U	20 U
ICS-P16-SO-16	15 - 17'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-P17-SO-4	4.5 - 6.5'	19 U	19 U	100	19 U	94 U	94 U	19 U	19 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	200 U	98 J	1800	1300	980 U	980 U	200 U	200 U
ICS-P18-SO-7	6 - 8'	-----	24 J	370	180	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	39 U	39 U	420	230	190 U	190 U	39 U	39 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	84 U	84 U	570	310	420 U	420 U	170	84 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	19 U	19 U	19 U	19 U	94 U	94 U	25	19 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	22 U	22 U	45	33	110 U	110 U	23	22 U
ICS-P19-SO-10	9 - 10'	19 U	19 U	19 U	19 U	95 U	95 U	23	19 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	20 U	20 U	20 U	20 U	97 U	97 U	18 J	20 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	19 U	19 U	19 U	19 U	97 U	97 U	19 U	19 U
ICS-P20-SO-10	9.5 - 11'	19 U	19 U	19 U	19 U	97 U	97 U	19 U	19 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P21-SO-7	6 - 8'	37 U	37 U	690	360	180 U	180 U	37 U	37 U
ICS-P21-SO-13	12 - 14'	34 U	34 U	60	29 J	170 U	170 U	34 U	34 U
ICS-P21-SO-16	15 - 17'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	19 U	19 U	19 U	19 U	93 U	93 U	19 U	19 U
ICS-P22-SO-4	3 - 4.5'	19 U	19 U	57	46	94 U	94 U	19 U	19 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	27	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-P22-SO-16	15 - 17'	19 U	j	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P23-SO-3	2 - 4'	19 U	19 U	19 U	19 U	97 U	97 U	28	19 U
ICS-P23-SO-10	9.5 - 11	19 U	19 U	19 U	19 U	97 U	97 U	19 U	19 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	20 U	20 U	20 U	20 U	99 U	99 U	34	20 U
ICS-P24-SO-4	3 - 5'	18 U	18 U	18 U	18 U	92 U	18 U	21 JB	18 U
ICS-P24-SO-10	9 - 10.5'	19 U	19 U	40	29	97 U	97 U	32 JB	19 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	19 U	19 U	19 U	19 U	96 U	96 U	41 JB	19 U
ICS-P25-SO-3	1 - 3'	19 U	19	19 U	10 J	95 U	95 U	19 U	19 U
ICS-P25-SO-10	9 - 11'	19 U	19 U	19 U	19 U	93 U	93 U	19 U	19 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P26-SO-4	3 - 5'	19 U	19 U	19 U	9.4 J	94 U	94 U	38 JB	19 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	20 U	20 U	20 U	20 U	100 U	100 U	28 JB	20 U
ICS-P26-SO-16	15 - 17'	20 U	20 U	20 U	20 U	98 U	98 U	26 JB	20 U
ICS-P27-SO-3	1 - 3'	19 U	19 U	19 U	16 J	97 U	97 U	19 U	19 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	19 U	19 U	19 U	19 U	95 U	95 U	19 U	19 U
ICS-P27-SO-32	31 - 33'	19 U	19 U	19 U	19 U	93 U	93 U	19 U	19 U
ICS-P28-SO-4	3 - 5'	20 U	20 U	20	12 J	98 U	98 U	19 J	20 U
ICS-P28-SO-10	8.5 - 10'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P28-SO-16	15 - 17'	18 U	18 U	18 U	18 U	92 U	92 U	19	18 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	19 U	19 U	19 U	19 U	93 U	93 U	18 J	19 U
ICS-P29-SO-4	3 - 4'	230 U	230 U	640	360	1200 U	1200 U	260 JB	230 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	19 U	19 U	38	26	93 U	93 U	19 U	19 U
ICS-P29-SO-16	15 - 17'	19 U	19 U	230	230	94 U	94 U	19 U	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-DUP2	P29-SO-16	19 U	19 U	200	190	95 U	95 U	19 U	19 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	20 U	20 U	20 U	20 U	99 U	99 U	20 U	20 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	44 U	31	44 U	44 U	220 U	220 U	44 U	44 U
ICS-P30-SO-10	9 - 10'	-----	24	27	54	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	19	31	65	55	100 U	100 U	20 U	20 U
ICS-P30-SO-16	15 - 16.5'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	18 U	18 U	18 U	18 U	92 U	92 U	18 U	18 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P31-SO-10	9 - 11'	19 U	19 U	19 U	6.8 J	97 U	97 U	19 U	19 U
ICS-P31-SO-16	15 - 17'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P31-SO-32	31 - 33'	19 U	19 U	19 U	19 U	96 U	96 U	39	19 U
ICS-P32-SO-16	16 - 17.5'	19 U	19 U	19 U	19 U	96 U	96 U	33	19 U
ICS-SO-DUPL3	P32-SO-16	18 U	18 U	18 U	18 U	93 U	93 U	18	18 U
ICS-P32-SO-32	31 - 33'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P33-SO-16	15 - 17'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P33-SO-32	31 - 33'	19 U	19 U	19 U	19 U	95 U	95 U	19 U	19 U
ICS-P34-SO-4	3 - 5'	19 U	8.6 J	19 U	4.8 J	95 U	95 U	19 JB	19 U
ICS-P34-SO-10	9 - 11'	20 U	20 U	20 U	20 U	98 U	98 U	24 JB	20 U
ICS-P34-SO-16	15 - 17'	19 U	19 U	19 U	19 U	97 U	97 U	19 U	19 U
ICS-P35-SO-4	3 - 5'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-P35-SO-10	9 - 11'	19 U	19 U	19 U	19 U	93 U	93 U	19 U	19 U
ICS-P35-SO-16	15 - 17'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-P36-SO-4	3 - 4'	19 U	19 U	19 U	19 U	94 U	94 U	19 JB	19 U
ICS-P36-SO-10	10 - 12'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-P36-SO-16	15 - 17'	19 U	19 U	19 U	19 U	95 U	95 U	19 U	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Dimethyl-phthalate µg/kg, dry	Acenaphthylene µg/kg, dry	Acenaphthene µg/kg, dry	Dibenzofuran µg/kg, dry	2,6-Dinitro-toluene µg/kg, dry	2,4-Dinitro-toluene µg/kg, dry	Diethyl-phthalate µg/kg, dry	4-Chlorophenyl-phenylether µg/kg, dry
Screening Level (a)			-----	210,000	3,500	87.5	423	2,800,000	-----
ICS-Ap-10-SO	9 - 10'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-Bp-10-SO	9 - 10'	20 U	20 U	20 U	4.9 J	97 U	97 U	20 U	20 U
ICS-Cp-10-SO	9 - 10'	19 U	19 U	17 J	17 J	96 U	96 U	19 U	19 U
ICS-Du-10-SO	9 - 10'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-Du-16-SO	15 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-FL-4-SO	3 - 5'	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
ICS-FL-7-SO	6 - 8'	19 U	19 U	19 U	19 U	95 U	95 U	19 U	19 U
ICS-FL-10-SO	9 - 10'	20 U	20 U	20 U	20 U	100 U	100 U	20 U	20 U
ICS-FL-13-SO	12 - 14'	20 U	20 U	20 U	20 U	100 U	100 U	20 U	20 U
ICS-FL-16-SO	15.5 - 17'	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U
ICS-FL-21-SO	20 - 22'	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U
ICS-Ju-4-SO	3 - 4'	120 U	120 U	510	580	590 U	590 U	120 U	120 U
ICS-Ju-10-SO	10- 11'	20 U	21	21	20	97 U	97 U	20 U	20 U
ICS-Ju-15-SO	15 - 16	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U
Number of Samples		137	140	140	140	137	137	137	137
Number of Detections		5	12	38	44	0	0	33	0
Percent Detected		3.6%	8.6%	27.1%	31.4%	0.0%	0.0%	24.1%	0.0%
Highest Conc.		540	98	9700	7100	0	0	2200	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-LP1-SO-A	3 - 5'	18 U	18 U	15 J	52	18 U	21	9.6 J	68
ICS-LP1-SO-B	6.5 - 8'	50 J	38 J	140 J	200	63 U	110	63 U	540
ICS-LP1-SO-C	10.5 - 12'	19 U	19 U	47 U	19 U	19 U	19 U	19 U	10 J
ICS-LP2-SO-A	3 - 5'	18 U	18 U	46 U	42	18 U	18 U	10 J	55
ICS-LP2-SO-B	5.5 - 7.5'	19 U	19 U	47 U	9.5 J	19 U	19 U	19 U	19 U
ICS-LP2-SO-C	8 - 10'	19 U	19 U	48 U	19 U	19 U	19 U	19 U	19 U
ICS-LP3-SO-A	3 - 5'	45	12 J	460	220	34	34	420	200
ICS-LP3-SO-B	6 - 8'	12,000	1400	5300 J	42,000	6000	7900	16,000	32,000
ICS-LP3-SO-C	10 - 12'	78	28	56 J	330	33	42	81	120
ICS-LP3-SO-D	15 - 16'	53	4.8 U	72 J	210	30	35	59	110
ICS-LP4-SO-A	8 - 10'	310	94	210 J	1100	60	220	300	850
ICS-LP4-SO-B	10 - 12'	45	41	150 J	250	19 U	19 U	19 U	130
ICS-LP4-SO-C	14 - 15'	18 U	18 U	45 U	18 U	18 U	18 U	18 U	18 U
ICS-DOF-MW1-A	4 - 5'	20 U	20 U	49 U	86	20 U	20 U	20 U	36
ICS-DOF-MW1-B	6.5 - 7.5'	19 U	19 U	47 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW1-C	11 - 12'	19 U	19 U	46 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW2-A	2 - 3'	18 U	18 U	46 U	18 U	18 U	18 U	18 U	18 U
ICS-DOF-MW2-B	8 - 9'	19 U	19 U	48 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW2-C	12 - 13'	20 U	20 U	49 U	20 U	20 U	20 U	20 U	20 U
ICS-DOF-MW3-A	2 - 4'	19 U	19 U	48 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-DUP1	dup of MW3-A	19 U	19 U	47 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW3-B	7 - 8'	20 U	13 J	50 U	30	20 U	20 U	20 U	20 U
ICS-DOF-MW4-A	3 - 4'	19 U	19 U	48 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW4-B	7 - 8'	10 J	15 J	47 U	51	19 U	19 U	19 U	24
ICS-DOF-MW4-C	10 - 11'	25	20 U	50 U	69	20 U	17 J	20 U	85
ICS-DOF-MW5-A	3 - 4'	18 U	18 U	45 U	36	18 U	18 U	18 U	14 J
ICS-DOF-MW5-B	7 - 8'	14 J	20 U	50 U	61	20 U	11 J	20 U	34
ICS-DOF-MW6-A	3 - 5'	8400	100 U	260 U	9500	100 U	100 U	100 U	99 J
ICS-DOF-MW6-B	6 - 8'	1600	44 U	110 U	2400	44 U	44 U	44 U	47
ICS-DOF-DUP2	dup of MW6-B	3500	61 U	150 U	4900	61 U	61 U	61 U	94

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-DOF-MW6-C	9 - 10'	12 J	19 U	47 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW7-A	3 - 4'	340	19 U	160,000	1000	34 JQ	270	600	580
ICS-DOF-MW7-B	7 - 8'	25	4.4 J	88	13 J	19 U	19 U	19 U	19 U
ICS-DOF-MW7-C	11 - 12'	19 U	19 U	62	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW8-A	3 - 4'	19 U	19 U	190 U	19 U	19 U	19 U	19 U	19 U
ICS-DOF-MW8-B	7 - 8'	220	19 U	24 J	620	200 JQ	94	19 U	12 J
ICS-DOF-MW8-C	11 - 12'	20 U	20 U	250	20 U	20 U	20 U	20 U	20 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	13 J	5.5	13 J	18 J	10 J	19 U	19 U	16 J
ICS-P11-SO-10	9.5 - 11'	19 U	4.8 U	17 J	22	19 U	9.6 J	19 U	12 J
ICS-P11-SO-16	15 - 17'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-4	3 - 4.5'	20 U	3.6 J	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	19 U	4.7 U	11 J	11 J	19 U	19 U	19 U	19 U
ICS-P12-SO-13	12 - 14'	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-16	15 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P13-SO-4	4 - 6'	18 J	5.0 U	220 JQ	70	20 U	12 J	180	81
ICS-P13-SO-7	6 - 8'	-----	-----	3.5 J	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P13-SO-17	16.5 - 18'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P14-SO-4	3 - 5'	24	14	23 JQ	65	22	17 J	11 J	65
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	24	3.0 J	18 J	270	32	38	9.6 J	360
ICS-P14-SO-16	15 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P15-SO-4	3 - 5'	10 J	5.0 U	29 JQ	45	20 U	13 J	20 U	30
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	20 U	4.9 U	11 J	20 U	20 U	20 U	20 U	20 U
ICS-P15-SO-16	15 - 17'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P16-SO-4	3 - 4'	20 U	4.9 U	20 U	21	20 U	20 U	20 U	24
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P16-SO-16	15 - 17'	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-P17-SO-4	4.5 - 6.5'	450	4.7 U	19 U	480	19 U	39	19 U	35
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	2900	4.9 U	50	12000	1100 JQ	3500	210	12000
ICS-P18-SO-7	6 - 8'	240	-----	-----	870	-----	80	-----	380
ICS-P18-SO-10	9 - 10'	480	4.8 U	19 U	1200	58 JQ	87	16 J	480
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	610	21 U	100	2700	160 JQ	500	100	1700
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-32	31 - 33'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	6.6 J
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	71	5.4 U	53	310	21 J	47	14 J	230
ICS-P19-SO-10	9 - 10'	19 U	4.7 U	15 J	17 J	19 U	7.6 J	19 U	8.5 J
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	20 U	4.9 U	20 U	18 J	20 U	20 U	20 U	11 J
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	19 U	4.8 U	19 U	25	19 U	19 U	19 U	19 U
ICS-P20-SO-10	9.5 - 11'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	19 U	4.7 U	11 J	9.4 J	19 U	19 U	19 U	19 U
ICS-P21-SO-7	6 - 8'	620	53	150	2100	140	400	37 U	1200
ICS-P21-SO-13	12 - 14'	64	70	54	230	33 J	74	34 U	310
ICS-P21-SO-16	15 - 17'	19 U	4.8 U	19 U	14 J	19 U	19 U	19 U	11 J
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	19 U	4.7 U	19 U	11 J	19 U	19 U	19 U	19 U
ICS-P22-SO-4	3 - 4.5'	64	4.7 U	19 U	140	54	23	12 J	38
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P22-SO-10	9 - 11'	19 U	4.8 U	19 U	15 J	19 U	19 U	19 U	12 J
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-P22-SO-16	15 - 17'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P23-SO-3	2 - 4'	19 U	4.9 U	19 U	19 U	19 U	19 U	19 U	68
ICS-P23-SO-10	9.5 - 11	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	20 U	5.0 U	20 U	11 J	20 U	20 U	20 U	20 U
ICS-P24-SO-4	3 - 5'	18 U	4.6 U	18 U	37	18 U	18 U	13 J	18
ICS-P24-SO-10	9 - 10.5'	37	51	34 JQ	92	19 U	24	19 U	130
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P24-SO-16	15 - 17'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P25-SO-3	1 - 3'	19 U	3.0 J	19 U	120	12 J	12 J	19 U	170
ICS-P25-SO-10	9 - 11'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P26-SO-4	3 - 5'	17 J	11	19 U	110	19 U	16 J	49	89
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P26-SO-16	15 - 17'	20 U	4.9 U	20 U	14 J	20 U	20 U	20 U	20 U
ICS-P27-SO-3	1 - 3'	19 U	4.8 U	72	77	11 J	19 U	25	61
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	19 U	4.8 U	19 U	12 J	19 U	19 U	19 U	19 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P27-SO-32	31 - 33'	19 U	4.6 U	19 U	14 J	19 U	19 U	19 U	19 U
ICS-P28-SO-4	3 - 5'	54	4.9 U	14 J	34	11 J	20 U	20 U	20 U
ICS-P28-SO-10	8.5 - 10'	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P28-SO-16	15 - 17'	18 U	4.6 U	18 U	18 U	18 U	18 U	18 U	18 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	19 U	4.6 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P29-SO-4	3 - 4'	350	58 U	410	2400	230 U	480	310	1100
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	30	4.7 U	35	410	44 JQ	25	19 U	47
ICS-P29-SO-16	15 - 17'	150	4.7 U	50	860	120 JQ	81	19 U	330

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-DUP2	P29-SO-16	150	4.7 U	48	660	110 JQ	72	19 U	270
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-32	31 - 33'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	140	140	50	1000	150	230	280	1400
ICS-P30-SO-10	9 - 10'	67	-----	-----	660	-----	120	-----	530
ICS-P30-SO-13	12.5 - 13.5'	76	160	36	490	37	120	270	690
ICS-P30-SO-16	15 - 16.5'	8.8	4.9 U	20 U	14	20 U	20 U	20 U	11
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	18 U	3	18 U	14	18 U	18 U	18 U	9.2
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	19 U	4.7 U	19 U	13 J	19 U	19 U	19 U	19 U
ICS-P31-SO-10	9 - 11'	19 U	4.8 U	19 U	42	19 U	19 U	19 U	48
ICS-P31-SO-16	15 - 17'	20 U	4.9 U	20 U	12 J	20 U	20 U	20 U	20 U
ICS-P31-SO-32	31 - 33'	19 U	4.8 U	19 U	12 J	19 U	19 U	19 U	19 U
ICS-P32-SO-16	16 - 17.5'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-SO-DUPL3	P32-SO-16	18 U	4.6 U	18 U	18 U	18 U	18 U	18 U	18 U
ICS-P32-SO-32	31 - 33'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P33-SO-16	15 - 17'	19 U	4.8 U	19 U	9.6 J	19 U	19 U	19 U	19 U
ICS-P33-SO-32	31 - 33'	19 U	4.8 U	19 U	8.6 J	19 U	19 U	19 U	19 U
ICS-P34-SO-4	3 - 5'	19 U	4.8 U	19 U	22	8.6 J	19 U	6.7 J	37
ICS-P34-SO-10	9 - 11'	20 U	4.9 U	20 U	11 J	20 U	20 U	6.9 J	20 U
ICS-P34-SO-16	15 - 17'	19 U	4.8 U	19 U	9.7 J	19 U	19 U	19 U	19 U
ICS-P35-SO-4	3 - 5'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P35-SO-10	9 - 11'	19 U	4.7 U	19 U	6.5 J	19 U	19 U	9.3 J	19 U
ICS-P35-SO-16	15 - 17'	20 U	4.9 U	20 U	13 J	20 U	20 U	9.8 J	5.9 JB
ICS-P36-SO-4	3 - 4'	19 U	4.7 U	19 U	5.6 J	19 U	19 U	8.4 J	19 U
ICS-P36-SO-10	10 - 12'	19 U	4.7 U	19 U	7.5 J	19 U	19 U	6.6 J	19 U
ICS-P36-SO-16	15 - 17'	19 U	4.8 U	19 U	19 U	19 U	19 U	6.6 J	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Fluorene µg/kg, dry	N-Nitrosodi- phenylamine µg/kg, dry	Pentachloro- phenol µg/kg, dry	Phenanthrene µg/kg, dry	Carbazole µg/kg, dry	Anthracene µg/kg, dry	Di-n-butyl- phthalate µg/kg, dry	Fluoranthene µg/kg, dry
Screening Level (a)		140,000	26,800	328	-----	-----	1,050,000	-----	140,000
ICS-Ap-10-SO	9 - 10'	19 U	4.7 U	17 J	10 J	19 U	19 U	19 U	5.6 J
ICS-Bp-10-SO	9 - 10'	20 U	4.9 U	20 U	20	20 U	20 U	20 U	13 J
ICS-Cp-10-SO	9 - 10'	33	4.8 U	19 U	66	19 U	16 J	19 U	74
ICS-Du-10-SO	9 - 10'	4.7 J	4.7 U	19 U	24	19 U	19 U	19 U	26
ICS-Du-16-SO	15 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-FL-4-SO	3 - 5'	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-FL-7-SO	6 - 8'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-FL-10-SO	9 - 10'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-FL-13-SO	12 - 14'	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-FL-16-SO	15.5 - 17'	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-FL-21-SO	20 - 22'	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-Ju-4-SO	3 - 4'	1400	29 U	1800	7600	420	590 J	2100	3000
ICS-Ju-10-SO	10- 11'	41	6.8	43	82	16 J	26	20 U	130
ICS-Ju-15-SO	15 - 16	5.8 J	2.9 J	11 J	45	19 U	14 J	19 U	69
Number of Samples		140	137	137	140	137	140	137	140
Number of Detections		47	23	41	85	28	40	29	66
Percent Detected		33.6%	16.8%	29.9%	60.7%	20.4%	28.6%	21.2%	47.1%
Highest Conc.		12000	1400	160000	42000	6000	7900	16000	32000

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-LP1-SO-A	3 - 5'	66	4.4 U	34	170	53	18 U	93	62
ICS-LP1-SO-B	6.5 - 8'	600	63 U	220	2100	350	63 U	510	230
ICS-LP1-SO-C	10.5 - 12'	10 J	4.7 U	19 U	19 JB	19 U	19 U	38 U	19 U
ICS-LP2-SO-A	3 - 5'	50	4.6 U	21	37	38	18 U	56	25
ICS-LP2-SO-B	5.5 - 7.5'	19 U	4.7 U	19 U	22 JB	19 U	19 U	38 U	19 U
ICS-LP2-SO-C	8 - 10'	19 U	4.8 U	19 U	24 JB	19 U	19 U	38 U	19 U
ICS-LP3-SO-A	3 - 5'	130	180	88	380	110	19 U	270	150
ICS-LP3-SO-B	6 - 8'	23,000	14,000	13,000	55,000	14,000	670 U	18,000	10,000
ICS-LP3-SO-C	10 - 12'	120	48	49	340	64	18 U	78	38
ICS-LP3-SO-D	15 - 16'	100	43	46	270	54	19 U	78	40
ICS-LP4-SO-A	8 - 10'	650	57	240	1400	300	57 U	350	200
ICS-LP4-SO-B	10 - 12'	140	4.7 U	50	120	79	19 U	84	41
ICS-LP4-SO-C	14 - 15'	18 U	4.5 U	18 U	22 JB	18 U	18 U	36 U	18 U
ICS-DOF-MW1-A	4 - 5'	35	20 U	12 J	20 JB	17 J	20 U	20 J	20 U
ICS-DOF-MW1-B	6.5 - 7.5'	19 U	4.7 U	19 U	22 JB	19 U	19 U	38 U	19 U
ICS-DOF-MW1-C	11 - 12'	19 U	4.6 U	19 U	30 JB	19 U	19 U	37 U	19 U
ICS-DOF-MW2-A	2 - 3'	18 U	4.6 U	18 U	17 JB	18 U	18 U	37 U	18 U
ICS-DOF-MW2-B	8 - 9'	19 U	4.8 U	19 U	14 JB	19 U	19 U	38 U	19 U
ICS-DOF-MW2-C	12 - 13'	20 U	4.9 U	20 U	16 JB	20 U	20 U	39 U	20 U
ICS-DOF-MW3-A	2 - 4'	19 U	13	19 U	260	19 U	19 U	38 U	19 U
ICS-DOF-DUP1	dup of MW3-A	19 U	4.7 U	19 U	24 U	19 U	19 U	38 U	19 U
ICS-DOF-MW3-B	7 - 8'	20 U	5.0 U	20 U	25 U	20 U	20 U	40 U	20 U
ICS-DOF-MW4-A	3 - 4'	19 U	4.8 U	19 U	24 U	19 U	19 U	38 U	19 U
ICS-DOF-MW4-B	7 - 8'	18 J	4.7 U	19 U	16 JB	10 J	19 U	38 U	19 U
ICS-DOF-MW4-C	10 - 11'	56	5.0 U	19 J	20 JB	23	20 U	27 J	14 J
ICS-DOF-MW5-A	3 - 4'	14 J	4.5 U	18 U	23 U	13 J	18 U	9 J	18 U
ICS-DOF-MW5-B	7 - 8'	32	5.0 U	11 J	25 U	12 J	20 U	13 J	20 U
ICS-DOF-MW6-A	3 - 5'	300	26 U	100 U	88 J	100 U	100 U	88 J	100 U
ICS-DOF-MW6-B	6 - 8'	78	11 U	29 J	62	62	44 U	31 J	44 U
ICS-DOF-DUP2	dup of MW6-B	180	15 U	70	76 U	120	61 U	42 J	61 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-DOF-MW6-C	9 - 10'	19 U	4.7 U	19 U	23 U	19 U	19 U	37 U	19 U
ICS-DOF-MW7-A	3 - 4'	530	130	250	400	220	19 U	240	150
ICS-DOF-MW7-B	7 - 8'	19 U	4.8 U	19 U	24 U	19 U	19 U	38 U	19 U
ICS-DOF-MW7-C	11 - 12'	19 U	4.7 U	19 U	24 U	19 U	19 U	38 U	19 U
ICS-DOF-MW8-A	3 - 4'	19 U	4.7 U	19 U	17 JB	19 U	19 U	38 U	19 U
ICS-DOF-MW8-B	7 - 8'	19 U	4.8 U	19 U	18 JB	19 U	19 U	38 U	19 U
ICS-DOF-MW8-C	11 - 12'	20 U	4.9 U	20 U	23 JB	20 U	20 U	39 U	20 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	16 J	7.7	12 J	47 U	12 J	19 U	23 J	12 J
ICS-P11-SO-10	9.5 - 11'	12 J	8.1	19 U	91	19 U	19 U	16 J	19 U
ICS-P11-SO-16	15 - 17'	20 U	2.7 J	20 U	50 U	20 U	20 U	40 U	20 U
ICS-P12-SO-4	3 - 4.5'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	19 U	8	19 U	47 U	19 U	19 U	11 J	19 U
ICS-P12-SO-13	12 - 14'	20 U	3.1 J	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P12-SO-16	15 - 17'	19 U	5	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P13-SO-4	4 - 6'	100	20	37	190	79	20 U	130	46
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P13-SO-10	9.5 - 11'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P13-SO-17	16.5 - 18'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P14-SO-4	3 - 5'	57	10	24	48 U	39	9.5 J	50	23
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	250	9	70	48 U	100	19 U	100	37
ICS-P14-SO-16	15 - 17'	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P15-SO-4	3 - 5'	36	26	14 J	65	25	20 U	22 J	20 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	20 U	12	20 U	49 U	20 U	20 U	16 J	20 U
ICS-P15-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P16-SO-4	3 - 4'	22	4.9 U	7.8 J	49 U	17 J	20 U	26 J	20 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P16-SO-10	9 - 10'	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U
ICS-P16-SO-16	15 - 17'	20 U	2.7 J	20 U	49 U	20 U	20 U	39 U	20 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-P17-SO-4	4.5 - 6.5'	52	4.7 U	19 U	47 U	30	19 U	37 U	19 U
ICS-P17-SO-7	6.7 - 8'	----	----	----	----	----	----	----	----
ICS-P17-SO-10	9 - 11'	19 U	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P17-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P17-SO-16	15 - 17'	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P17-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P18-SO-4	3 - 5'	12000	23	6800	490 U	8100	200 U	11000	7200
ICS-P18-SO-7	6 - 8'	330	----	89	----	130	----	140	71
ICS-P18-SO-10	9 - 10'	360	22	75	200	99	39 U	75 J	39
ICS-P18-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P18-SO-16	14 - 16'	1700	210	640	1100	1000	84 U	1200	570
ICS-P18-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P18-SO-32	31 - 33'	5.7 J	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P18-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P19-SO-4	3 - 4'	250	5.4 U	140	220	230	22 U	250	140
ICS-P19-SO-10	9 - 10'	19	4.7 U	19 U	35 J	19 U	19 U	38 U	19 U
ICS-P19-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P19-SO-16	15 - 17'	9.7 J	5.3	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P19-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P20-SO-3	2 - 4'	19 U	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P20-SO-10	9.5 - 11'	19 U	2.7 J	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P20-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P20-SO-16	15 - 17'	19 U	3.6 J	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P21-SO-7	6 - 8'	1000	130	350	970	460	37 U	500	310
ICS-P21-SO-13	12 - 14'	330	8.6 U	160	210	230	34 U	270	130
ICS-P21-SO-16	15 - 17'	9.6 J	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P21-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P21-SO-32	31 - 33'	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P22-SO-4	3 - 4.5'	33	4.7 U	11 J	28 J	16 J	19 U	23 J	19 U
ICS-P22-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P22-SO-10	9 - 11'	14 J	5.5	19 U	28 J	19 U	19 U	16 J	19 U
ICS-P22-SO-13	12 - 14'	----	----	----	----	----	----	----	----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-P22-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P23-SO-3	2 - 4'	56	4.9 U	31	49 U	50	19 U	91	33
ICS-P23-SO-10	9.5 - 11	19 U	5.2 JQ	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P23-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P23-SO-16	15 - 17'	20 U	4.8 J	20 U	50 U	20 U	20 U	40 U	20 U
ICS-P24-SO-4	3 - 5'	17 J	3.3 J	18 U	46 U	14 J	18 U	16 J	18 U
ICS-P24-SO-10	9 - 10.5'	180	4.8 U	50	390	150	19 U	170	100
ICS-P24-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P24-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P25-SO-3	1 - 3'	160	15 JQ	62	72 JB	95	19 U	150	76
ICS-P25-SO-10	9 - 11'	19 U	5.3 JQ	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P25-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P25-SO-16	15 - 17'	19 U	9.2 JQ	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P26-SO-4	3 - 5'	110	4.7	45	31 J	64	19 U	83	47
ICS-P26-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P26-SO-10	9 - 11'	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U
ICS-P26-SO-16	15 - 17'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P27-SO-3	1 - 3'	56	8.0 JQ	20	48 JB	56	19 U	78	19
ICS-P27-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P27-SO-11	9 - 11'	19 U	4.8 U	19 U	33 JB	19 U	19 U	38 U	19 U
ICS-P27-SO-13	12 - 14'	----	----	----	----	----	----	----	----
ICS-P27-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P27-SO-32	31 - 33'	19 U	4.6 U	19 U	46 U	19 U	19 U	37 U	19 U
ICS-P28-SO-4	3 - 5'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P28-SO-10	8.5 - 10'	20 U	11	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P28-SO-16	15 - 17'	18 U	4.6 U	18 U	46 U	18 U	18 U	37 U	18 U
ICS-P28-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P28-SO-32	31 - 33'	19 U	4.6 U	19 U	46 U	19 U	19 U	37 U	19 U
ICS-P29-SO-4	3 - 4'	1500	58 U	340	7600	660	230 U	310 J	230 U
ICS-P29-SO-7	6 - 8'	----	----	----	----	----	----	----	----
ICS-P29-SO-10	9 - 10'	90	4.7 U	16 J	34 J	26	19 U	20 J	7.5 J
ICS-P29-SO-16	15 - 17'	210	4.7 U	71	47 U	81	19 U	58	30

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-DUP2	P29-SO-16	170	4.7 U	54	47 U	67	19 U	49	26
ICS-P29-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P29-SO-32	31 - 33'	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U
ICS-P29-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P29-SO-50	49 - 50'	----	----	----	----	----	----	----	----
ICS-P30-SO-7	6 - 7'	1900	690	940	2400	1100	44 U	1400	1300
ICS-P30-SO-10	9 - 10'	490	----	160	----	220	----	260	130
ICS-P30-SO-13	12.5 - 13.5'	790	140	280	660	420	20 U	420	240
ICS-P30-SO-16	15 - 16.5'	14	2.6	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P30-SO-22	21 - 23'	----	----	----	----	----	----	----	----
ICS-P30-SO-32	31 - 33'	11	2.8	5.6	46 U	9.2	18 U	11	18 U
ICS-P30-SO-42	41 - 43'	----	----	----	----	----	----	----	----
ICS-P30-SO-50	49 - 50'	----	----	----	----	----	----	----	----
ICS-P31-SO-4	3 - 4'	19 U	2.6 J	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P31-SO-10	9 - 11'	39	3.4 J	13 J	48 U	17 J	19 U	20 J	19 U
ICS-P31-SO-16	15 - 17'	20 U	7	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P31-SO-32	31 - 33'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P32-SO-16	16 - 17.5'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-SO-DUPL3	P32-SO-16	18 U	4.6 U	18 U	46 U	18 U	18 U	37 U	18 U
ICS-P32-SO-32	31 - 33'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P33-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P33-SO-32	31 - 33'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P34-SO-4	3 - 5'	47	9.5	34	120	46	19 U	110	43
ICS-P34-SO-10	9 - 11'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P34-SO-16	15 - 17'	5.8 J	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U
ICS-P35-SO-4	3 - 5'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-P35-SO-10	9 - 11'	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P35-SO-16	15 - 17'	7.8 J	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-P36-SO-4	3 - 4'	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U
ICS-P36-SO-10	10 - 12'	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-P36-SO-16	15 - 17'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Pyrene µg/kg, dry	Butylbenzyl- phthalate µg/kg, dry	Benzo(a)- anthracene µg/kg, dry	bis (2- Ethylhexyl)- phthalate µg/kg, dry	Chrysene µg/kg, dry	Di-n-octyl- phthalate µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene µg/kg, dry
Screening Level (a)		105,000	69,100	see BaPEq	9,380	see BaPEq	35,000	see BaPEq	see BaPEq
ICS-Ap-10-SO	9 - 10'	6.6 J	6.1	19 U	47 U	7.5 J	19 U	38 U	19 U
ICS-Bp-10-SO	9 - 10'	12 J	6.1	5.8 J	49 U	6.8 J	20 U	39 U	20 U
ICS-Cp-10-SO	9 - 10'	60	6.5	21	48 U	27	19 U	33 J	19 U
ICS-Du-10-SO	9 - 10'	24	4.7 U	19 U	47 U	13 J	19 U	16 J	19 U
ICS-Du-16-SO	15 - 17'	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U
ICS-FL-4-SO	3 - 5'	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U
ICS-FL-7-SO	6 - 8'	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-FL-10-SO	9 - 10'	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U
ICS-FL-13-SO	12 - 14'	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U
ICS-FL-16-SO	15.5 - 17'	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U
ICS-FL-21-SO	20 - 22'	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U
ICS-Ju-4-SO	3 - 4'	3700	6900	1100	44,000	1100	2200	1800	1400
ICS-Ju-10-SO	10- 11'	140	11	43	59	49	20 U	71	30
ICS-Ju-15-SO	15 - 16	62	4.5 J	29	35 J	32	19 U	36 J	14 J
Number of Samples		140	137	140	137	140	137	140	140
Number of Detections		65	50	49	52	55	2	56	37
Percent Detected		46.4%	36.5%	35.0%	38.0%	39.3%	1.5%	40.0%	26.4%
Highest Conc.		23000	14000	13000	55000	14000	2200	18000	10000

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background
or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-LP1-SO-A	3 - 5'	51	11 J	77	141	515	91	2.5 U	2.5 U	2.5 U
ICS-LP1-SO-B	6.5 - 8'	110	63 U	130	501	2690	318	17 U	17 U	52 U
ICS-LP1-SO-C	10.5 - 12'	19 U	19 U	19 U	19 U	20	nd	0.47 U	0.47 U	0.47 U
ICS-LP2-SO-A	3 - 5'	23	18 U	31	70	299	35	0.47 U	0.47 U	0.47 U
ICS-LP2-SO-B	5.5 - 7.5'	19 U	19 U	19 U	27.5	38 U	nd	0.46 U	0.76 U	0.46 U
ICS-LP2-SO-C	8 - 10'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-LP3-SO-A	3 - 5'	170	48	190	550	1356	252	3.3 U	3.3 U	3.3 U
ICS-LP3-SO-B	6 - 8'	4500	2300	4400	122600	121200	15990	120 U	350 U	120 U
ICS-LP3-SO-C	10 - 12'	16 J	18 U	19	686	504	53	4.9 U	13 U	50 U
ICS-LP3-SO-D	15 - 16'	22	19 U	26	520	476	55	2.4 U	2.4 U	2.4 U
ICS-LP4-SO-A	8 - 10'	99	34 J	120	2650	2843	306	20 U	20 U	290 U
ICS-LP4-SO-B	10 - 12'	19 U	19 U	19 U	875	524	55	2.8 U	16 U	12 U
ICS-LP4-SO-C	14 - 15'	18 U	18 U	18 U	18 U	36 U	nd	0.46 U	0.46 U	0.46 U
ICS-DOF-MW1-A	4 - 5'	20 U	20 U	20 U	926	120	3.4	0.47 U	0.47 U	0.47 U
ICS-DOF-MW1-B	6.5 - 7.5'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	1.5 U	0.47 U
ICS-DOF-MW1-C	11 - 12'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-DOF-MW2-A	2 - 3'	18 U	18 U	18 U	18 U	37 U	nd	0.49 U	0.49 U	0.49 U
ICS-DOF-MW2-B	8 - 9'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-DOF-MW2-C	12 - 13'	20 U	20 U	20 U	20 U	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-DOF-MW3-A	2 - 4'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-DOF-DUP1	dup of MW3-A	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-DOF-MW3-B	7 - 8'	20 U	20 U	20 U	42	40 U	nd	0.46 U	0.46 U	0.46 U
ICS-DOF-MW4-A	3 - 4'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-DOF-MW4-B	7 - 8'	19 U	19 U	19 U	80	52	0.1	0.48 U	0.48 U	0.48 U
ICS-DOF-MW4-C	10 - 11'	20 U	20 U	12 J	151	236	19	0.48 U	0.48 U	0.48 U
ICS-DOF-MW5-A	3 - 4'	18 U	18 U	18 U	50	50	1.0	0.46 U	0.46 U	0.46 U
ICS-DOF-MW5-B	7 - 8'	20 U	20 U	20 U	143	102	2.5	0.47 U	0.47 U	0.47 U
ICS-DOF-MW6-A	3 - 5'	100 U	100 U	100 U	31100	487	8.8	2.5 U	16 U	2.5 U
ICS-DOF-MW6-B	6 - 8'	44 U	44 U	44 U	7520	247	6.6	2.4 U	10 U	2.4 U
ICS-DOF-DUP2	dup of MW6-B	61 U	61 U	61 U	15100	247	12	2.4 U	8.5 U	2.4 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-DOF-MW6-C	9 - 10'	19 U	19 U	19 U	61	37 U	nd	13 U	4.5 U	0.50 U
ICS-DOF-MW7-A	3 - 4'	52	15 J	100	2783	2137	221	4.4 U	200 U	95 U
ICS-DOF-MW7-B	7 - 8'	19 U	19 U	19 U	38	38 U	nd	0.49 U	0.55 U	0.49 U
ICS-DOF-MW7-C	11 - 12'	19 U	19 U	19 U	55	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-DOF-MW8-A	3 - 4'	19 U	19 U	19 U	11	38 U	nd	0.46 U	0.46 U	0.46 U
ICS-DOF-MW8-B	7 - 8'	19 U	19 U	19 U	1135	12	nd	0.50 U	0.50 U	0.50 U
ICS-DOF-MW8-C	11 - 12'	20 U	20 U	20 U	24	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	12 J	19 U	21	66	124	17	0.46 U	0.46 U	0.46 U
ICS-P11-SO-10	9.5 - 11'	19 U	19 U	11 J	50.6	51	1.6	35 U	29 U	4.9 U
ICS-P11-SO-16	15 - 17'	20 U	20 U	20 U	20 U	40 U	nd	0.49 U	0.49 U	0.49 U
ICS-P12-SO-4	3 - 4.5'	20 U	20 U	20 U	20 U	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	19 U	19 U	12 J	19 U	19 U	1.1	0.49 U	0.49 U	0.49 U
ICS-P12-SO-13	12 - 14'	20 U	20 U	20 U	20 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P12-SO-16	15 - 17'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P13-SO-4	4 - 6'	48	13 J	58	163	592	81	2.4 U	2.4 U	2.4 U
ICS-P13-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	0.5 U	0.5 U	0.5 U
ICS-P13-SO-10	9.5 - 11'	20 U	20 U	20 U	20 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P13-SO-17	16.5 - 18'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P14-SO-4	3 - 5'	22	11 J	36	189	327	44	0.48 U	0.48 U	0.48 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	26	13 J	42	364	998	71	0.49 U	0.49 U	0.49 U
ICS-P14-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P15-SO-4	3 - 5'	20 U	20 U	20 U	98	127	3.9	0.47 U	0.47 U	0.47 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	20 U	20 U	20 U	160	20 U	1.6	0.90 U	0.50 U	0.50 U
ICS-P15-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P16-SO-4	3 - 4'	11 J	20 U	14 J	34	121.8	4.7	4.8 U	4.8 U	4.8 U
ICS-P16-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	0.47 U	0.47 U	0.47 U
ICS-P16-SO-10	9 - 10'	20 U	20 U	20 U	20 U	40 U	nd	0.48 U	0.48 U	0.48 U
ICS-P16-SO-16	15 - 17'	20 U	20 U	20 U	20 U	39 U	nd	0.48 U	0.48 U	0.48 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-P17-SO-4	4.5 - 6.5'	19 U	19 U	19 U	1069	117	0.30	4.8 U	4.8 U	4.8 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	19 U	19 U	19 U	24	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	3900	1700	3900	22498	66600	11151	2.7 U	14 U	2.7 U
ICS-P18-SO-7	6 - 8'	48	19 U	62	4684	1250	100	0.48 U	0.85 U	0.48 U
ICS-P18-SO-10	9 - 10'	21 J	39 U	33 J	3387	1182	57	0.48 U	1.4 U	0.48 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	180	80 J	180	5260	7250	862	16 U	16 U	32 U
ICS-P18-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	0.48 U	0.48 U	0.48 U
ICS-P18-SO-32	31 - 33'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	28	18 J	32	733	1318	202	2.4 U	2.4 U	2.4 U
ICS-P19-SO-10	9 - 10'	19 U	19 U	19 U	24.6	38 U	nd	4.9 U	4.9 U	4.9 U
ICS-P19-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	0.49 U	0.49 U	0.49 U
ICS-P19-SO-16	15 - 17'	20 U	20 U	20 U	20 U	39 U	nd	0.50 U	0.50 U	0.50 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	19 U	19 U	19 U	39	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P20-SO-10	9.5 - 11'	19 U	19 U	19 U	19 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P21-SO-7	6 - 8'	180	65	190	5710	4255	483	4.7 U	4.7 U	4.7 U
ICS-P21-SO-13	12 - 14'	79	40	74	688	1623	223	4.8 U	4.8 U	4.8 U
ICS-P21-SO-16	15 - 17'	19 U	19 U	19 U	29	39 U	nd	0.50 U	0.50 U	0.50 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	19 U	19 U	19 U	22	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P22-SO-4	3 - 4.5'	19 U	19 U	19 U	894	121	4	0.47 U	0.47 U	0.47 U
ICS-P22-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	0.49 U	12 U	0.49 U
ICS-P22-SO-10	9 - 11'	19 U	19 U	19 U	34	42	2	0.50 U	0.50 U	0.50 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-P22-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P23-SO-3	2 - 4'	40	14 J	45	19 U	428	64	0.48 U	0.48 U	0.48 U
ICS-P23-SO-10	9.5 - 11	19 U	19 U	19 U	19 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P23-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	0.50 U	0.50 U	0.50 U
ICS-P23-SO-16	15 - 17'	20 U	20 U	20 U	20 U	40 U	nd	0.48 U	0.48 U	0.48 U
ICS-P24-SO-4	3 - 5'	18 U	18 U	18 U	19 U	65	2	0.50 U	0.50 U	0.50 U
ICS-P24-SO-10	9 - 10.5'	30	19 U	22	1113	832	127	2.5 U	8.5 U	2.5 U
ICS-P24-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	0.49 U	0.49 U	0.49 U
ICS-P24-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P25-SO-3	1 - 3'	59	16 J	65	177	853	120	2.4 U	2.4 U	2.4 U
ICS-P25-SO-10	9 - 11'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.54 U	0.48 U
ICS-P26-SO-4	3 - 5'	29	13 J	39	167	519	76	0.47 U	0.47 U	0.47 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	20 U	20 U	20 U	20 U	40 U	nd	0.48 U	0.48 U	0.48 U
ICS-P26-SO-16	15 - 17'	20 U	20 U	20 U	20 U	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P27-SO-3	1 - 3'	28	9.7 J	39	110	366.7	42	2.5 U	2.5 U	2.5 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-P27-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	0.49 U	0.49 U	0.49 U
ICS-P27-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P27-SO-32	31 - 33'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P28-SO-4	3 - 5'	20 U	20 U	20 U	338	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P28-SO-10	8.5 - 10'	20 U	20 U	20 U	28	39 U	nd	0.49 U	0.49 U	0.49 U
ICS-P28-SO-16	15 - 17'	18 U	18 U	18 U	18 U	37 U	nd	0.47 U	0.47 U	0.47 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	19 U	19 U	19 U	19 U	37 U	nd	0.47 U	0.47 U	0.47 U
ICS-P29-SO-4	3 - 4'	230 U	230 U	230 U	4220	3910	72	30 U	170 U	30 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	nd	-----	-----	-----
ICS-P29-SO-10	9 - 10'	19 U	19 U	19 U	723	206.5	11	4.9 U	4.9 U	4.9 U
ICS-P29-SO-16	15 - 17'	11 J	19 U	16 J	1851	807	45	0.98 U	1.6 U	0.98 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-DUP2	P29-SO-16	19 U	19 U	11 J	1562	647	37	0.98 U	1.5 U	0.98 U
ICS-P29-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	0.62 U	3.5 U	0.48 U
ICS-P29-SO-32	31 - 33'	20 U	20 U	20 U	20 U	40 U	nd	0.47 U	0.47 U	0.47 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	580	220	850	2001	9690	1823	2.5 U	5.4 U	2.5 U
ICS-P30-SO-10	9 - 10'	80	29	92	1448	1991	211	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	150	46	180	1152	3216	375	2.5 U	5.9 U	2.5 U
ICS-P30-SO-16	15 - 16.5'	20 U	20 U	20 U	43.8	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	18 U	18 U	18 U	18 U	46	1.8	0.47 U	0.47 U	0.47 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P31-SO-10	9 - 11'	19 U	19 U	19 U	42	137	3.5	0.47 U	0.47 U	0.47 U
ICS-P31-SO-16	15 - 17'	20 U	20 U	20 U	20 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-P31-SO-32	31 - 33'	19 U	19 U	19 U	19 U	38 U	nd	0.49 U	0.49 U	0.49 U
ICS-P32-SO-16	16 - 17.5'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-SO-DUPL3	P32-SO-16	18 U	18 U	18 U	18 U	37 U	nd	0.47 U	0.47 U	0.47 U
ICS-P32-SO-32	31 - 33'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P33-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.50 U	0.50 U	0.50 U
ICS-P33-SO-32	31 - 33'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-P34-SO-4	3 - 5'	30	15 J	30	39	392	76	0.48 U	0.48 U	0.48 U
ICS-P34-SO-10	9 - 11'	20 U	20 U	20 U	20 U	39 U	nd	0.48 U	0.48 U	0.48 U
ICS-P34-SO-16	15 - 17'	19 U	19 U	19 U	19 U	39 U	nd	0.50 U	0.50 U	0.50 U
ICS-P35-SO-4	3 - 5'	19 U	19 U	8.6 J	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-P35-SO-10	9 - 11'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-P35-SO-16	15 - 17'	20 U	20 U	20 U	20 U	39 U	nd	0.95 U	0.95 U	0.95 U
ICS-P36-SO-4	3 - 4'	19 U	19 U	6.5 J	19 U	37 U	nd	0.47 U	0.47 U	0.47 U
ICS-P36-SO-10	10 - 12'	19 U	19 U	19 U	19 U	38 U	nd	12 U	10 U	3.7 U
ICS-P36-SO-16	15 - 17'	19 U	19 U	19 U	19 U	38 U	nd	5.7 U	5.7 U	2.2 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Indeno(1,2,3-cd)pyrene µg/kg, dry	Dibenz(a,h)-anthracene µg/kg, dry	Benzo(g,h,i)-perylene µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	BaPEq µg/kg, dry	alpha-BHC µg/kg, dry	beta-BHC µg/kg, dry	delta-BHC µg/kg, dry
Screening Level (a)		see BaPEq	see BaPEq	-----	-----	-----	18000	-----	-----	-----
ICS-Ap-10-SO	9 - 10'	19 U	19 U	11 J	19 U	38 U	0.08	0.49 U	0.49 U	0.49 U
ICS-Bp-10-SO	9 - 10'	20 U	20 U	20 U	20	39 U	0.65	0.49 U	0.49 U	0.49 U
ICS-Cp-10-SO	9 - 10'	15 J	19 U	21	168	251	7.2	0.48 U	0.96 U	0.48 U
ICS-Du-10-SO	9 - 10'	19 U	19 U	19 U	28.7	79	1.7	0.49 U	0.49 U	0.49 U
ICS-Du-16-SO	15 - 17'	19 U	19 U	19 U	19 U	37 U	nd	0.48 U	0.48 U	0.48 U
ICS-FL-4-SO	3 - 5'	19 U	19 U	19 U	19 U	38 U	nd	0.47 U	0.47 U	0.47 U
ICS-FL-7-SO	6 - 8'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-FL-10-SO	9 - 10'	20 U	20 U	20 U	20 U	40 U	nd	0.50 U	0.50 U	0.50 U
ICS-FL-13-SO	12 - 14'	20 U	20 U	20 U	20 U	40 U	nd	0.48 U	0.48 U	0.48 U
ICS-FL-16-SO	15.5 - 17'	19 U	19 U	19 U	19 U	38 U	nd	0.48 U	0.48 U	0.48 U
ICS-FL-21-SO	20 - 22'	20 U	20 U	20 U	20 U	39 U	nd	0.47 U	0.47 U	0.47 U
ICS-Ju-4-SO	3 - 4'	180	120 U	210	14,500	12,490	1719	29 U	130 U	29 U
ICS-Ju-10-SO	10- 11'	21	20 U	30	246	514	44	0.47 U	0.47 U	0.47 U
ICS-Ju-15-SO	15 - 16	19 U	19 U	19 U	72.5	242	21	0.50 U	0.50 U	0.50 U
Number of Samples		140	140	140	140	140	140	147	147	147
Number of Detections		34	21	40	71	58	60	0	0	0
Percent Detected		24.3%	15.0%	28.6%	50.7%	41.4%	42.9%	0.0%	0.0%	0
Highest Conc.		4500	2300	4400	122600	121200	15990	0	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-LP1-SO-A	3 - 5'	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U	4.9 U	4.9 U	4.9 U	4.9 U
ICS-LP1-SO-B	6.5 - 8'	17 U	19 U	17 U	180 U	17 U	96 U	430	34 U	86 U
ICS-LP1-SO-C	10.5 - 12'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-LP2-SO-A	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	2.7 U	0.94 U	1.4 U	3.7 U
ICS-LP2-SO-B	5.5 - 7.5'	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U	0.92 U	0.92 U
ICS-LP2-SO-C	8 - 10'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-LP3-SO-A	3 - 5'	3.3 U	3.3 U	3.3 U	110 U	130 U	12 U	79 U	120 U	49 U
ICS-LP3-SO-B	6 - 8'	120 U	620 U	120 U	2400 U	120 U	240 U	2900 JP	1200 U	1000 U
ICS-LP3-SO-C	10 - 12'	4.9 U	20 U	4.9 U	70 U	4.9 U	56 U	170 JP	47 U	9.8 U
ICS-LP3-SO-D	15 - 16'	2.4 U	28 U	2.4 U	28 U	2.4 U	17 U	50 J	4.9 U	4.9 U
ICS-LP4-SO-A	8 - 10'	20 U	120 U	20 U	220 U	20 U	41 U	380 JP	250 U	130 U
ICS-LP4-SO-B	10 - 12'	2.8 U	12 U	2.8 U	46 U	2.8 U	20 U	94 JP	30 U	16 U
ICS-LP4-SO-C	14 - 15'	0.46 U	0.46 U	0.46 U	0.91 U	0.46 U	0.91 U	5.6	0.91 U	0.91 U
ICS-DOF-MW1-A	4 - 5'	0.47 U	0.47 U	0.47 U	3.9 U	0.47 U	12 U	0.94 U	25 U	0.94 U
ICS-DOF-MW1-B	6.5 - 7.5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-DOF-MW1-C	11 - 12'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	2.0 U	0.97 U
ICS-DOF-MW2-A	2 - 3'	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-DOF-MW2-B	8 - 9'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-DOF-MW2-C	12 - 13'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-DOF-MW3-A	2 - 4'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-DOF-DUP1	dup of MW3-A	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-DOF-MW3-B	7 - 8'	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U	0.92 U	0.92 U
ICS-DOF-MW4-A	3 - 4'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-DOF-MW4-B	7 - 8'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-DOF-MW4-C	10 - 11'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-DOF-MW5-A	3 - 4'	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U	0.92 U	0.92 U
ICS-DOF-MW5-B	7 - 8'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-DOF-MW6-A	3 - 5'	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U	4.9 U	4.9 U	4.9 U	19 U
ICS-DOF-MW6-B	6 - 8'	2.4 U	2.4 U	2.4 U	10 U	2.4 U	36 U	4.8 U	48 U	68 U
ICS-DOF-DUP2	dup of MW6-B	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U	33 U	4.8 U	44 U	27 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-DOF-MW6-C	9 - 10'	0.50 U	0.50 U	0.50 U	0.99 U	6.0 U	0.99 U	0.99 U	2.0 U	3.1 U
ICS-DOF-MW7-A	3 - 4'	4.4 U	4.4 U	4.4 U	15 U	40 U	8.8 U	23 JP	8.8 U	8.8 U
ICS-DOF-MW7-B	7 - 8'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	1.8 U
ICS-DOF-MW7-C	11 - 12'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-DOF-MW8-A	3 - 4'	0.46 U	0.46 U	0.68	0.93 U	0.46 U	0.93 U	0.93 U	0.93 U	0.93 U
ICS-DOF-MW8-B	7 - 8'	0.50 U	0.50 U	1.2	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-DOF-MW8-C	11 - 12'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	0.46 U	0.46 U	0.46 U	0.93 U	0.46 U	0.93 U	0.93 U	0.93 U	0.93 U
ICS-P11-SO-10	9.5 - 11'	85 U	4.9 U	4.9 U	9.7 U	4.9 U	9.7 U	9.7 U	9.7 U	9.7 U
ICS-P11-SO-16	15 - 17'	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P12-SO-4	3 - 4.5'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P12-SO-13	12 - 14'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P12-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P13-SO-4	4 - 6'	2.4 U	2.4 U	2.4 U	18 U	2.4 U	4.9 U	4.9 U	6.6 U	4.9 U
ICS-P13-SO-7	6 - 8'	0.5 U	0.5 U	0.5 U	0.99 U	0.5 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P13-SO-10	9.5 - 11'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P13-SO-17	16.5 - 18'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P14-SO-4	3 - 5'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P14-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P15-SO-4	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P15-SO-16	15 - 17'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P16-SO-4	3 - 4'	4.8 U	4.8 U	4.8 U	9.6 U	4.8 U	250 JP	9.6 U	9.6 U	9.6 U
ICS-P16-SO-7	6 - 8'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P16-SO-10	9 - 10'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P16-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-P17-SO-4	4.5 - 6.5'	4.8 U	4.8 U	4.8 U	84 U	4.8 U	650 U	48 U	220 U	9.6 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	9.3 U	18 U	2.7 U	33 U	2.7 U	9.9 U	41 JP	5.4 U	5.4 U
ICS-P18-SO-7	6 - 8'	0.48 U	0.69 U	0.48 U	19 U	0.48 U	7.8 U	14 U	4.0 U	7.4 U
ICS-P18-SO-10	9 - 10'	0.48 U	0.48 U	0.48 U	7.0 U	0.91 U	0.96 U	4.3 U	0.96 U	0.96 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	16 U	16 U	16 U	70 U	16 U	32 U	280	32 U	32 U
ICS-P18-SO-22	21 - 23'	0.48 U	0.48 U	0.48 U	1.6 U	0.48 U	0.96 U	2.9	0.96 U	0.96 U
ICS-P18-SO-32	31 - 33'	0.48 U	0.48 U	0.48 U	0.96 U	1.2 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	2.4 U	2.4 U	2.4 U	12 U	2.4 U	4.9 U	4.9 U	4.9 U	4.9 U
ICS-P19-SO-10	9 - 10'	4.9 U	6.4 U	4.9 U	9.8 U	4.9 U	12 U	60	9.8 U	9.8 U
ICS-P19-SO-13	12 - 14'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P19-SO-16	15 - 17'	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P20-SO-10	9.5 - 11'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P21-SO-7	6 - 8'	4.7 U	36 U	4.7 U	47 U	4.7 U	57 U	130 JP	62 U	31 U
ICS-P21-SO-13	12 - 14'	4.8 U	12 U	4.8 U	28 U	4.8 U	41 U	98 JP	9.6 U	9.6 U
ICS-P21-SO-16	15 - 17'	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P22-SO-4	3 - 4.5'	0.47 U	0.54 U	0.47 U	1.3 U	0.47 U	2.9 U	1.9 JP	1.6 U	0.94 U
ICS-P22-SO-7	6 - 8'	3.9	1.2 U	0.49 U	8.1 U	0.49 U	0.98 U	8.2 U	18 U	4.2 U
ICS-P22-SO-10	9 - 11'	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-P22-SO-16	15 - 17'	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P23-SO-3	2 - 4'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	6.4 U	2.1 U	2.7 U	0.96 U
ICS-P23-SO-10	9.5 - 11	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	1.5	0.94 U	0.94 U
ICS-P23-SO-13	12 - 14'	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P23-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P24-SO-4	3 - 5'	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P24-SO-10	9 - 10.5'	2.5 U	10 U	2.5 U	50 U	14 U	50 U	140	18 U	49 U
ICS-P24-SO-13	12 - 14'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P24-SO-16	15 - 17'	0.49 U	0.49 U	0.49 U	2.2 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P25-SO-3	1 - 3'	2.4 U	2.4 U	2.4 U	16 U	2.4 U	49 U	4.8 U	29 U	4.8 U
ICS-P25-SO-10	9 - 11'	0.48 U	0.48 U	0.48 U	3.7 U	0.48 U	10 U	4.0 U	8.9 U	0.96 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P26-SO-4	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	1.9 U	0.94 U	0.94 U	0.94 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P26-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P27-SO-3	1 - 3'	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	87	5.0 U	5.0 U	5.0 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	1.6	0.95 U	0.95 U	0.95 U
ICS-P27-SO-13	12 - 14'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P27-SO-16	15 - 17'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P27-SO-32	31 - 33'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P28-SO-4	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P28-SO-10	8.5 - 10'	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P28-SO-16	15 - 17'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P29-SO-4	3 - 4'	47 U	140 U	30 U	390 U	30 U	97 U	250 U	61 U	200 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	4.9 U	6.0 U	4.9 U	21 U	4.9 U	9.7 U	14	9.7 U	9.7 U
ICS-P29-SO-16	15 - 17'	0.98 U	1.8 U	0.98 U	8.3 U	0.98 U	2.0 U	27 JP	2.0 U	3.8 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-DUP2	P29-SO-16	0.98 U	1.8 U	0.98 U	7.3 U	0.98 U	2.0 U	24 JP	2.0 U	3.1 U
ICS-P29-SO-22	21 - 23'	1.7 U	5.4 U	7.1 U	9.6 U	0.48 U	4.8 U	220	9.6 U	5.6 U
ICS-P29-SO-32	31 - 33'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	2.5 U	7.1 U	2.5 U	4.9 U	2.5 U	4.9 U	28	4.9 U	4.9 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	2.5 U	5.7 U	2.5 U	5.0 U	2.5 U	5.0 U	23	5.0 U	5.0 U
ICS-P30-SO-16	15 - 16.5'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	1.8 U	0.94 U	0.94 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P31-SO-10	9 - 11'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P31-SO-16	15 - 17'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P31-SO-32	31 - 33'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P32-SO-16	16 - 17.5'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-SO-DUPL3	P32-SO-16	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P32-SO-32	31 - 33'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P33-SO-16	15 - 17'	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P33-SO-32	31 - 33'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-P34-SO-4	3 - 5'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	2.7 U	0.95 U	6.9 U	0.95 U
ICS-P34-SO-10	9 - 11'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-P34-SO-16	15 - 17'	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-P35-SO-4	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-P35-SO-10	9 - 11'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-P35-SO-16	15 - 17'	0.95 U	0.95 U	0.95 U	1.9 U	0.95 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P36-SO-4	3 - 4'	0.47 U	0.47 U	0.47 U	0.93 U	0.47 U	0.93 U	0.93 U	0.93 U	0.93 U
ICS-P36-SO-10	10 - 12'	0.49 U	0.49 U	0.49 U	4.1 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-P36-SO-16	15 - 17'	3.8 U	0.49 U	1.4 U	3.1 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	gamma-BHC (Lindane) µg/kg, dry	Heptachlor µg/kg, dry	Aldrin µg/kg, dry	Heptachlor epoxide µg/kg, dry	Endosulfan I µg/kg, dry	Dieldrin µg/kg, dry	4,4'-DDE µg/kg, dry	Endrin µg/kg, dry	Endosulfan II µg/kg, dry
Screening Level (a)		119	29.2	7.7	14.4	-----	8.2	386	1050	-----
ICS-Ap-10-SO	9 - 10'	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U
ICS-Bp-10-SO	9 - 10'	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U
ICS-Cp-10-SO	9 - 10'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-Du-10-SO	9 - 10'	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-Du-16-SO	15 - 17'	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U
ICS-FL-4-SO	3 - 5'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-FL-7-SO	6 - 8'	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U
ICS-FL-10-SO	9 - 10'	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-FL-13-SO	12 - 14'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-FL-16-SO	15.5 - 17'	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U
ICS-FL-21-SO	20 - 22'	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U
ICS-Ju-4-SO	3 - 4'	29 U	130 U	29 U	58 U	29 U	58 U	400 U	77 U	380 U
ICS-Ju-10-SO	10- 11'	0.47 U	0.47 U	0.47 U	1.6 U	0.47 U	0.95 U	3.8	0.95 U	0.95 U
ICS-Ju-15-SO	15 - 16	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U
Number of Samples		147	147	147	147	147	147	147	147	147
Number of Detections		1	0	2	0	0	3	24	0	0
Percent Detected		0.7%	0.0%	1.4%	0.0%	0.0%	2.0%	16.3%	0.0%	0.0%
Highest Conc.		3.9	0	1.2	0	0	250	2900	0	0

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-LP1-SO-A	3 - 5'	4.9 U	4.9 U	4.9 U	25 U	4.9 U	4.9 U	2.5 U	2.5 U	490 U	4.9 U
ICS-LP1-SO-B	6.5 - 8'	1000	34 U	270 U	170 U	120 U	74 U	83 U	17 U	3400 U	34 U
ICS-LP1-SO-C	10.5 - 12'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U
ICS-LP2-SO-A	3 - 5'	0.94 U	0.94 U	4.6 U	4.7 U	4.2 U	2.3 U	0.47 U	0.47 U	94 U	0.94 U
ICS-LP2-SO-B	5.5 - 7.5'	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U
ICS-LP2-SO-C	8 - 10'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U
ICS-LP3-SO-A	3 - 5'	6.7 U	6.7 U	180 U	33 U	6.7 U	17 U	38 U	3.3 U	670 U	6.7 U
ICS-LP3-SO-B	6 - 8'	3000 JP	240 U	2900 U	1200 U	240 U	810 U	690 U	120 U	24,000 U	240 U
ICS-LP3-SO-C	10 - 12'	56 JP	9.8 U	62 U	49 U	30 U	18 U	26 U	4.9 U	980 U	9.8 U
ICS-LP3-SO-D	15 - 16'	24 J	4.9 U	35 U	24 U	20 U	4.9 U	2.4 U	2.4 U	120 U	4.9 U
ICS-LP4-SO-A	8 - 10'	970	41 U	450 U	200 U	41 U	210 U	20 U	20 U	4100 U	41 U
ICS-LP4-SO-B	10 - 12'	60 JP	5.5 U	56 U	28 U	5.5 U	20 U	9.8 U	2.8 U	550 U	21 U
ICS-LP4-SO-C	14 - 15'	2.7	0.91 U	2.5 U	4.6 U	0.91 U	0.91 U	0.46 U	0.46 U	91 U	0.91 U
ICS-DOF-MW1-A	4 - 5'	4.6 U	0.94 U	42 U	4.7 U	31 U	17 U	0.47 U	0.47 U	94 U	0.94 U
ICS-DOF-MW1-B	6.5 - 7.5'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U
ICS-DOF-MW1-C	11 - 12'	0.97 U	0.97 U	3.2 U	4.8 U	0.97 U	1.4 U	0.48 U	0.48 U	97 U	0.97 U
ICS-DOF-MW2-A	2 - 3'	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	97 U	0.97 U
ICS-DOF-MW2-B	8 - 9'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U
ICS-DOF-MW2-C	12 - 13'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U
ICS-DOF-MW3-A	2 - 4'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	95 U	0.95 U
ICS-DOF-DUP1	dup of MW3-A	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	1.2 U	0.47 U	94 U	0.94 U
ICS-DOF-MW3-B	7 - 8'	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U
ICS-DOF-MW4-A	3 - 4'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	95 U	0.95 U
ICS-DOF-MW4-B	7 - 8'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U
ICS-DOF-MW4-C	10 - 11'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	97 U	0.97 U
ICS-DOF-MW5-A	3 - 4'	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U
ICS-DOF-MW5-B	7 - 8'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U
ICS-DOF-MW6-A	3 - 5'	4.9 U	4.9 U	10 U	25 U	4.9 U	4.9 U	7.4 U	11 U	490 U	4.9 U
ICS-DOF-MW6-B	6 - 8'	4.8 U	4.8 U	72 U	24 U	4.8 U	43 U	7.5 U	11 U	480 U	4.8 U
ICS-DOF-DUP2	dup of MW6-B	4.8 U	4.8 U	67 U	24 U	59 U	41 U	9.1 U	14 U	480 U	4.8 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-DOF-MW6-C	9 - 10'	0.99 U	0.99 U	2.5 U	5.0 U	0.99 U	8.5 U	0.50 U	0.50 U	99 U	0.99 U
ICS-DOF-MW7-A	3 - 4'	8.8 U	8.8 U	22 U	44 U	23 U	22 U	13 U	4.4 U	880 U	34
ICS-DOF-MW7-B	7 - 8'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	98 U	0.98 U
ICS-DOF-MW7-C	11 - 12'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	98 U	0.98 U
ICS-DOF-MW8-A	3 - 4'	1.7	0.93 U	0.93 U	4.6 U	0.93 U	0.93 U	0.46 U	0.46 U	93 U	0.93 U
ICS-DOF-MW8-B	7 - 8'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	99 U	0.99 U
ICS-DOF-MW8-C	11 - 12'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	0.93 U	0.93 U	0.93 U	4.6 U	0.93 U	0.93 U	0.46 U	0.46 U	23 U	0.93 U
ICS-P11-SO-10	9.5 - 11'	9.7 U	9.7 U	9.7 U	49 U	9.7 U	9.7 U	4.9 U	4.9 U	240 U	9.7 U
ICS-P11-SO-16	15 - 17'	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	25 U	0.99 U
ICS-P12-SO-4	3 - 4.5'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P12-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P12-SO-10	9.8 - 11'	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	24 U	0.97 U
ICS-P12-SO-13	12 - 14'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U
ICS-P12-SO-16	15 - 17'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P13-SO-4	4 - 6'	120 JP	4.9 U	57 U	24 U	17 U	4.9 U	2.4 U	2.4 U	120 U	4.9 U
ICS-P13-SO-7	6 - 8'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.05 U	0.5 U	25 U	0.99 U
ICS-P13-SO-10	9.5 - 11'	0.94 U	0.94 U	0.94 U	4.7 U	1.2 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P13-SO-17	16.5 - 18'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P14-SO-4	3 - 5'	0.95 U	2.4 U	0.95 U	4.8 U	1.4 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P14-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P14-SO-10	10 - 11.5'	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	25 U	0.99 U
ICS-P14-SO-16	15 - 17'	0.95 U	0.95 U	0.48 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P15-SO-4	3 - 5'	0.94 U	0.94 U	1.5 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	23 U	0.94 U
ICS-P15-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P15-SO-10	8.5 - 10'	1.0 U	2.2 U	1.0 U	5.0 U	1.0 U	1.0 U	0.50 U	0.50 U	25 U	1.8 U
ICS-P15-SO-16	15 - 17'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P16-SO-4	3 - 4'	9.6 U	9.6 U	14 U	48 U	9.6 U	9.6 U	4.8 U	4.8 U	240 U	9.6 U
ICS-P16-SO-7	6 - 8'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U
ICS-P16-SO-10	9 - 10'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P16-SO-16	15 - 17'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-P17-SO-4	4.5 - 6.5'	9.6 U	48 U	1600 U	240 U	9.6 U	48 U	4.8 U	4.8 U	240 U	21 U
ICS-P17-SO-7	6.7 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-10	9 - 11'	0.96 U	0.96 U	6.1 U	4.8 U	4.3 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P17-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P17-SO-16	15 - 17'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P17-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-4	3 - 5'	71 JP	5.4 U	27 U	27 U	5.4 U	5.4 U	2.7 U	2.7 U	140 U	5.4 U
ICS-P18-SO-7	6 - 8'	20 U	2.0 U	29 U	4.8 U	6.9 U	3.6 U	3.6 U	13 U	24 U	0.96 U
ICS-P18-SO-10	9 - 10'	8 JP	0.96 U	6.3 U	12 U	2.2 U	3.4 U	1.0 U	1.2 U	24 U	0.96 U
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	450 JP	32 U	280 U	160 U	100 U	32 U	16 U	16 U	790 U	32 U
ICS-P18-SO-22	21 - 23'	0.96 U	0.96 U	2.6 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P18-SO-32	31 - 33'	0.96 U	21 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P18-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-4	3 - 4'	35 JP	4.9 U	18 U	24 U	4.9 U	4.9 U	2.4 U	2.4 U	120 U	4.9 U
ICS-P19-SO-10	9 - 10'	61 JP	9.8 U	16 U	49 U	9.8 U	9.8 U	4.9 U	4.9 U	240 U	9.8 U
ICS-P19-SO-13	12 - 14'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P19-SO-16	15 - 17'	1.0 U	1.0 U	3.3 U	5.0 U	1.0 U	1.0 U	0.50 U	0.50 U	25 U	1.4
ICS-P19-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-3	2 - 4'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P20-SO-10	9.5 - 11'	0.94 U	0.94 U	1.3 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P20-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P20-SO-16	15 - 17'	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	24 U	0.97 U
ICS-P21-SO-7	6 - 8'	290 JP	21 U	130 U	47 U	72 U	9.4 U	4.7 U	4.7 U	230 U	9.4 U
ICS-P21-SO-13	12 - 14'	120 JP	9.6 U	78 U	48 U	25 U	9.6 U	28 U	4.8 U	240 U	9.6 U
ICS-P21-SO-16	15 - 17'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U
ICS-P21-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P21-SO-32	31 - 33'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P22-SO-4	3 - 4.5'	15 JP	4.6 U	7.8 U	4.7 U	5.1 U	3.8 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P22-SO-7	6 - 8'	15 U	0.98 U	15 U	4.9 U	14 U	9.4 U	8.9 U	8.9 U	24 U	2.6 U
ICS-P22-SO-10	9 - 11'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	2.6 U	25 U	0.99 U
ICS-P22-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-P22-SO-16	15 - 17'	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	25 U	0.99 U
ICS-P23-SO-3	2 - 4'	0.96 U	0.96 U	26 U	4.8 U	40 U	18 U	0.48 U	0.48 U	24 U	2.1
ICS-P23-SO-10	9.5 - 11	2.5 JP	0.94 U	2.5 U	4.7 U	2.5 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P23-SO-13	12 - 14'	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.50 U	0.50 U	25 U	1.0 U
ICS-P23-SO-16	15 - 17'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P24-SO-4	3 - 5'	1.0 U	1.0 U	7.3 U	11 U	3.4 U	1.6 U	0.97 U	1.6 U	25 U	1.0 U
ICS-P24-SO-10	9 - 10.5'	480 JP	5.0 U	140 U	200 U	50 U	44 U	8.9 U	7.0 U	120 U	5.0 U
ICS-P24-SO-13	12 - 14'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	25 U	0.98 U
ICS-P24-SO-16	15 - 17'	0.98 U	33 U	0.98 U	4.9 U	2.4 U	2.6 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P25-SO-3	1 - 3'	4.8 U	4.8 U	130 U	24 U	94 U	37 U	6.0 U	15 U	120 U	4.8 U
ICS-P25-SO-10	9 - 11'	0.96 U	0.96 U	19 U	4.8 U	16 U	5.0 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P25-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P25-SO-16	15 - 17'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P26-SO-4	3 - 5'	0.94 U	0.94 U	6.2 U	4.7 U	5.0 U	0.94 U	0.53 U	1.1 U	23 U	0.94 U
ICS-P26-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P26-SO-10	9 - 11'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P26-SO-16	15 - 17'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P27-SO-3	1 - 3'	5.0 U	5.0 U	10 U	25 U	5.0 U	5.0 U	25	29	120 U	5.0 U
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U
ICS-P27-SO-13	12 - 14'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P27-SO-16	15 - 17'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P27-SO-32	31 - 33'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P28-SO-4	3 - 5'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.54 U	0.47 U	24 U	0.94 U
ICS-P28-SO-10	8.5 - 10'	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	24 U	0.97 U
ICS-P28-SO-16	15 - 17'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P28-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P28-SO-32	31 - 33'	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U
ICS-P29-SO-4	3 - 4'	61 U	61 U	590 U	300 U	61 U	61 U	30 U	83 U	1500 U	61 U
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	9.7 U	9.7 U	34 U	49 U	9.7 U	9.7 U	4.9 U	4.9 U	240 U	9.7 U
ICS-P29-SO-16	15 - 17'	2.0 U	2.0 U	10 U	9.8 U	2.0 U	2.0 U	0.98 U	0.98 U	49 U	2.0 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-DUP2	P29-SO-16	2.0 U	2.0 U	8.0 U	9.8 U	2.0 U	2.0 U	0.98 U	0.98 U	49 U	2.0 U
ICS-P29-SO-22	21 - 23'	0.96 U	5.6 U	16 U	48 U	9.3 U	0.96 U	7.7 U	2.4 U	24 U	0.96 U
ICS-P29-SO-32	31 - 33'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P29-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-7	6 - 7'	17	4.9 U	29 U	25 U	15 U	4.9 U	2.5 U	2.5 U	120 U	13 U
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	15	5.0 U	24 U	25 U	15 U	5.0 U	2.5 U	2.5 U	120 U	5.0 U
ICS-P30-SO-16	15 - 16.5'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P30-SO-22	21 - 23'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-32	31 - 33'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P30-SO-42	41 - 43'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-50	49 - 50'	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P31-SO-4	3 - 4'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P31-SO-10	9 - 11'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P31-SO-16	15 - 17'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P31-SO-32	31 - 33'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-P32-SO-16	16 - 17.5'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-SO-DUPL3	P32-SO-16	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P32-SO-32	31 - 33'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P33-SO-16	15 - 17'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U
ICS-P33-SO-32	31 - 33'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-P34-SO-4	3 - 5'	0.95 U	0.95 U	6.4 U	4.8 U	3.5 U	2.3 U	2.5	2.1	24 U	0.95 U
ICS-P34-SO-10	9 - 11'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-P34-SO-16	15 - 17'	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U
ICS-P35-SO-4	3 - 5'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-P35-SO-10	9 - 11'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-P35-SO-16	15 - 17'	1.9 U	1.9 U	1.9 U	9.5 U	1.9 U	1.9 U	0.95 U	0.95 U	48 U	1.9 U
ICS-P36-SO-4	3 - 4'	0.93 U	0.93 U	0.93 U	4.7 U	0.93 U	0.93 U	0.47 U	0.47 U	23 U	0.93 U
ICS-P36-SO-10	10 - 12'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	2.9 U	0.49 U	24 U	5.4 U
ICS-P36-SO-16	15 - 17'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	2.1 U	0.49 U	25 U	4.6 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	4,4'-DDD µg/kg, dry	Endosulfan sulfate µg/kg, dry	4,4'-DDT µg/kg, dry	Methoxy-chlor µg/kg, dry	Endrin ketone µg/kg, dry	Endrin aldehyde µg/kg, dry	trans-Chlordane µg/kg, dry	cis-Chlor-dane µg/kg, dry	Toxa-phene µg/kg, dry	Hexachloro-benzene µg/kg, dry
Screening Level (a)		547	-----	386	17,500	-----	-----	-----	-----	119	82
ICS-Ap-10-SO	9 - 10'	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U
ICS-Bp-10-SO	9 - 10'	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	25 U	0.99 U
ICS-Cp-10-SO	9 - 10'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-Du-10-SO	9 - 10'	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	24 U	0.97 U
ICS-Du-16-SO	15 - 17'	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U
ICS-FL-4-SO	3 - 5'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	23 U	0.94 U
ICS-FL-7-SO	6 - 8'	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U
ICS-FL-10-SO	9 - 10'	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.50 U	0.50 U	25 U	1.0 U
ICS-FL-13-SO	12 - 14'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-FL-16-SO	15.5 - 17'	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U
ICS-FL-21-SO	20 - 22'	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U
ICS-Ju-4-SO	3 - 4'	370 U	140 U	720 U	400 U	410 U	220 U	460	500 J	1400 U	110 U
ICS-Ju-10-SO	10- 11'	4.4	0.95 U	3.4 U	4.7 U	2.4 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U
ICS-Ju-15-SO	15 - 16	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U
Number of Samples		147	147	147	147	147	147	147	147	147	147
Number of Detections		22	0	0	0	0	0	3	3	0	3
Percent Detected		15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	0.0%	2.0%
Highest Conc.		3000	0	0	0	0	0	460	500	0	34

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

JB = estimate; associated value may be biased high due to contribution from laboratory background or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Hexachloro-butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-LP1-SO-A	3 - 5'	4.9 U	3.8 U	3.8 U	17	26	49	3.8 U	3.8 U	92
ICS-LP1-SO-B	6.5 - 8'	34 U	140 U	140 U	4100	4600	1900	140 U	140 U	10600
ICS-LP1-SO-C	10.5 - 12'	0.94 U	3.9 U	3.9 U	10	12	12	3.9 U	3.9 U	34
ICS-LP2-SO-A	3 - 5'	0.94 U	3.8 U	3.8 U	3.8 U	16	33	3.8 U	3.8 U	49
ICS-LP2-SO-B	5.5 - 7.5'	0.92 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-LP2-SO-C	8 - 10'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-LP3-SO-A	3 - 5'	6.7 U	130 U	130 U	1900 U	3300	520 U	130 U	130 U	3300
ICS-LP3-SO-B	6 - 8'	240 U	980 U	980 U	53000	36000	24000	980 U	980 U	113000
ICS-LP3-SO-C	10 - 12'	9.8 U	37 U	37 U	1000	760	310	37 U	37 U	2070
ICS-LP3-SO-D	15 - 16'	4.9 U	39 U	39 U	460	380	210	39 U	39 U	1050
ICS-LP4-SO-A	8 - 10'	41 U	200 U	200 U	7400	4000	3900	200 U	200 U	15300
ICS-LP4-SO-B	10 - 12'	5.5 U	55 U	55 U	810	780	560	55 U	55 U	2150
ICS-LP4-SO-C	14 - 15'	0.91 U	3.8 U	3.8 U	31	21	12	3.8 U	3.8 U	64
ICS-DOF-MW1-A	4 - 5'	0.94 U	3.7 U	3.7 U	9.3 U	83 U	470	3.7 U	3.7 U	470
ICS-DOF-MW1-B	6.5 - 7.5'	0.94 U	3.8 U	3.8 U	3.8 U	5.8	9.8	3.8 U	3.8 U	15.6
ICS-DOF-MW1-C	11 - 12'	0.97 U	3.8 U	3.8 U	6.4	7.6 U	26	3.8 U	3.8 U	32.4
ICS-DOF-MW2-A	2 - 3'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-DOF-MW2-B	8 - 9'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW2-C	12 - 13'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW3-A	2 - 4'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-DUP1	dup of MW3-A	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW3-B	7 - 8'	0.92 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-DOF-MW4-A	3 - 4'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW4-B	7 - 8'	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-DOF-MW4-C	10 - 11'	0.97 U	3.9 U	3.9 U	3.9 U	3.1	2.3	3.9 U	3.9 U	5.4
ICS-DOF-MW5-A	3 - 4'	0.92 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-DOF-MW5-B	7 - 8'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW6-A	3 - 5'	73	19 U	19 U	130	160	180	19 U	19 U	470
ICS-DOF-MW6-B	6 - 8'	52	20 U	20 U	260	390 U	1200	20 U	20 U	1460
ICS-DOF-DUP2	dup of MW6-B	65	19 U	19 U	200	240 U	740	19 U	19 U	940

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Hexachloro- butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-DOF-MW6-C	9 - 10'	0.99 U	4.0 U	4.0 U	9.9	12 U	32	4.0 U	4.0 U	41.9
ICS-DOF-MW7-A	3 - 4'	8.8 U	140 U	140 U	220	210 U	670	140 U	140 U	890
ICS-DOF-MW7-B	7 - 8'	0.98 U	3.9 U	3.9 U	3.2	2.3	4.1	3.9 U	3.9 U	9.6
ICS-DOF-MW7-C	11 - 12'	0.98 U	3.9 U	3.9 U	3.3	2.4	2.5	3.9 U	3.9 U	8.2
ICS-DOF-MW8-A	3 - 4'	0.93 U	3.7 U	3.7 U	3.7 U	5.3	3.1	3.7 U	5.6 U	8.4
ICS-DOF-MW8-B	7 - 8'	0.99 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.9 U	4.9 U
ICS-DOF-MW8-C	11 - 12'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-LP4-NAPL	4 - 5'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P11-SO-4	3 - 4.5'	0.93 U	3.7 U	3.7 U	3.7 U	3.1	3.7 U	3.7 U	3.7 U	3.1
ICS-P11-SO-10	9.5 - 11'	9.7 U	3.9 U	3.9 U	9.8 U	3.9 U	3.9 U	3.9 U	3.9 U	9.8 U
ICS-P11-SO-16	15 - 17'	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P12-SO-4	3 - 4.5'	0.96 U	3.8 U	3.8 U	3.8 U	5.3	3.8 U	3.8 U	3.8 U	5.3
ICS-P12-SO-7	6 - 8'	-----	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P12-SO-10	9.8 - 11'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P12-SO-13	12 - 14'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P12-SO-16	15 - 17'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P13-SO-4	4 - 6'	4.9 U	3.9 U	3.9 U	230	1100	280	3.9 U	3.9 U	1610
ICS-P13-SO-7	6 - 8'	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P13-SO-10	9.5 - 11'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P13-SO-17	16.5 - 18'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P14-SO-4	3 - 5'	0.95 U	3.8 U	3.8 U	24	43	27	3.8 U	3.8 U	94
ICS-P14-SO-7	6 - 8'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P14-SO-10	10 - 11.5'	0.99 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P14-SO-16	15 - 17'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P15-SO-4	3 - 5'	0.94 U	3.7 U	3.7 U	7.5 U	20	5.9	3.7 U	3.7 U	25.9
ICS-P15-SO-7	6 - 8'	-----	3.8 U	3.8 U	5.8 U	5.2	2.3 J	3.8 U	3.8 U	7.5
ICS-P15-SO-10	8.5 - 10'	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	5.0 U
ICS-P15-SO-16	15 - 17'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P16-SO-4	3 - 4'	(see M.8260C result)	3.8 U	3.8 U	13 U	160	23	3.8 U	3.8 U	183
ICS-P16-SO-7	6 - 8'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P16-SO-10	9 - 10'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P16-SO-16	15 - 17'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Hexachloro- butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-P17-SO-4	4.5 - 6.5'	(see M.8260C result)	490 U	490 U	490 U	9800 U	34000	490 U	490 U	34000
ICS-P17-SO-7	6.7 - 8'	-----	130 U	130 U	650 U	2900	5500	130 U	130 U	8400
ICS-P17-SO-10	9 - 11'	(see M.8260C result)	3.8 U	3.8 U	3.8 U	12 U	22	3.8 U	3.8 U	22
ICS-P17-SO-13	12 - 14'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P17-SO-16	15 - 17'	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	2.1	3.8 U	3.8 U	2.1
ICS-P17-SO-22	21 - 23'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P18-SO-4	3 - 5'	5.4 U	22 U	22 U	3500	1600	420	22 U	22 U	5520
ICS-P18-SO-7	6 - 8'	15 U	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-10	9 - 10'	0.96 U	19 U	19 U	110	190	69	19 U	19 U	369
ICS-P18-SO-13	12 - 14'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P18-SO-16	14 - 16'	(see M.8260C result)	20 U	20 U	3600	6100	2000	20 U	20 U	11700
ICS-P18-SO-22	21 - 23'	0.96 U	3.8 U	3.8 U	43	43	27	3.8 U	3.8 U	113
ICS-P18-SO-32	31 - 33'	0.96 U	3.8 U	3.8 U	5.1	3.8	3.8 U	3.8 U	3.8 U	8.9
ICS-P18-SO-42	41 - 43'	-----	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P19-SO-4	3 - 4'	4.9 U	19 U	19 U	660	670	120	19 U	19 U	1450
ICS-P19-SO-10	9 - 10'	(see M.8260C result)	20 U	20 U	340	290	170	20 U	20 U	800
ICS-P19-SO-13	12 - 14'	0.98 U	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P19-SO-16	15 - 17'	1.0 U	20 U	20 U	28	43	60	20 U	20 U	131
ICS-P19-SO-22	21 - 23'	-----	4.0 U	4.0 U	9.9 U	12	26	4.0 U	4.0 U	38
ICS-P20-SO-3	2 - 4'	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	5.1	3.8 U	3.8 U	5.1
ICS-P20-SO-10	9.5 - 11'	0.94 U	3.8 U	3.8 U	13	14	10	3.8 U	3.8 U	37
ICS-P20-SO-13	12 - 14'	-----	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P20-SO-16	15 - 17'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P21-SO-7	6 - 8'	(see M.8260C result)	380 U	380 U	4400	3300	1500	380 U	380 U	9200
ICS-P21-SO-13	12 - 14'	9.6 U	96 U	96 U	1900	1900	500	96 U	96 U	4300
ICS-P21-SO-16	15 - 17'	0.99 U	4.0 U	4.0 U	4.6	4.9	4.0 U	4.0 U	4.0 U	9.5
ICS-P21-SO-22	21 - 23'	-----	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P21-SO-32	31 - 33'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P22-SO-4	3 - 4.5'	0.94 U	3.7 U	3.7 U	65	120	98	3.7 U	3.7 U	283
ICS-P22-SO-7	6 - 8'	2.8 U	20 U	20 U	370	540	240	20 U	20 U	1150
ICS-P22-SO-10	9 - 11'	0.99 U	4.0 U	4.0 U	13	19	16	4.0 U	4.0 U	48
ICS-P22-SO-13	12 - 14'	-----	3.9 U	3.9 U	3.9 U	4.1	2.5 J	3.9 U	3.9 U	6.6

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Hexachloro-butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-P22-SO-16	15 - 17'	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P23-SO-3	2 - 4'	0.96 U	3.8 U	3.8 U	3.8 U	96 U	520	3.8 U	3.8 U	520
ICS-P23-SO-10	9.5 - 11	0.94 U	3.8 U	3.8 U	28	23	14	3.8 U	3.8 U	65
ICS-P23-SO-13	12 - 14'	1.0 U	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P23-SO-16	15 - 17'	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P24-SO-4	3 - 5'	1.0 U	4.0 U	4.0 U	6.0 U	42	58	4.0 U	4.0 U	100
ICS-P24-SO-10	9 - 10.5'	5.0 U	4.0 U	4.0 U	980	1400	420	4.0 U	4.0 U	2800
ICS-P24-SO-13	12 - 14'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P24-SO-16	15 - 17'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P25-SO-3	1 - 3'	4.8 U	38 U	38 U	38 U	1600	2200	38 U	38 U	3800
ICS-P25-SO-10	9 - 11'	(see M.8260C result)	3.8 U	3.8 U	29 U	220	300	3.8 U	3.8 U	520
ICS-P25-SO-13	12 - 14'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P25-SO-16	15 - 17'	(see M.8260C result)	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P26-SO-4	3 - 5'	1.3 U	3.8 U	3.8 U	18	53	57	3.8 U	3.8 U	128
ICS-P26-SO-7	6 - 8'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P26-SO-10	9 - 11'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P26-SO-16	15 - 17'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P27-SO-3	1 - 3'	5.0 U	4.0 U	4.0 U	4.0 U	99 U	40	4.0 U	4.0 U	40
ICS-P27-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-11	9 - 11'	0.95 U	3.8 U	3.8 U	3.8 U	5.7 U	3.4	3.8 U	3.8 U	3.4
ICS-P27-SO-13	12 - 14'	0.98 U	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P27-SO-16	15 - 17'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P27-SO-32	31 - 33'	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P28-SO-4	3 - 5'	0.94 U	3.8 U	3.8 U	3.8 U	4.7 U	5.4	3.8 U	3.8 U	5.4
ICS-P28-SO-10	8.5 - 10'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	5.1	3.9 U	3.9 U	5.1
ICS-P28-SO-16	15 - 17'	0.94 U	3.8 U	3.8 U	3.8 U	9.4 U	13	3.8 U	3.8 U	13
ICS-P28-SO-22	21 - 23'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P28-SO-32	31 - 33'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P29-SO-4	3 - 4'	(see M.8260C result)	24 U	24 U	17000	9700	5600	24 U	24 U	32300
ICS-P29-SO-7	6 - 8'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P29-SO-10	9 - 10'	(see M.8260C result)	3.9 U	3.9 U	460	320	290	3.9 U	3.9 U	1070
ICS-P29-SO-16	15 - 17'	2.0 U	3.9 U	3.9 U	150	170	45	3.9 U	3.9 U	365

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Hexachloro- butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-DUP2	P29-SO-16	2.0 U	3.9 U	3.9 U	150	160	32	3.9 U	3.9 U	342
ICS-P29-SO-22	21 - 23'	0.96 U	19 U	19 U	530	600	140	19 U	19 U	1270
ICS-P29-SO-32	31 - 33'	0.94 U	3.8 U	3.8 U	4.9	2.6	2.8	3.8 U	3.8 U	10.3
ICS-P29-SO-42	41 - 43'	-----	3.8 U	3.8 U	6.4	5.0	3.0 J	3.8 U	3.8 U	14.4
ICS-P29-SO-50	49 - 50'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P30-SO-7	6 - 7'	4.9 U	3.9 U	3.9 U	450	330	200	3.9 U	3.9 U	980
ICS-P30-SO-10	9 - 10'	-----	-----	-----	-----	-----	-----	-----	-----	-----
ICS-P30-SO-13	12.5 - 13.5'	5.0 U	4.0 U	4.0 U	530	400	230	4.0 U	4.0 U	1160
ICS-P30-SO-16	15 - 16.5'	0.97 U	3.9 U	3.9 U	19 U	12 U	4.8 U	3.9 U	3.9 U	19 U
ICS-P30-SO-22	21 - 23'	-----	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P30-SO-32	31 - 33'	0.94 U	3.8 U	3.8 U	5.3	6	3.8 U	3.8 U	3.8 U	11.3
ICS-P30-SO-42	41 - 43'	-----	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P30-SO-50	49 - 50'	-----	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P31-SO-4	3 - 4'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-10	9 - 11'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-16	15 - 17'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-32	31 - 33'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P32-SO-16	16 - 17.5'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-SO-DUPL3	P32-SO-16	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P32-SO-32	31 - 33'	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P33-SO-16	15 - 17'	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P33-SO-32	31 - 33'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P34-SO-4	3 - 5'	0.95 U	3.8 U	3.8 U	19 U	57.0 JP	60	3.8 U	3.8 U	117
ICS-P34-SO-10	9 - 11'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P34-SO-16	15 - 17'	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P35-SO-4	3 - 5'	0.94 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-P35-SO-10	9 - 11'	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P35-SO-16	15 - 17'	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P36-SO-4	3 - 4'	0.93 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P36-SO-10	10 - 12'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P36-SO-16	15 - 17'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U

TABLE H.4a - Results of Soil Sample Analyses - 2012 to 2015

 ICS/NW Cooperage Site
 Seattle, Washington

Sample Location	Depth (feet)	Hexachloro- butadiene µg/kg, dry	Aroclor 1016 µg/kg, dry	Aroclor 1242 µg/kg, dry	Aroclor 1248 µg/kg, dry	Aroclor 1254 µg/kg, dry	Aroclor 1260 µg/kg, dry	Aroclor 1221 µg/kg, dry	Aroclor 1232 µg/kg, dry	Total Detected PCBs µg/kg, dry
Screening Level (a)		1680	-----	-----	-----	-----	-----	-----	-----	10,000
ICS-Ap-10-SO	9 - 10'	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Bp-10-SO	9 - 10'	0.99 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Cp-10-SO	9 - 10'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-Du-10-SO	9 - 10'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Du-16-SO	15 - 17'	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FL-4-SO	3 - 5'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FL-7-SO	6 - 8'	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-FL-10-SO	9 - 10'	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.9 J	4.0 U	4.0 U	4.0 U
ICS-FL-13-SO	12 - 14'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FL-16-SO	15.5 - 17'	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FL-21-SO	20 - 22'	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-Ju-4-SO	3 - 4'	98 U	120 U	120 U	19,000	15,000	5800	120 U	120 U	39,800
ICS-Ju-10-SO	10- 11'	0.95 U	3.8 U	3.8 U	40	48	19	3.8 U	3.8 U	107
ICS-Ju-15-SO	15 - 16	0.99 U	4.0 U	4.0 U	6.2	5.8	1.4 J	4.0 U	4.0 U	13.4
Number of Samples		134	162	162	162	162	162	162	162	162
Number of Detections		3	0	0	50	62	70	0	0	78
Percent Detected		2.2%	0.0%	0.0%	30.9%	38.3%	43.2%	0.0%	0.0%	48.1%
Highest Conc.		73	0	0	53000	36000	34000	0	0	113000

Notes: JM = estimate associated with manual evaluation; see narrative.

J = estimate associated with value less than the verifiable lower quantitation limit.

JQ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

JR = estimate; due to low matrix spike recovery. Value likely biased low.

 JB = estimate; associated value may be biased high due to contribution from laboratory background
 or method blank

JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

(a) - Based on industrial land use

TABLE H.4b - BaPEq-TEQ Calculations - 2012 to 2015 Soil Data

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	Benzo(a)- anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo- fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)- pyrene µg/kg, dry	Adjusted Conc. TEF=1.0	Indeno(1,2,3- cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)- anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	Sum TEQ BaPEq
ICS-LP1-SO-A	3 - 5'	10/15/12	VN72	34	3.4	53	0.53	93	9.3	62	62	51	5.1	11 J	11	91
ICS-LP1-SO-B	6.5 - 8'	10/15/12	VN72	220	22	350	3.5	510	51	230	230	110	11	63 U		318
ICS-LP1-SO-C	10.5 - 12'	10/15/12	VN72	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-LP2-SO-A	3 - 5'	10/15/12	VN72	21	2.1	38	0.38	56	5.6	25	25	23	2.3	18 U		35
ICS-LP2-SO-B	5.5 - 7.5'	10/15/12	VN72	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-LP2-SO-C	8 - 10'	10/15/12	VN72	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-LP3-SO-A	3 - 5'	10/15/12	VN72	88	8.8	110	1.1	270	27	150	150	170	17	48	48	252
ICS-LP3-SO-B	6 - 8'	10/15/12	VN72	13,000	1300	14,000	140	18,000	1800	10,000	10000	4500	450	2300	2300	15990
ICS-LP3-SO-C	10 - 12'	10/15/12	VN72	49	4.9	64	0.64	78	7.8	38	38	16 J	1.6	18 U		53
ICS-LP3-SO-D	15 - 16'	10/15/12	XD56	46	4.6	54	0.54	78	7.8	40	40	22	2.2	19 U		55
ICS-LP4-SO-A	8 - 10'	10/15/12	VN72	240	24	300	3	350	35	200	200	99	9.9	34 J	34	306
ICS-LP4-SO-B	10 - 12'	10/15/12	VN72	50	5	79	0.79	84	8.4	41	41	19 U		19 U		55
ICS-LP4-SO-C	14 - 15'	10/15/12	VN72	18 U		18 U		36 U		18 U		18 U		18 U		nd
ICS-DOF-MW1-A	4 - 5'	10/15/12	VN71	12 J	1.2	17 J	0.17	20 J	2	20 U		20 U		20 U		3.4
ICS-DOF-MW1-B	6.5 - 7.5'	10/15/12	VN71	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW1-C	11 - 12'	10/15/12	VN71	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-DOF-MW2-A	2 - 3'	10/16/12	VO10	18 U		18 U		37 U		18 U		18 U		18 U		nd
ICS-DOF-MW2-B	8 - 9'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW2-C	12 - 13'	10/16/12	VO10	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-DOF-MW3-A	2 - 4'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-DUP1	dup of MW3-A	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW3-B	7 - 8'	10/16/12	VO10	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-DOF-MW4-A	3 - 4'	10/17/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW4-B	7 - 8'	10/17/12	VO10	19 U		10 J	0.1	38 U		19 U		19 U		19 U		0.1
ICS-DOF-MW4-C	10 - 11'	10/17/12	VO10	19 J	1.9	23	0.23	27 J	2.7	14 J	14	20 U		20 U		19
ICS-DOF-MW5-A	3 - 4'	10/17/12	VO11	18 U		13 J	0.13	9 J	0.9	18 U		18 U		18 U		1.0
ICS-DOF-MW5-B	7 - 8'	10/17/12	VO11	11 J	1.1	12 J	0.12	13 J	1.3	20 U		20 U		20 U		2.5
ICS-DOF-MW6-A	3 - 5'	10/17/12	VO11	100 U		100 U		88 J	8.8	100 U		100 U		100 U		8.8
ICS-DOF-MW6-B	6 - 8'	10/17/12	VO11	29 J	2.9	62	0.62	31 J	3.1	44 U		44 U		44 U		6.6
ICS-DOF-DUP2	dup of MW6-B	10/17/12	VO11	70	7	120	1.2	42 J	4.2	61 U		61 U		61 U		12
ICS-DOF-MW6-C	9 - 10'	10/17/12	VO11	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-DOF-MW7-A	3 - 4'	10/16/12	VO10	250	25	220	2.2	240	24	150	150	52	5.2	15 J	15	221
ICS-DOF-MW7-B	7 - 8'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW7-C	11 - 12'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW8-A	3 - 4'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW8-B	7 - 8'	10/16/12	VO10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-DOF-MW8-C	11 - 12'	10/16/12	VO10	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-LP4-NAPL	4 - 5'	10/15/12	VN72	-----		-----		-----		-----		-----		-----		-----
ICS-P11-SO-4	3 - 4.5'	11/17/14	ZK75	12 J	1.2	12 J	0.12	23 J	2.3	12 J	12	12 J	1.2	19 U		17
ICS-P11-SO-10	9.5 - 11'	11/17/14	ZK75	19 U		19 U		16 J	1.6	19 U		19 U		19 U		1.6
ICS-P11-SO-16	15 - 17'	11/17/14	ZK75	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-P12-SO-4	3 - 4.5'	41960	ZK75	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P12-SO-7	6 - 8'	41960	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P12-SO-10	9.8 - 11'	41960	ZK75	19 U		19 U		11	1.1	19 U		19 U		19 U		1.1
ICS-P12-SO-13	12 - 14'	41960	ZK75	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P12-SO-16	15 - 17'	41960	ZK75	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P13-SO-4	4 - 6'	11/13/14	ZK33	37	3.7	79	0.79	130	13	46	46	48	4.8	13 J	13	81

TABLE H.4b - BaPEq-TEQ Calculations - 2012 to 2015 Soil Data

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	Benzo(a)- anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo- fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)- pyrene µg/kg, dry	Adjusted Conc. TEF=1.0	Indeno(1,2,3- cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)- anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	Sum TEQ BaPEq
ICS-P13-SO-7	6 -8'	11/13/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P13-SO-10	9.5 - 11'	11/13/14	ZK33	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P13-SO-17	16.5 - 18'	11/13/14	ZK33	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P14-SO-4	3 - 5'	11/14/14	ZK50	24	2.4	39	0.39	50	5	23	23	22	2.2	11 J	11	44
ICS-P14-SO-7	6 - 8'	11/14/15	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P14-SO-10	10 - 11.5'	11/14/14	ZK50	70	7	100	1	100	10	37	37	26	2.6	13 J	13	71
ICS-P14-SO-16	15 - 17'	11/14/14	ZK50	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P15-SO-4	3 - 5'	11/14/14	ZK50	14 J	1.4	25	0.25	22 J	2.2	20 U		20 U		20 U		3.9
ICS-P15-SO-7	6 - 8'	11/14/15	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P15-SO-10	8.5 - 10'	11/14/14	ZK50	20 U		20 U		16 J	1.6	20 U		20 U		20 U		1.6
ICS-P15-SO-16	15 - 17'	11/14/14	ZK50	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P16-SO-4	3 - 4'	12/10/14	ZO28	7.8 J	0.78	17 J	0.17	26 J	2.6	20 U		11 J	1.1	20 U		4.7
ICS-P16-SO-7	6 - 8'	12/10/15	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P16-SO-10	9 - 10'	12/10/14	ZO28	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-P16-SO-16	15 - 17'	12/10/14	ZO28	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P17-SO-4	4.5 - 6.5'	11/12/14	ZK10	19 U		30	0.3	37 U		19 U		19 U		19 U		0.30
ICS-P17-SO-7	6.7 - 8'	11/12/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P17-SO-10	9 - 11'	11/12/14	ZK10	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P17-SO-13	12 - 14'	11/12/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P17-SO-16	15 - 17'	11/12/14	ZK10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P17-SO-22	21 - 23'	11/12/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P18-SO-4	3 - 5'	12/16/14	ZP53	6800	680	8100	81	11000	1100	7200	7200	3900	390	1700	1700	11151
ICS-P18-SO-7	6 - 8'	12/16/14	AKB5	89	8.9	130	1.3	140	14	71	71	48	4.8	19 U		100
ICS-P18-SO-10	9 - 10'	12/16/14	ZP53	75	7.5	99	0.99	75 J	7.5	39	39	21 J	2.1	39 U		57
ICS-P18-SO-13	12 - 14'	12/16/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P18-SO-16	14 - 16'	12/16/14	ZP53	640	64	1000	10	1200	120	570	570	180	18	80 J	80	862
ICS-P18-SO-22	21 - 23'	12/16/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P18-SO-32	31 - 33'	12/16/14	ZP53	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P18-SO-42	41 - 43'	12/16/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P19-SO-4	3 - 4'	12/16/14	ZP53	140	14	230	2.3	250	25	140	140	28	2.8	18 J	18	202
ICS-P19-SO-10	9 - 10'	12/16/14	ZP53	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P19-SO-13	12 - 14'	12/16/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P19-SO-16	15 - 17'	12/16/14	ZP53	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P19-SO-22	21 - 23'	12/16/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P20-SO-3	2 - 4'	11/12/14	ZK10	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P20-SO-10	9.5 - 11'	11/12/14	ZK10	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P20-SO-13	12 - 14'	11/12/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P20-SO-16	15 - 17'	11/12/14	ZK10	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P21-SO-7	6 - 8'	12/8/14	ZN97	350	35	460	4.6	500	50	310	310	180	18	65	65	483
ICS-P21-SO-13	12 - 14'	12/8/14	ZN97	160	16	230	2.3	270	27	130	130	79	7.9	40	40	223
ICS-P21-SO-16	15 - 17'	12/8/14	ZN97	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P21-SO-22	21 - 23'	12/8/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P21-SO-32	31 - 33'	12/8/14	ZN97	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P22-SO-4	3 - 4.5'	11/14/14	ZK50	11 J	1.1	16 J	0.16	23 J	2.3	19 U		19 U		19 U		4
ICS-P22-SO-7	6 - 8'	11/14/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P22-SO-10	9 - 11'	11/14/14	ZK50	19 U		19 U		16 J	1.6	19 U		19 U		19 U		2
ICS-P22-SO-13	12 - 14'	11/14/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P22-SO-16	15 - 17'	11/14/14	ZK50	19 U		19 U		38 U		19 U		19 U		19 U		nd

TABLE H.4b - BaPEq-TEQ Calculations - 2012 to 2015 Soil Data

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	Benzo(a)- anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo- fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)- pyrene µg/kg, dry	Adjusted Conc. TEF=1.0	Indeno(1,2,3- cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)- anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	Sum TEQ BaPEq
ICS-P23-SO-3	2 - 4'	11/12/14	ZK10	31	3.1	50	0.5	91	9.1	33	33	40	4	14 J	14	64
ICS-P23-SO-10	9.5 - 11	11/12/14	ZK10	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P23-SO-13	12 - 14'	11/12/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P23-SO-16	15 - 17'	11/12/14	ZK10	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-P24-SO-4	3 - 5'	11/13/14	ZK33	18 U		14 J	0.14	16 J	1.6	18 U		18 U		18 U		2
ICS-P24-SO-10	9 - 10.5'	11/13/14	ZK33	50	5	150	1.5	170	17	100	100	30	3	19 U		127
ICS-P24-SO-13	12 - 14'	11/13/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P24-SO-16	15 - 17'	11/13/14	ZK33	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P25-SO-3	1 - 3'	11/11/14	ZJ92	62	6.2	95	0.95	150	15	76	76	59	5.9	16 J	16	120
ICS-P25-SO-10	9 - 11'	11/11/14	ZJ92	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P25-SO-13	12 - 14'	11/11/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P25-SO-16	15 - 17'	11/11/14	ZJ92	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P26-SO-4	3 - 5'	11/13/14	ZK33	45	4.5	64	0.64	83	8.3	47	47	29	2.9	13 J	13	76
ICS-P26-SO-7	6 - 8'	11/13/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P26-SO-10	9 - 11'	11/13/14	ZK33	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-P26-SO-16	15 - 17'	11/13/14	ZK33	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P27-SO-3	1 - 3'	11/11/14	ZJ92	20	2	56	0.56	78	7.8	19	19	28	2.8	9.7 J	9.7	42
ICS-P27-SO-7	6 - 8'	11/11/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P27-SO-11	9 - 11'	11/11/14	ZJ92	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P27-SO-13	12 - 14'	11/11/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P27-SO-16	15 - 17'	11/11/14	ZJ92	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P27-SO-32	31 - 33'	11/11/14	ZJ92	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P28-SO-4	3 - 5'	12/15/14	ZP37	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P28-SO-10	8.5 - 10'	12/15/14	ZP37	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P28-SO-16	15 - 17'	12/15/14	ZP37	18 U		18 U		37 U		18 U		18 U		18 U		nd
ICS-P28-SO-22	21 - 23'	12/15/14	AKB5	-----		-----		-----		-----		-----		-----		-----
ICS-P28-SO-32	31 - 33'	12/15/14	ZP37	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P29-SO-4	3 - 4'	12/10/14	ZO28	340	34	660	6.6	310 J	31	230 U		230 U		230 U		72
ICS-P29-SO-7	6 - 8'	12/10/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P29-SO-10	9 - 10'	12/10/14	ZO28	16 J	1.6	26	0.26	20 J	2	7.5 J	7.5	19 U		19 U		11
ICS-P29-SO-16	15 - 17'	12/10/14	ZO28	71	7.1	81	0.81	58	5.8	30	30	11 J	1.1	19 U		45
ICS-DUP2	P29-SO-16	12/10/14	ZO28	54	5.4	67	0.67	49	4.9	26	26	19 U		19 U		37
ICS-P29-SO-22	21 - 23'	12/10/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P29-SO-32	31 - 33'	12/10/14	ZO28	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-P29-SO-42	41 - 43'	12/10/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P29-SO-50	49 - 50'	12/10/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P30-SO-7	6 - 7'	12/9/14	ZO01	940	94	1100	11	1400	140	1300	1300	580	58	220	220	1823
ICS-P30-SO-10	9 - 10'	12/9/14	AKB6	160	16	220	2.2	260	26	130	130	80	8	29	29	211
ICS-P30-SO-13	12.5 - 13.5'	12/9/14	ZO01	280	28	420	4.2	420	42	240	240	150	15	46	46	375
ICS-P30-SO-16	15 - 16.5'	12/9/14	ZO01	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P30-SO-22	21 - 23'	12/9/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P30-SO-32	31 - 33'	12/9/14	ZO01	5.6	0.56	9.2	0.092	11	1.1	18 U		18 U		18 U		1.8
ICS-P30-SO-42	41 - 43'	12/9/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P30-SO-50	49 - 50'	12/9/14	AKB6	-----		-----		-----		-----		-----		-----		-----
ICS-P31-SO-4	3 - 4'	12/9/14	ZO01	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P31-SO-10	9 - 11'	12/9/14	ZO01	13 J	1.3	17 J	0.17	20 J	2	19 U		19 U		19 U		3.5
ICS-P31-SO-16	15 - 17'	12/9/14	ZO01	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P31-SO-32	31 - 33'	12/9/14	ZO01	19 U		19 U		38 U		19 U		19 U		19 U		nd

TABLE H.4b - BaPEq-TEQ Calculations - 2012 to 2015 Soil Data

ICS/NW Cooperage Site
Seattle, Washington

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	Benzo(a)- anthracene µg/kg, dry	Adjusted Conc. TEF=0.1	Chrysene µg/kg, dry	Adjusted Conc. TEF=0.01	total Benzo- fluoranthenes µg/kg, dry	Adjusted Conc. TEF=0.1	Benzo(a)- pyrene µg/kg, dry	Adjusted Conc. TEF=1.0	Indeno(1,2,3- cd)pyrene µg/kg, dry	Adjusted Conc. TEF=0.1	Dibenz(a,h)- anthracene µg/kg, dry	Adjusted Conc. TEF=1.0	Sum TEQ BaPEq
ICS-P32-SO-16	16 - 17.5'	12/15/14	ZP37	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-SO-DUPL3	P32-SO-16	12/15/14	ZP37	18 U		18 U		37 U		18 U		18 U		18 U		nd
ICS-P32-SO-32	31 - 33'	12/15/14	ZP37	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P33-SO-16	15 - 17'	12/8/14	ZN97	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P33-SO-32	31 - 33'	12/8/14	ZN97	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P34-SO-4	3 - 5'	6/9/2015	AHN0	34	3.4	46	0.46	110	11	43	43	30	3	15 J	15	76
ICS-P34-SO-10	9 - 11'	6/9/2015	AHN0	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P34-SO-16	15 - 17'	6/9/2015	AHN0	19 U		19 U		39 U		19 U		19 U		19 U		nd
ICS-P35-SO-4	3 - 5'	6/8/2015	AHL3	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P35-SO-10	9 - 11'	6/8/2015	AHL3	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P35-SO-16	15 - 17'	6/8/2015	AHL3	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-P36-SO-4	3 - 4'	6/8/2015	AHL3	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-P36-SO-10	10 - 12'	6/8/2015	AHL3	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-P36-SO-16	15 - 17'	6/8/2015	AHL3	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-Ap-10-SO	9 - 10'	10/5/15	AOE4	19 U		7.5 J	0.075	38 U		19 U		19 U		19 U		0.08
ICS-Bp-10-SO	9 - 10'	10/5/15	AOE4	5.8 J	0.58	6.8 J	0.068	39 U		20 U		20 U		20 U		0.65
ICS-Cp-10-SO	9 - 10'	10/7/15	AOE4	21	2.1	27	0.27	33 J	3.3	19 U		15 J	1.5	19 U		7.2
ICS-Du-10-SO	9 - 10'	10/5/15	AOE4	19 U		13 J	0.13	16 J	1.6	19 U		19 U		19 U		1.7
ICS-Du-16-SO	15 - 17'	10/5/15	AOE4	19 U		19 U		37 U		19 U		19 U		19 U		nd
ICS-FL-4-SO	3 - 5'	10/8/15	AOE4	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-FL-7-SO	6 - 8'	10/8/15	AOE4	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-FL-10-SO	9 - 10'	10/8/15	AOE4	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-FL-13-SO	12 - 14'	10/8/15	AOE4	20 U		20 U		40 U		20 U		20 U		20 U		nd
ICS-FL-16-SO	15.5 - 17'	10/8/15	AOE4	19 U		19 U		38 U		19 U		19 U		19 U		nd
ICS-FL-21-SO	20 - 22'	10/8/15	AOE4	20 U		20 U		39 U		20 U		20 U		20 U		nd
ICS-Ju-4-SO	3 - 4'	10/7/15	AOE4	1100	110	1100	11	1800	180	1400	1400	180	18	120 U		1719
ICS-Ju-10-SO	10- 11'	10/7/15	AOE4	43	4.3	49	0.49	71	7.1	30	30	21	2.1	20 U		44
ICS-Ju-15-SO	15 - 16	10/7/15	AOE4	29	2.9	32	0.32	36 J	3.6	14 J	14	19 U		19 U		21
Number of Samples		-----	-----	140	-----	140	-----	140	-----	140	-----	140	-----	140	-----	140
Number of Detections		-----	-----	49	-----	55	-----	56	-----	37	-----	34	-----	21	-----	60
Percent Detected		-----	-----	35.0%	-----	39.3%	-----	40.0%	-----	26.4%	-----	24.3%	-----	15.0%	-----	42.9%
Highest Conc.		-----	-----	13000	-----	14000	-----	18000	-----	10000	-----	4500	-----	2300	-----	15990

Notes: JM = estimate associated with manual evaluation; see narrative.
J = estimate associated with value less than the verifiable lower quantitation limit.
JQ = estimate; due to noncompliant CCV check.
U = nondetected at the associated lower reporting limit.
JR = estimate; due to low matrix spike recovery. Value likely biased low.
JB = estimate; associated value may be biased high due to contribution from laboratory background
or method blank
JP = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

TABLE H.5 - Results PCDD/PCDF Soil Sample Analyses - 2014

ICS/NW Cooperage Site
Seattle, WA

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	solids	2,3,7,8-TCDF	total TCDF	2,3,7,8-TCDD	total TCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	total PeCDF
				%	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>
ICS-P21-SO-13	12 - 14'	12/8/2014	ZN97B	70	8.24	267	4.61	78.6	7.14	26.9	693
ICS-P18-SO-16	14 - 16'	12/16/2014	ZP53C	79	22.3	344	13.2	213	17.2	44.7	1000

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	1,2,3,7,8-PeCDD	total PeCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	total HxCDF	1,2,3,4,7,8-HxCDD
				<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>
ICS-P21-SO-13	12 - 14'	12/8/2014	ZN97B	27.2	165	187	50.6	67.5	20.1	1910	48.3
ICS-P18-SO-16	14 - 16'	12/16/2014	ZP53C	47.2	296	354	97.7	128	43.4	3840	64.3

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	total HxCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	total HpCDF	1,2,3,4,6,7,8-HpCDD	total HpCDD
				<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>
ICS-P21-SO-13	12 - 14'	12/8/2014	ZN97B	157	123	1070	1620	86.0	5460	4630	8400
ICS-P18-SO-16	14 - 16'	12/16/2014	ZP53C	314	213	1710	3090	193	10,300	7140	12,200

Sample Location	Depth (feet)	Collection Date	ARI Delivery Group	OCDF	OCDD	TEQ	
						ND=0	ND/2
				<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>	<u>ng/kg, dry</u>
ICS-P21-SO-13	12 - 14'	12/8/2014	ZN97B	6230	43,000 J_E	184	184
ICS-P18-SO-16	14 - 16'	12/16/2014	ZP53C	9320	47,300 J_E	319	319

J_E = estimated value due to exceedance of verifiable linear calibration range.

PCDD/PCDF - Polychlorinated dibenzo-p-dioxins/dibenzofurans

Table G-1
RI Soil Analytical Data - TPH and VOC Results
7100 1st Avenue South Site
Seattle, Washington

Analyte	Screening Level		Unit	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-4	SB-4	SB-4	SB-4	SB-4	SB-5	SB-5	SB-5	SB-5	SB-5	SG-1
	Vadose Zone	Saturated Zone		3.5 (v)	11.5	3.5 (v)	8.5 (v)	3.5 (v)	11.5	8 (v)	13	18	23	28	33	13	18	23	28	33	3.5 (v)	
				10/26/1990	10/26/1990	10/26/1990	10/26/1990	10/26/1990	10/26/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	12/6/1990	10/26/1990
TPH																						
Total Petroleum Hydrocarbons ¹	2000	2000	mg/kg	12	73	57	350	99	31	130	207	460	240	450	55	210	3600	110	340	59	3.5	
Gasoline-range hydrocarbons	30	30	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diesel-range hydrocarbons	2000	2000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lube Oil-range Hydrocarbons	2000	2000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
VOCs																						
1,1,2-Trichloroethane	18	18	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
1,2,4-Trimethylbenzene	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dichloroethane	11	11	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
1,3,5-Trimethylbenzene	800	800	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2-Butanone (MEK)	48000	48000	mg/kg	-	-	-	-	-	-	0.01 U	-	-	-	-	-	0.01 U	-	-	-	-	-	
2-Hexanone	NE	NE	mg/Kg	-	-	-	-	-	-	0.01 U	-	-	-	-	-	0.01 U	-	-	-	-	-	
Acetone	72000	72000	mg/kg	-	-	-	-	-	-	0.22	-	-	-	-	-	0.094	-	-	-	-	-	
Benzene	1.1	0.058	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	0.097	
Bromomethane	112	112	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Carbon Disulfide	8000	8000	mg/kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Chloroform	800	800	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Chloromethane	NE	NE	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
cis-1,2-Dichloroethene	160	160	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Dichlorodifluoromethane (CFC-12)	16000	16000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylbenzene	6.6	0.34	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	0.0050 U	
Isopropylbenzene (Cumene)	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Iodide (Iodomethane)	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methylene Chloride	480	480	mg/kg	-	-	-	-	-	-	0.11	-	-	-	-	-	0.054	-	-	-	-	-	
n-Butylbenzene	4000	4000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
n-Propylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
p-Isopropyltoluene	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sec-Butylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tert-Butylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	476	476	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Toluene	6400	6400	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	0.013	
Trichloroethene	11.5	11.5	mg/Kg	-	-	-	-	-	-	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	-	
Xylene, m-,p-	16000	16000	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	0.018	
Xylene, o-	16000	16000	mg/kg	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	-	-	-	-	-	0.0010 U	-	-	-	-	0.0050 U	

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	SG-1	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-8	MW-9	MW-10	MW-11	MW-12	MW-12	HA-1
	Vadose Zone	Saturated Zone		11.5	3.5 (v)	8.5 (v)	13.5	3.5 (v)	13.5	18.5	3.5 (v)	13.5	18.5	3.5 (v)	30	15	20	15	15	25	0.5 (v)
				10/26/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/25/1990	10/26/1990	6/18/2008	6/18/2008	6/18/2008	6/19/2008	6/19/2008	6/19/2008	7/10/2013
TPH																					
Total Petroleum Hydrocarbons ¹	2000	2000	mg/kg	18	720	480	820	25	110	350	550	380	540	360	-	-	-	-	-	-	-
Gasoline-range hydrocarbons	30	30	mg/kg	-	-	-	-	-	-	-	-	-	-	-	7.7 J	-	-	-	100 J	-	-
Diesel-range hydrocarbons	2000	2000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	670 J	43 J	72 J	-	410 J	90 J	160
Lube Oil-range Hydrocarbons	2000	2000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	970 J	100 J*	180 J	-	490 J	290 J	410
VOCs																					
1,1,2-Trichloroethane	17.54	17.54	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.053 U	0.0056 U	-
1,2,4-Trimethylbenzene			mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0066 J	0.025 U	0.011 J	0.00017 J	0.38	0.0015 J	-
1,2-Dichloroethane	10.989	10.989	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.053 U	0.0056 U	-
1,3,5-Trimethylbenzene	800	800	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0026 J	0.025 U	0.0047 J	0.022 U	0.091 J	0.023 U	-
2-Butanone (MEK)	48000	48000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.027 U	0.025 U	0.032 U	0.0042 J	2.1 U	0.0065 J	-
2-Hexanone	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.027 U	0.025 U	0.032 U	0.022 U	2.1 U	0.023 U	-
Acetone	72000	72000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.047	0.032	0.051	0.027	0.31 J	0.038	-
Benzene	1.1	0.058	mg/kg	0.01	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.05	0.0020 U	0.0150	0.0280	0.0020 U	0.0050 U	0.0068 U	0.0062 U	0.052	0.0055 U	0.071	0.014	-
Bromomethane	112	112	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0011 J	0.0012 J	0.0055 U	0.053 U	0.0025 J	-
Carbon Disulfide	8000	8000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.0014 J	0.002 J	0.0034 J	0.0022 J	0.053 U	0.0039 J	-
Chloroform	800	800	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.053 U	0.0056 U	-
Chloromethane	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.022 J	0.00048 J	-
cis-1,2-Dichloroethene	160	160	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.053 U	0.0056 U	-
Dichlorodifluoromethane (CFC-12)	16000	16000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.055	0.0097	-
Ethylbenzene	6.6	0.34	mg/kg	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0024 J	0.00025 J	0.0033 J	0.0055 U	0.085	0.0006 J	-
Isopropylbenzene (Cumene)	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0079 J	0.025 U	0.0061 J	0.022 U	0.11 J	0.001 J	-
Methyl Iodide (Iodomethane)	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride	480	480	mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.014 U	0.00033 J	0.00056 J	0.00041 J	0.095 J	0.0023 J	-
n-Butylbenzene	4000	4000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.00095 J	0.025 U	0.0026 J	0.022 U	0.4	0.0047 J	-
n-Propylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0016 J	0.025 U	0.0028 J	0.022 U	0.54	0.0048 J	-
p-Isopropyltoluene	NE	NE	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0011 J	0.025 U	0.0026 J	0.022 U	0.21 U	0.023 U	-
Sec-Butylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0013 J	0.025 U	0.0034 J	0.022 U	0.12 J	0.0015 J	-
Tert-Butylbenzene	8000	8000	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.027 U	0.025 U	0.032 U	0.022 U	0.21 U	0.023 U	-
Tetrachloroethene	476	476	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.016 J	0.0056 U	-
Toluene	6400	6400	mg/kg	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0023	0.0020 U	0.0020 U	0.0050 U	0.00098 J	0.00045 J	0.0014 J	0.00065 J	0.18	0.0014 J	-
Trichloroethene	11.5	11.5	mg/Kg	-	-	-	-	-	-	-	-	-	-	-	0.0068 U	0.0062 U	0.0079 U	0.0055 U	0.053 U	0.0056 U	-
Xylene, m-,p-	16000	16000	mg/kg	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0049 J	0.0062 U	0.0034 J	0.00022 J	0.32	0.0016 J	-
Xylene, o-	16000	16000	mg/kg	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0024 J	0.0062 U	0.002 J	0.0055 U	0.085	0.00049 J	-

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	HA-2	HA-3	DP-1	DP-1	DP-2	DP-2	DP-3	DP-4	DP-4	DP-5	DP-6	DP-6	DP-6	DP-7	DP-8	DP-10	DP-10	DP-10	DP-10
	Vadose Zone	Saturated Zone		0.5 (v) 7/10/2013	0.5 (v) 7/10/2013	10 (v) 7/8/2013	12.5 7/8/2013	7.5 (v) 7/8/2013	12.5 7/8/2013	12.5 7/8/2013	7.5 (v) 7/8/2013	12.5 7/8/2013	7.5 (v) 7/8/2013	5 (v) 7/8/2013	7.5 (v) 7/8/2013	12.5 7/8/2013	12.5 7/8/2013	12.5 7/8/2013	5 (v) 7/8/2013	10 (v) 7/8/2013	12.5 7/8/2013	15 7/8/2013
TPH																						
Total Petroleum Hydrocarbons ¹	2000	2000	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	30	30	mg/kg	–	–	8.8 U	8.5 U	9.0	11 U	6.7 U	10 U	9.5 U	14	380	51	75	9.1 U	8.1 U	7.1 U	820	4500 J	14
Diesel-range hydrocarbons	2000	2000	mg/kg	91	110	5.4 U	30	160	53	13	25	60	52	380	210	34	49	55	38	320	87	42
Lube Oil-range Hydrocarbons	2000	2000	mg/kg	280	340	13	54	640	100	22	44	110	90	480	520	63	96	100	130	140	160	60
VOCs																						
1,1,2-Trichloroethane	17.54	17.54	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,2,4-Trimethylbenzene			mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,2-Dichloroethane	10.989	10.989	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,3,5-Trimethylbenzene	800	800	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2-Butanone (MEK)	48000	48000	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2-Hexanone	NE	NE	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Acetone	72000	72000	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Benzene	1.1	0.058	mg/kg	–	–	0.022 U	0.021 UJ	0.031	0.027 U	0.017 U	0.026 U	0.3	0.1	0.11	0.016 U	0.024 U	0.023 U	0.02 U	0.026	0.015 U	1.6 J	0.27
Bromomethane	112	112	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Carbon Disulfide	8000	8000	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chloroform	800	800	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chloromethane	NE	NE	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
cis-1,2-Dichloroethene	160	160	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dichlorodifluoromethane (CFC-12)	16000	16000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ethylbenzene	6.6	0.34	mg/kg	–	–	0.022 U	0.021 U	0.031	0.027 U	0.017 U	0.026 U	0.024 U	0.023 U	0.014 U	0.016 U	0.024 U	0.023 U	0.02 U	0.018 U	0.73	8.8	0.024 U
Isopropylbenzene (Cumene)	8000	8000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methyl Iodide (Iodomethane)	NE	NE	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Methylene Chloride	480	480	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
n-Butylbenzene	4000	4000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
n-Propylbenzene	8000	8000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
p-Isopropyltoluene	NE	NE	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sec-Butylbenzene	8000	8000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tert-Butylbenzene	8000	8000	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tetrachloroethene	476	476	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Toluene	6400	6400	mg/kg	–	–	0.022 U	0.021 U	0.021	0.043	0.017 U	0.026 U	0.024 U	0.05	0.21	0.016 U	0.024 U	0.023	0.02 U	0.019	0.025	0.024 UJ	0.024 U
Trichloroethene	11.5	11.5	mg/Kg	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Xylene, m-,p-	16000	16000	mg/kg	–	–	0.044 U	0.043 U	0.042	0.1	0.033 U	0.051 U	0.081	0.046 U	0.68	0.061	0.093	0.046 U	0.04 U	0.068	0.15	3 J	0.049 U
Xylene, o-	16000	16000	mg/kg	–	–	0.022 U	0.021 U	0.021	0.027 U	0.017 U	0.026 U	0.031	0.023 U	0.21	0.016 U	0.024 U	0.023 U	0.02 U	0.038	0.12	0.024 UJ	0.024 U

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	DP-11	MW-2R	MW-2R	MW-2R	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14	MW-14	MW-15	Unit	MW-15	MW-15	MW-16	MW-16	MW-16	MW-17
	Vadose Zone	Saturated Zone		12.5 7/8/2013	10 (v) 7/11/2013	20 7/11/2013	32.5 7/11/2013	12.5 7/12/2013	25 7/12/2013	32.5 7/12/2013	7.5 (v) 7/9/2013	17.5 7/9/2013	30 7/9/2013	12.5 7/9/2013	22.5 7/9/2013		35 7/9/2013	12.5 7/10/2013	25 7/10/2013	30 7/10/2013	12.5 7/12/2013	
TPH																						
Total Petroleum Hydrocarbons ¹	2000	2000	mg/kg	–	–	–	–	–	–	–	–	–	–	–	–	mg/kg	–	–	–	–	–	–
Gasoline-range hydrocarbons	30	30	mg/kg	29	7.3 U	8.3 U	7.4 U	7.8 U	10 U	10 U	8.4 U	10 U	97	8.7 U	mg/kg	9.4 U	11 U	9.1 U	150	7.8 U	7.5 U	
Diesel-range hydrocarbons	2000	2000	mg/kg	23	8.4	50 J	140	11	640	60	28	98	520	99	mg/kg	500	31	57	3000	30	22	
Lube Oil-range Hydrocarbons	2000	2000	mg/kg	32	17	83	85	22	1300	170	66	220	900	450	mg/kg	930	62	100	3800	65	57	
VOCs																						
1,1,2-Trichloroethane	17.54	17.54	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
1,2,4-Trimethylbenzene			mg/Kg	–	0.0007 J	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0078	0.0013 U	0.0011 U	
1,2-Dichloroethane	10.989	10.989	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
1,3,5-Trimethylbenzene	800	800	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0020	0.0013 U	0.0011 U	
2-Butanone (MEK)	48000	48000	mg/kg	–	0.0060 U	0.038	0.015	0.0054 U	0.0042 J	0.09	0.036	0.0066 U	0.11	0.0062 U	mg/kg	0.025	0.0074 U	0.0063 U	0.0097 U	0.013	0.0030 J	
2-Hexanone	NE	NE	mg/Kg	–	0.0060 U	0.0066 U	0.0057 U	0.0054 U	0.0069 U	0.0077 U	0.0066 U	0.0066 U	0.0086 U	0.0062 U	mg/Kg	0.0069 UJ	0.0074 U	0.0063 U	0.0098	0.0064 U	0.0057 U	
Acetone	72000	72000	mg/kg	–	0.032	0.22	0.1	0.032	0.048	0.59	0.3	0.038	0.71	0.069	mg/kg	0.22	0.051	0.036 U	0.0097 U	0.08 U	0.039	
Benzene	1.1	0.058	mg/kg	0.02 U	0.015	0.014	0.0007 J	0.0009 J	0.0014 U	0.0008 J	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/kg	0.0018	0.0015 U	0.052	0.0027	0.0013 U	0.0008 J	
Bromomethane	112	112	mg/Kg	–	0.0012 UJ	0.0013 UJ	0.0011 UJ	0.0011 UJ	0.0014 UJ	0.0015 UJ	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0037	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 UJ	
Carbon Disulfide	8000	8000	mg/kg	–	0.0054	0.0076 J	0.0049	0.0019	0.0063	0.011	0.0053	0.0075	0.02	0.0026	mg/kg	0.0014 U	0.0037	0.0040	0.015	0.0071	0.0048	
Chloroform	800	800	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Chloromethane	NE	NE	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
cis-1,2-Dichloroethene	160	160	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Dichlorodifluoromethane (CFC-12)	16000	16000	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Ethylbenzene	6.6	0.34	mg/kg	0.02 U	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/kg	0.0014 UJ	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Isopropylbenzene (Cumene)	8000	8000	mg/Kg	–	0.0018	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0051	0.0013 U	0.0011 U	
Methyl Iodide (Iodomethane)	NE	NE	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0021	0.0012 U	mg/Kg	0.048	0.0029	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Methylene Chloride	480	480	mg/kg	–	0.0074	0.03	0.023	0.0075 U	0.0053 U	0.11	0.054	0.012 U	0.079	0.0089 U	mg/kg	0.044	0.012 U	0.0053 U	0.0080 U	0.02 U	0.0067 U	
n-Butylbenzene	4000	4000	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
n-Propylbenzene	8000	8000	mg/Kg	–	0.0021	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0023	0.0013 U	0.0011 U	
p-Isopropyltoluene	NE	NE	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 U	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Sec-Butylbenzene	8000	8000	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0027	0.0013 U	0.0011 U	
Tert-Butylbenzene	8000	8000	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Tetrachloroethene	476	476	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0013 U	0.0019 U	0.0013 U	0.0011 U	
Toluene	6400	6400	mg/kg	0.02 U	0.0018	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0061	mg/kg	0.0014 UJ	0.0015 U	0.0008 J	0.0015 J	0.0013 U	0.0011 U	
Trichloroethene	11.5	11.5	mg/Kg	–	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/Kg	0.0014 UJ	0.0015 U	0.0052	0.0019 U	0.0013 U	0.0011 U	
Xylene, m-,p-	16000	16000	mg/kg	0.039 U	0.0077	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/kg	0.0014 UJ	0.0015 U	0.0013 U	0.0022	0.0013 U	0.0011 U	
Xylene, o-	16000	16000	mg/kg	0.02 U	0.0008 J	0.0013 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0017 U	0.0012 U	mg/kg	0.0014 UJ	0.0015 U	0.0013 U	0.0035	0.0013 U	0.0011 U	

Analyte	Screening Level		Unit	MW-17	MW-17	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19
	Vadose Zone	Saturated Zone		27.5	30	12.5	27.5	35	12.5	20	32.5
				7/12/2013	7/12/2013	7/11/2013	7/11/2013	7/11/2013	7/10/2013	7/10/2013	7/10/2013
TPH											
Total Petroleum Hydrocarbons ¹	2000	2000	mg/kg	–	–	–	–	–	–	–	–
Gasoline-range hydrocarbons	30	30	mg/kg	2400	12 U	8.1 U	13 U	7.9 U	7.4 U	9.1 U	12 U
Diesel-range hydrocarbons	2000	2000	mg/kg	2100	52	26	1900	60	110	100	89
Lube Oil-range Hydrocarbons	2000	2000	mg/kg	4400	110	47	2200	93	460	190	170
VOCs											
1,1,2-Trichloroethane	17.54	17.54	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
1,2,4-Trimethylbenzene			mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0025	0.0014 U	0.0018 U
1,2-Dichloroethane	10.989	10.989	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
1,3,5-Trimethylbenzene	800	800	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0022	0.0014 U	0.0018 U
2-Butanone (MEK)	48000	48000	mg/kg	4.4 U	0.011 J	0.0068 U	0.0073 J	0.011	0.0058 U	0.013	0.0088 U
2-Hexanone	NE	NE	mg/Kg	4.4 U	0.0092 U	0.0068 U	0.01 U	0.0061 U	0.0058 U	0.0072 U	0.0088 U
Acetone	72000	72000	mg/kg	4.4 U	0.1 J	0.032	0.082	0.082	0.026 U	0.082 U	0.09 U
Benzene	1.1	0.058	mg/kg	0.88 U	0.0018 U	0.0014 U	0.0018 J	0.0012 U	0.027	0.0031	0.0018 U
Bromomethane	112	112	mg/Kg	1.8 UJ	0.0018 UJ	0.0014 UJ	0.0020 UJ	0.0012 UJ	0.0012 U	0.0014 U	0.0018 U
Carbon Disulfide	8000	8000	mg/kg	0.88 U	0.013 J	0.0051	0.0097	0.016	0.0038	0.0098	0.0061
Chloroform	800	800	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Chloromethane	NE	NE	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
cis-1,2-Dichloroethene	160	160	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Dichlorodifluoromethane (CFC-12)	16000	16000	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Ethylbenzene	6.6	0.34	mg/kg	64	0.0099 J	0.0014 U	0.0020 U	0.0012 U	0.0043 J	0.0014 U	0.0018 U
Isopropylbenzene (Cumene)	8000	8000	mg/Kg	1.2	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.013	0.0014 U	0.0018 U
Methyl Iodide (Iodomethane)	NE	NE	mg/Kg	0.82 J	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Methylene Chloride	480	480	mg/kg	1.8 U	0.0048 U	0.0076	0.0096	0.032	0.0054 U	0.017 U	0.0050 U
n-Butylbenzene	4000	4000	mg/Kg	1.7	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012	0.0014 U	0.0018 U
n-Propylbenzene	8000	8000	mg/Kg	2.5	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.03	0.0014 U	0.0018 U
p-Isopropyltoluene	NE	NE	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0014	0.0014 U	0.0018 U
Sec-Butylbenzene	8000	8000	mg/Kg	1.7	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012	0.0014 U	0.0018 U
Tert-Butylbenzene	8000	8000	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Tetrachloroethene	476	476	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Toluene	6400	6400	mg/kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0037	0.0014 U	0.0018 U
Trichloroethene	11.5	11.5	mg/Kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0012 U	0.0014 U	0.0018 U
Xylene, m-,p-	16000	16000	mg/kg	1.8 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.021	0.0014 U	0.0018 U
Xylene, o-	16000	16000	mg/kg	0.88 U	0.0018 U	0.0014 U	0.0020 U	0.0012 U	0.0017	0.0014 U	0.0018 U

Notes:

¹ Samples collected by Dames and Moore were analyzed by an out-of-date method that combined Total Petroleum Hydrocarbons (TPH). Review of chromatographs indicate product is predominantly heavy oil range hydrocarbons. Therefore, the Screening Level for lube oil range hydrocarbons is used to screen the data from this previous study.

- J = estimated value
- mg/kg = milligrams per kilogram
- T = summed result
- U = not detected
- v = vadose zone soil sample
- VOCs = volatile organic compounds

Bold = detected value

Yellow Fill indicates detected result for saturated zone sample > the Screening Level for saturated soil

Orange Fill indicates detected result for vadoze zone sample > the Screening Level for vadose zone soil

Blue Fill indicates not detected with reporting limit > the Screening Level

Table G-2
RI Soil Analytical Data - SVOC and PAH Results
7100 1st Avenue South Site
Seattle, Washington

Analyte	Screening Level		Unit	SB-4	SB-5	MW-8	MW-9	MW-10	MW-11	MW-12	MW-12	HA-1	HA-2	HA-3	MW-2R
	Vadose Zone	Saturated Zone		8 (v)	13	30	15	20	15	15	25	0.5 (v)	0.5 (v)	0.5 (v)	10 (v)
12/6/199012/6/19906/18/20086/18/20086/18/20086/19/20086/19/20086/19/20087/10/20137/10/20137/10/20137/11/2013															
Semivolatile Organic Compounds (SVOCs)															
2,4-Dimethylphenol	1600	1600	mg/Kg	–	–	0.04 U	0.036 U	0.038 U	0.033 U	0.15 U	0.032 U	0.038 U	0.037 U	0.038 U	0.039 U
Benzoic Acid	320000	320000	mg/kg	–	–	0.16 U	0.15 U	0.16 U	0.14 U	0.59 U	0.13 U	0.38 U	0.37 U	0.38 U	0.39 U
Benzyl Alcohol	8000	8000	mg/kg	–	–	0.016 U	0.015 U	0.016 U	0.014 U	0.059 U	0.013 U	0.019 U	0.019 U	0.045	0.02 U
Bis(2-Ethylhexyl) Phthalate	25	1.3	mg/kg	–	–	0.019 J	0.029 J	0.038 J	0.014 J	0.16 J	0.1	0.24	0.12	0.17	0.018 J
Butyl benzyl phthalate	530	530	mg/kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.018 J	0.019 U	0.019 U	0.02 U
Carbazole	NE	NE	mg/kg	–	–	–	–	–	–	–	–	0.02	0.019 U	0.02	0.02 UJ
Dibutyl phthalate	8000	8000	mg/kg	–	–		0.015 U	0.016 U	0.014 U	0.059 U	0.013 U	0.0094 J	0.019 U	0.019 U	0.02 U
Diethyl phthalate	64000	64000	mg/kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0017 J	0.03 U	0.0063 U	0.047 U	0.047 U	0.055	0.049 U
Dimethyl phthalate	NE	NE	mg/kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.019 U	0.019 U	0.019 U	0.02 U
Di-N-Octyl Phthalate	800	800	mg/kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.017 J	0.015 J	0.014 J	0.02 U
Isophorone	1052.6	1052.6	mg/Kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.019 U	0.019 U	0.019 U	0.02 U
N-Nitrosodiphenylamine	0.020	0.020	mg/kg	–	–	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.019 U	0.019 U	0.019 U	0.02 U
p-Cresol (4-methylphenol)	8000	8000	mg/kg	–	–	0.0079 U	0.0017 J	0.0051 J	0.0066 U	0.03 U	0.0063 U	0.019 U	0.019 U	0.019 U	0.02 U
Pentachlorophenol	0.763	0.1	mg/Kg	–	–	0.079 U	0.071 U	0.076 U	0.066 U	0.3 U	0.063 U	0.19 U	0.19 U	0.19 U	0.2 UJ
Phenol	24000	24000	mg/kg	–	–	0.024 U	0.022 U	0.023 U	0.02 U	0.088 U	0.019 U	0.021	0.011 J	0.02	0.02 U
Pyridine	80	80	mg/kg	–	–	–	–	–	–	–	–	0.14 U	0.14 U	0.14 U	0.15 U
Polycyclic Aromatic Hydrocarbons (PAHs)															
1-Methylnaphthalene	34.5	34.5	mg/kg	–	–	–	–	–	–	–	–	0.012	0.0078 J	0.0076 J	0.0066
2-Methylnaphthalene	320	320	mg/kg	0.04 U	0.05 U	0.067	0.006 J	0.054	0.0038 J	2.2 J	0.025	0.01	0.011	0.01 J	0.0037 J
Acenaphthene	4800	4800	mg/kg	0.04 U	0.05 U	0.014	0.0025 J	0.056	0.0066 U	0.037 J	0.0028 J	0.011	0.0082 J	0.011	0.0098
Acenaphthylene	NE	NE	mg/kg	0.04 U	0.05 U	0.0057 J	0.0013 J	0.0033 J	0.0066 U	0.03 U	0.0015 J	0.01 U	0.011 U	0.018	0.0049 U
Anthracene	NE	NE	mg/kg	0.04 U	0.05 U	0.014	0.0046 J	0.018	0.0022 J	0.021 J	0.0065	0.019	0.015	0.032	0.0049 U
Benzo(ghi)perylene	7.1	0.35	mg/kg	–	–	0.013	0.0071 U	0.0046 J	0.0066 U	0.03 U	0.0049 J	0.052	0.052	0.1	0.0049 U
Dibenzofuran	80	80	mg/kg	0.04 U	0.05 U	0.0096	0.0042 J	0.023	0.0018 J	0.022 J	0.0024 J	0.0072 J	0.0056 J	0.0059 J	0.0049 U
Fluoranthene	3200	3200	mg/kg	0.04 U	0.056	0.056	0.025	0.26	0.0091	0.045 J	0.033	0.15	0.086	0.14	0.0062
Fluorene	3200	3200	mg/kg	0.04 U	0.05 U	0.019	0.004 J	0.035	0.002 J	0.051 J	0.004 J	0.0070 J	0.0059 J	0.0076 J	0.0049 U
Naphthalene	0.39	0.019	mg/kg	0.04 U	0.05 U	0.065	0.0036 J	0.031	0.0066 U	0.46 J	0.0075	0.0092 U	0.012	0.014	0.021
Phenanthrene	NE	NE	mg/kg	0.04 U	0.065	0.054	0.017	0.065	0.0076	0.1 J	0.018	0.055	0.031	0.039	0.0059
Pyrene	2400	2400	mg/kg	0.04 U	0.07	0.057	0.022	0.17	0.01	0.048 J	0.027	0.17	0.074	0.19	0.0055
Benzo(a)pyrene	2.2	0.11	mg/kg	0.08 U	0.1 U	0.019	0.006 J	0.0072 J	0.0025 J	0.015 J	0.0069	0.053	0.051	0.18	0.0049 U
Benzo(a)anthracene	0.82	0.041	mg/kg	0.04 U	0.05 U	0.021	0.01	0.015	0.0036 J	0.017 J	0.0098	0.066	0.038	0.11	0.0049 U
Benzo(b)fluoranthene	2.8	0.14	mg/kg	0.08 U	0.1 U	0.025	0.0093	0.01	0.004 J	0.021 J	0.0083	0.069	0.063	0.23	0.0049 U
Benzo(k)fluoranthene	3.6	.18	mg/kg	0.08 U	0.1 U	0.0083	0.0032 J	0.0034 J	0.0066 U	0.03 U	0.0029 J	0.038	0.035	0.13	0.0049 U
Benzo(a)fluoranthenes (Sum)	6.5	.31	mg/kg	–	–	–	–	–	–	–	–	0.14	0.12	0.45	0.0049 U
Chrysene	2.8	.14	mg/kg	0.04 U	0.05 U	0.031	0.014	0.016	0.0035 J	0.018 J	0.013	0.11	0.063	0.28	0.0027 J
Dibenzo(a,h)anthracene	4.1	.2	mg/kg	0.08 U	0.1 U	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.013	0.015	0.027	0.0049 U
Indeno(1,2,3-cd)pyrene	7.9	0.40	mg/kg	0.08 U	0.1 U	0.014	0.0043 J	0.0056 J	0.0066 U	0.03 U	0.0052 J	0.036	0.037	0.093	0.0049 U
Total cPAH TEQ (ND=0.5RL)	0.14	0.11	mg/kg	0.0582 UT	0.07275 UT	0.026535 T	0.009175 T	0.01114 T	0.004285 T	0.02348 T	0.009965 T	0.0796 T	0.07263 T	0.2508 T	0.003457 T

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	MW-2R	MW-2R	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	MW-16
	Vadose Zone	Saturated Zone		20	32.5	12.5	25	32.5	7.5 (v)	17.5	30	12.5	22.5	35	12.5	
7/11/20137/11/20137/12/20137/12/20137/12/20137/9/20137/9/20137/9/20137/9/20137/9/20137/9/20137/9/20137/9/20137/9/20137/10/2013																
SVOCs																
2,4-Dimethylphenol	1600	1600	mg/Kg	0.039 U	0.039 U	0.092 U	0.29 U	0.3 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 U	0.038 U	0.038 U	0.038 U
Benzoic Acid	320000	320000	mg/kg	0.39 U	0.39 U	0.18 U	0.58 U	0.59 U	0.38 U	0.27 J	0.39	0.11 J	0.24 J	0.42		0.38 U
Benzyl Alcohol	8000	8000	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.14	0.14	0.067	0.073	0.24		0.024
Bis(2-Ethylhexyl) Phthalate	25	1.3	mg/kg	0.041	0.044	0.046 U	0.35	0.15 U	0.024 U	0.18	0.052	0.06	0.17	0.015 J		0.018 J
Butyl benzyl phthalate	530	530	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.035
Carbazole	NE	NE	mg/kg	0.08 J	0.028 J	0.018 UJ	0.058 UJ	0.059 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 U
Dibutyl phthalate	8000	8000	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
Diethyl phthalate	64000	64000	mg/kg	0.049 U	0.054	0.018 U	0.058 U	0.059 U	0.048 U	0.047 U	0.048 U	0.046 U	0.048 U	0.048 U	0.048 U	0.047 U
Dimethyl phthalate	NE	NE	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02		0.019 U
Di-N-Octyl Phthalate	800	800	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
Isophorone	1052.6	1052.6	mg/Kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
N-Nitrosodiphenylamine	0.020	0.020	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.031	0.019 U	0.019 U
p-Cresol (4-methylphenol)	8000	8000	mg/kg	0.02 U	0.02 U	0.018 U	0.029 J	0.059 U	0.019 U	0.024	0.036	0.01 J	0.033	0.06		0.019 U
Pentachlorophenol	0.763	0.1	mg/Kg	0.2 UJ	0.2 UJ	0.092 U	0.29 U	0.3 U	0.19 U	0.19 U	0.19 U	0.19 U	0.051 J	0.19 U		0.19 U
Phenol	24000	24000	mg/kg	0.02 U	0.02 U	0.018 U	0.058 U	0.059 U	0.019 U	0.041	0.08	0.024	0.038	0.068		0.019 U
Pyridine	80	80	mg/kg	0.15 U	0.15 U	0.14 U	0.44 U	0.44 U	0.14 U	0.14 U	0.046 J	0.14 U	0.054 J	0.073 J		0.14 U
PAHs																
1-Methylnaphthalene	34.5	34.5	mg/kg	0.14 J	0.023	0.0056	0.036 J	0.017	0.0058	0.018	0.034	0.016	0.014 J	0.019		0.011
2-Methylnaphthalene	320	320	mg/kg	0.21 J	0.041	0.0051	0.05 J	0.019	0.0057	0.02	0.041	0.018	0.017	0.022 J		0.011
Acenaphthene	4800	4800	mg/kg	0.35 J	0.14	0.0047 U	0.04 J	0.022	0.0049 U	0.0071	0.016 U	0.0054	0.018	0.021 J		0.01
Acenaphthylene	NE	NE	mg/kg	0.0048 U	0.0030 J	0.0047 U	0.015 UJ	0.011	0.0049 U	0.0037 J	0.012 J	0.0036 J	0.0097 J	0.0079		0.0046 U
Anthracene	NE	NE	mg/kg	0.042	0.027	0.0047 U	0.052 J	0.028	0.0031 J	0.01	0.037	0.01	0.044	0.039 J		0.0076
Benzo(ghi)perylene	7.1	0.35	mg/kg	0.0088	0.0047 J	0.0042 J	0.029 J	0.022	0.0053	0.0083	0.02	0.01	0.048	0.031 J		0.0076
Dibenzofuran	80	80	mg/kg	0.26 J	0.046	0.0047 U	0.036 J	0.025	0.0042 J	0.012	0.018	0.0073	0.02	0.029 J		0.0079
Fluoranthene	3200	3200	mg/kg	0.19	0.086	0.01	0.24 J	0.087	0.014	0.041	0.13	0.031	0.26	0.13 J		0.077
Fluorene	3200	3200	mg/kg	0.3 J	0.083	0.0047 U	0.062 J	0.028	0.0033 J	0.011	0.023	0.0074	0.033	0.032 J		0.0073
Naphthalene	0.39	0.019	mg/kg	0.4 J	0.077	0.0038 J	0.045 J	0.037	0.0042 J	0.019	0.036	0.013	0.019	0.023 J		0.012
Phenanthrene	NE	NE	mg/kg	0.47	0.27	0.0082	0.17 J	0.075	0.014	0.032	0.069	0.032	0.082	0.069 J		0.03
Pyrene	2400	2400	mg/kg	0.13	0.048	0.0094	0.18 J	0.19	0.032	0.12	0.33	0.044	0.27	0.15		0.064
Benzo(a)pyrene	2.2	0.11	mg/kg	0.019	0.0050	0.0028 J	0.035 J	0.016	0.0046 J	0.011	0.065	0.013	0.14	0.039		0.01
Benzo(a)anthracene	0.82	0.041	mg/kg	0.036	0.01	0.0032 J	0.065 J	0.021	0.0056	0.016	0.069	0.012	0.14	0.049 J		0.017
Benzo(b)fluoranthene	2.8	0.14	mg/kg	0.019	0.0054	0.0028 J	0.049 J	0.018	0.0069	0.013	0.099	0.014	0.24	0.044		0.011
Benzo(k)fluoranthene	3.6	.18	mg/kg	0.0099	0.0029 J	0.0047 U	0.022 J	0.013	0.0027 J	0.0069	0.055	0.0068	0.11	0.022		0.0048
Benzo(a)fluoranthenes (Sum)	6.5	.31	mg/kg	0.037	0.011	0.0045 J	0.094 J	0.041	0.012	0.025	0.2	0.026	0.44	0.083		0.02
Chrysene	2.8	.14	mg/kg	0.046	0.012	0.0048	0.092 J	0.031	0.0094	0.019	0.12	0.022	0.17	0.065 J		0.018
Dibenzo(a,h)anthracene	4.1	.2	mg/kg	0.0034 J	0.0049 U	0.0047 U	0.015 UJ	0.0050 U	0.0049 U	0.0048 U	0.016 U	0.0047 U	0.012 J	0.0046 J		0.0046 U
Indeno(1,2,3-cd)pyrene	7.9	0.40	mg/kg	0.0068	0.0037 J	0.0047 U	0.021 J	0.0079	0.0049 U	0.0044 J	0.016	0.0049	0.049	0.016 J		0.0050
Total cPAH TEQ (ND=0.5RL)	0.14	0.11	mg/kg	0.02778 T	0.007835 T	0.004088 T	0.05467 T	0.02355 T	0.006944 T	0.01597 T	0.0955 T	0.01775 T	0.2058 T	0.05491 T		0.01461 T

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	MW-16	MW-16	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19
	Vadose Zone	Saturated Zone		25	30	12.5	27.5	30	12.5	27.5	35	12.5	20	32.5
				7/10/2013	7/10/2013	7/12/2013	7/12/2013	7/12/2013	7/11/2013	7/11/2013	7/11/2013	7/10/2013	7/10/2013	7/10/2013
SVOCs														
2,4-Dimethylphenol	1600	1600	mg/Kg	0.11 U	0.038 U	0.096 U	0.49 U	0.3 U	0.039 U	0.043 U	0.038 U	0.038 U	0.039 U	0.04 U
Benzoic Acid	320000	320000	mg/kg	1.1 U	0.38 U	0.19 U	0.97 U	0.59 U	0.39 U	0.38 J	0.38 U	0.38 U	0.12 J	0.46
Benzyl Alcohol	8000	8000	mg/kg	0.054 U	0.019 U	0.019 U	0.097 U	0.048 J	0.02 U	0.19	0.019 U	0.019 U	0.073	0.24
Bis(2-Ethylhexyl) Phthalate	25	1.3	mg/kg	0.93	0.024 U	0.048 U	2.5	0.15 U	0.066	0.26	0.033	0.038	0.032	0.025 U
Butyl benzyl phthalate	530	530	mg/kg	0.054 U	0.019 U	0.019 U	0.42	0.059 U	0.02 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U
Carbazole	NE	NE	mg/kg	0.054 U	0.019 U	0.019 UJ	0.097 UJ	0.059 UJ	0.02 U	0.022 U	0.01 J	0.26 J	0.013 J	0.02 U
Dibutyl phthalate	8000	8000	mg/kg	0.054 U	0.019 U	0.019 U	0.22	0.059 U	0.02 U	0.022 U	0.019 U	0.13 J	0.02 U	0.02 U
Diethyl phthalate	64000	64000	mg/kg	0.13 U	0.047 U	0.019 U	0.097 U	0.059 U	0.049 U	0.054 U	0.045 J	0.072	0.049 U	0.049 U
Dimethyl phthalate	NE	NE	mg/kg	0.054 U	0.019 U	0.019 U	0.097 U	0.059 U	0.02 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U
Di-N-Octyl Phthalate	800	800	mg/kg	0.2	0.019 U	0.019 U	0.097 U	0.059 U	0.02 U	0.069 NJ	0.019 U	0.019 U	0.02 U	0.02 U
Isophorone	1052.6	1052.6	mg/Kg	0.054 U	0.019 U	0.019 U	0.097 U	0.059 U	0.02 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U
N-Nitrosodiphenylamine	0.020	0.020	mg/kg	0.054 U	0.019 U	0.019 U	0.33	0.059 U	0.02 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U
p-Cresol (4-methylphenol)	8000	8000	mg/kg	0.054 U	0.019 U	0.019 U	0.097 U	0.059 U	0.02 U	0.046	0.019 U	0.019 U	0.045	0.064
Pentachlorophenol	0.763	0.1	mg/Kg	0.54 U	0.19 U	0.096 U	0.49 U	0.3 U	0.2 U	0.22 U	0.19 UJ	0.19 U	0.2 U	0.2 U
Phenol	24000	24000	mg/kg	0.054 U	0.019 U	0.019 U	0.088 J	0.095	0.02 U	0.092	0.019 U	0.019 U	0.021	0.089
Pyridine	80	80	mg/kg	0.4 U	0.14 U	0.14 U	0.73 U	0.44 U	0.15 U	0.11 J	0.14 U	0.14 U	0.15 U	0.15 U
PAHs														
1-Methylnaphthalene	34.5	34.5	mg/kg	0.38	0.01	0.0084	0.38	0.063 J	0.013	0.2	0.012	0.44 J	0.048	0.024
2-Methylnaphthalene	320	320	mg/kg	0.2	0.0097	0.0095	0.54	0.08 J	0.013	0.19	0.0080	0.35 J	0.048	0.039
Acenaphthene	4800	4800	mg/kg	0.038 U	0.037	0.0097	0.15	0.038 J	0.014	0.25	0.21	0.82 J	0.052	0.047
Acenaphthylene	NE	NE	mg/kg	0.038 U	0.0042 J	0.0035 J	0.032 J	0.036 J	0.0048 U	0.02 U	0.0046 U	0.0048 UJ	0.0048 U	0.0049 U
Anthracene	NE	NE	mg/kg	0.87	0.012	0.0059	0.072	0.066 J	0.0096	0.37	0.013	0.047	0.029	0.082
Benzo(ghi)perylene	7.1	0.35	mg/kg	0.21	0.01	0.0075	0.033 U	0.056 J	0.0066	0.14	0.0065	0.02	0.018	0.032
Dibenzofuran	80	80	mg/kg	0.21	0.01	0.0072	0.072	0.04 J	0.015	0.12	0.0065	0.41	0.036	0.068
Fluoranthene	3200	3200	mg/kg	1.4	0.057	0.027	0.29	0.21 J	0.038	0.93	0.043	0.11	0.099	0.37
Fluorene	3200	3200	mg/kg	0.4	0.015	0.0076	0.2	0.054 J	0.016	0.22	0.058	0.41	0.03	0.064
Naphthalene	0.39	0.019	mg/kg	0.21	0.017	0.012	0.11	0.1 J	0.014	0.2	0.014	0.51 J	0.068	0.066
Phenanthrene	NE	NE	mg/kg	1.2	0.045	0.03	0.52	0.17 J	0.042	0.55	0.082	0.36	0.11	0.12
Pyrene	2400	2400	mg/kg	1.6	0.043	0.066	0.35	0.29 J	0.034	0.92	0.039	0.089	0.087	0.26
Benzo(a)pyrene	2.2	0.11	mg/kg	0.31	0.012	0.0082	0.062	0.065 J	0.0076	0.24	0.0084	0.024	0.028	0.042
Benzo(a)anthracene	0.82	0.041	mg/kg	0.45	0.015	0.0085	0.077	0.094 J	0.012	0.46	0.014	0.034	0.04	0.073
Benzo(b)fluoranthene	2.8	0.14	mg/kg	0.29	0.011	0.0086	0.076	0.067 J	0.0089	0.22	0.0097	0.026	0.023	0.041
Benzo(k)fluoranthene	3.6	.18	mg/kg	0.16	0.0054	0.0035 J	0.059	0.036 J	0.0037 J	0.13	0.0049	0.012	0.011	0.022
Benzo(a)fluoranthenes (Sum)	6.5	.31	mg/kg	0.58	0.021	0.016	0.17	0.13 J	0.017	0.46	0.019	0.05	0.045	0.083
Chrysene	2.8	.14	mg/kg	0.73	0.015	0.015	0.14	0.094 J	0.015	1	0.02	0.063	0.049	0.074
Dibenzo(a,h)anthracene	4.1	.2	mg/kg	0.063	0.0047 U	0.0050 U	0.033 U	0.016 UJ	0.0048 U	0.035	0.0046 U	0.0073	0.0058	0.0084
Indeno(1,2,3-cd)pyrene	7.9	0.40	mg/kg	0.13	0.0070	0.0037 J	0.033 U	0.035 J	0.0040 J	0.11	0.0043 J	0.014	0.013	0.023
Total cPAH TEQ (ND=0.5RL)	0.14	0.11	mg/kg	0.4396 T	0.01669 T	0.01142 T	0.0914 T	0.09264 T	0.01129 T	0.3565 T	0.01256 T	0.03516 T	0.03887 T	0.06148 T

Notes:

cPAH = carcinogenic PAH
J = estimated value
mg/kg = milligrams per kilogram
NE = A Screening Level was not established for this analytes (See Table 10)

PAHs = polycyclic aromatic hydrocarbons
SVOCs = semivolatile organic compounds
T = summed result
TEQ = toxicity equivalent

U = not detected
v = vadose zone soil sample
Bold = detected value

Yellow Fill indicates detected result for saturated zone sample > the Screening Level for saturated soil
Orange Fill indicates detected result for vadoze zone sample > the Screening Level for vadose zone soil

Table G-3
RI Soil Analytical Data - PCBs, Pesticides, and Metals Results
7100 1st Avenue South Site
Seattle, Washington

Analyte	Screening Level		Unit	MW-8	MW-9	MW-10	MW-11	MW-12	MW-12	HA-1	HA-2	HA-3	MW-2R	MW-2R
	Vadose Zone	Saturated Zone		30 ft	15	20	15	15	25	0.5 (v)	0.5 (v)	0.5 (v)	10 (v)	20
				6/18/2008	6/18/2008	6/18/2008	6/19/2008	6/19/2008	6/19/2008	7/10/2013	7/10/2013	7/10/2013	7/11/2013	7/11/2013
Polychlorinated biphenyls (PCBs)														
PCB-aroclor 1242	1.2	0.058	mg/Kg	0.0078 U	0.0071 U	0.76 U	0.0067 U	0.0059 U	0.063 U	0.039 U	0.038 U	0.039 U	0.0040 U	0.0038 U
PCB-aroclor 1248	1.9	.096	mg/kg	0.0078 U	0.081 U	15 J	0.0067 U	0.0059 U	0.8 J	0.78 U	0.58 U	0.27	0.0059 U	0.1
PCB-aroclor 1254	0.5	.049	mg/kg	0.08	0.17	12 J	0.059	0.24	0.53 J	0.96	1	0.41	0.03 U	0.13
PCB-aroclor 1260	0.5	.28	mg/kg	0.1	0.12	0.76 U	0.0067 U	0.0059 U	0.4 J	0.49	0.83	0.26	0.15	0.074
Total PCBs	0.5	.035	mg/kg	0.18 T	0.29 T	27 T	0.059 T	0.24 T	1.73 T	1.45 T	1.83 T	0.94 T	0.15 T	0.304 T
Pesticides														
2,4'-DDD	0.0052	0.00026	mg/kg	0.0068 J	0.0037 U	1.3 J	0.0014 U	0.0025 U	0.0085 U	0.00353	0.000565	0.00514	0.0000993 U	0.000578
2,4'-DDE	0.0098	0.00049	mg/kg	0.001 J	0.0026 U	0.064 U	0.00067 U	0.00059 U	0.00063 U	0.00164	0.000188	0.00269	0.0000993 U	0.000130 U
2,4'-DDT	0.078	0.00389	mg/kg	0.0061	0.0094	0.48 J	0.0034	0.013 J	0.022	0.000653	0.000105 U	0.000471	0.0000993 U	0.000130 U
4,4'-DDD	0.0052	0.00026	mg/kg	0.0027	0.0048	0.16 J	0.0013	0.0016	0.014	0.0100	0.00179	0.0151	0.000455 J	0.00216
4,4'-DDE	0.0098	0.00049	mg/kg	0.0015 J	0.0044 U	0.16 J	0.00067 U	0.00069 U	0.013 J	0.0243	0.00314	0.0400	0.0000922 J	0.000633
4,4'-DDT	0.078	0.0039	mg/kg	0.0027 U	0.019	0.093 J	0.0035	0.0096	0.021	0.00210	0.000168	0.00146	0.0000993 U	0.000130 U
Aldrin	0.006	0.0003	mg/Kg	0.00078 U	0.00071 U	0.0076 U	0.00067 U	0.00059 U	0.00063 U	0.000158 U	0.000159 U	0.000160 U	0.000156 U	0.000158 U
Alpha-BHC	0.159	0.159	mg/Kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Beta-BHC	0.56	0.56	mg/kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Chlorpyrifos	0.01	0.0005	mg/Kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Delta-BHC	NE	NE	mg/Kg	-	-	-	-	-	-	0.0000970 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Dieldrin	0.029	0.0015	mg/kg	0.00078 U	0.0023 U	0.0076 U	0.00067 U	0.001 U	0.0037 U	0.000587	0.000210 U	0.000531	0.000200 U	0.000260 U
Endosulfan II	480	480	mg/kg	-	-	-	-	-	-	0.000200 U	0.00432 U	0.00298	0.000200 UJ	0.000260 U
Endosulfan Sulfate	480	480	mg/Kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Endrin	24	24	mg/Kg	-	-	-	-	-	-	0.000200 U	0.000210 U	0.000209 U	0.000200 U	0.000260 U
Endrin Ketone	24	24	mg/Kg	-	-	-	-	-	-	0.000200 U	0.000210 U	0.000209 U	0.000200 U	0.000260 U
Heptachlor	0.001	0.0001	mg/Kg	0.00078 U	0.00071 U	0.0076 U	0.00067 U	0.00059 U	0.00063 U	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Heptachlor Epoxide	0.021	0.001	mg/Kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Hexachlorobenzene	0.018	0.00091	mg/kg	0.0079 U	0.0071 U	0.0076 U	0.0066 U	0.03 U	0.0063 U	0.000138	0.0000974 J	0.000154	0.0000993 U	0.000130 U
Isodrin	NE	NE	mg/Kg	-	-	-	-	-	-	0.000193 U	0.000210 U	0.000209 U	0.000199 U	0.000260 U
Lindane (Gamma-BHC)	24	24	mg/Kg	0.00078 U	0.00071 U	0.0076 U	0.00067 U	0.00059 U	0.00063 U	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Methoxychlor	400	400	mg/kg	-	-	-	-	-	-	0.000189	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
Mirex	16	16	mg/Kg	-	-	-	-	-	-	0.0000962 U	0.000105 U	0.000105 U	0.0000993 U	0.000130 U
trans-Nonachlor	NE	NE	mg/kg	-	-	-	-	-	-	0.000478	0.000155	0.00126	0.0000993 U	0.000130 U
alpha-Chlordane (cis)	0.0069	0.00035	mg/kg	-	-	-	-	-	-	0.000755	0.000183	0.00195	0.0000993 U	0.000238
gamma-Chlordane	0.0069	0.00035	mg/kg	-	-	-	-	-	-	0.00117	0.000254	0.00286	0.0000993 U	0.000346 J
Metals														
Arsenic	20	20	mg/kg	19.7	7.28	10.5	3.72	4	4.66	16.5	21.2	15.0	4.0	4.5
Cadmium	80	80	mg/kg	1.66 J	0.348 J	0.16 J	0.146	0.43	0.181	0.6	0.4	0.5	0.1	0.3
Chromium	120000	120000	mg/kg	69.5	20.6	22.7	13.3	16.7	12.1	30.6	29.3	29.3	12.9	16.1
Copper	36	36	mg/kg	42.9	28.7	37.6	17.3	23.3	18.2	57.7	47.6	55.4	12.8	19.6
Lead	250	250	mg/kg	562 J	11.6 J	10.9 J	5.81	22.5	15	78.9	53.0	71.9	4.1	9.7
Mercury	0.07	0.07	mg/kg	0.165	0.129	0.635	0.068	0.098	0.135	0.36	0.17	0.69	0.03	0.06
Nickel	48	48	mg/kg	-	-	-	-	-	-	26.6	25.9	26.3	10.9	13.1
Silver	400	400	mg/Kg	0.303	0.231	0.112	0.087	0.065	0.056	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U
Zinc	110	85	mg/kg	835	64.7	48.4	41.5	119	40.4	187	147	143	35	52

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	MW-2R	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	MW-16
	Vadose Zone	Saturated Zone		32.5	12.5	25	32.5	7.5 (v)	17.5	30	12.5	22.5	35	12.5
				7/11/2013	7/12/2013	7/12/2013	7/12/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/10/2013
PCBs														
PCB-aroclor 1242	1.2	0.058	mg/Kg	0.0038 U	0.0038 U	0.19 U	0.0040 U	0.0038 U	0.019 U	0.019 U	0.019 U	0.038 U	0.0038 U	0.0039 U
PCB-aroclor 1248	1.9	.096	mg/kg	0.0038 U	0.0095 U	2.2	0.0060 U	0.036	0.15	0.048 U	0.11	0.6	0.0038 U	0.062
PCB-aroclor 1254	0.5	.049	mg/kg	0.0034 J	0.043	2.6	0.0066	0.095	0.47	0.25	0.3	1	0.0038 U	0.13
PCB-aroclor 1260	0.5	.28	mg/kg	0.0021 J	0.017	1.1	0.0030 J	0.032	0.14	0.23	0.06	0.41	0.0038 U	0.047
Total PCBs	0.5	.035	mg/kg	0.0055 T	0.06 T	5.9 T	0.0096 T	0.163 T	0.76 T	0.48 T	0.47 T	2.01 T	0.0095 UT	0.239 T
Pesticides														
2,4'-DDD	0.0052	0.00026	mg/kg	0.0000973 U	0.000244	0.00328	0.000129 U	0.00160 J	0.000550	0.00564	0.000348	0.000916	0.000115 U	0.000927
2,4'-DDE	0.0098	0.00049	mg/kg	0.0000973 U	0.000105 U	0.000629	0.000129 U	0.000136	0.000108 U	0.00179	0.000103 U	0.000399	0.000115 U	0.000104 J
2,4'-DDT	0.078	0.00389	mg/kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000121	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
4,4'-DDD	0.0052	0.00026	mg/kg	0.000150	0.00128	0.0129	0.000152	0.00525 J	0.00362	0.0461 J	0.00117	0.0102	0.000115 U	0.00443 J
4,4'-DDE	0.0098	0.00049	mg/kg	0.0000703 J	0.000239	0.00737	0.000129 U	0.00217 J	0.000876	0.0241 J	0.000456	0.0176	0.000115 U	0.00148
4,4'-DDT	0.078	0.0039	mg/kg	0.0000973 U	0.0000653 J	0.000288	0.000129 U	0.000474	0.000108 U	0.00198	0.000113	0.000110 U	0.000115 U	0.0000560 J
Aldrin	0.006	0.0003	mg/Kg	0.000159 U	0.000160 U	0.000157 U	0.000160 U	0.000159 U	0.000155 U	0.000490 U	0.000160 U	0.000156 U	0.000157 U	0.000159 U
Alpha-BHC	0.159	0.159	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000176 U	0.000115 U	0.000110 U
Beta-BHC	0.56	0.56	mg/kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000144 U	0.000115 U	0.000110 U
Chlorpyrifos	0.01	0.0005	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Delta-BHC	NE	NE	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Dieldrin	0.029	0.0015	mg/kg	0.000200 U	0.000271	0.000243 U	0.000258 U	0.000240 U	0.000216 U	0.000979 U	0.000206 U	0.000220 U	0.000229 U	0.000219 U
Endosulfan II	480	480	mg/kg	0.000200 U	0.000209 U	0.00232 NJ	0.000258 U	0.00955 UJ	0.000216 U	0.000979 U	0.000206 U	0.000220 U	0.000229 U	0.00392 UJ
Endosulfan Sulfate	480	480	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Endrin	24	24	mg/Kg	0.000200 U	0.000209 U	0.000243 U	0.000258 U	0.000240 U	0.000216 U	0.000979 U	0.000206 U	0.000220 U	0.000229 U	0.000219 U
Endrin Ketone	24	24	mg/Kg	0.000200 U	0.000209 U	0.000243 U	0.000258 U	0.000240 U	0.000216 U	0.000490 U	0.000206 U	0.000220 U	0.000229 U	0.000219 U
Heptachlor	0.001	0.0001	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Heptachlor Epoxide	0.021	0.001	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Hexachlorobenzene	0.018	0.00091	mg/kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Isodrin	NE	NE	mg/Kg	0.000195 U	0.000209 U	0.000243 U	0.000258 U	0.000240 U	0.000216 U	0.000979 U	0.000206 U	0.000220 U	0.000229 U	0.000219 U
Lindane (Gamma-BHC)	24	24	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Methoxychlor	400	400	mg/kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
Mirex	16	16	mg/Kg	0.0000973 U	0.000105 U	0.000122 U	0.000129 U	0.000120 U	0.000108 U	0.000490 U	0.000103 U	0.000110 U	0.000115 U	0.000110 U
trans-Nonachlor	NE	NE	mg/kg	0.0000973 U	0.000105 U	0.000144	0.000129 U	0.0000998 J	0.000108 U	0.000490 U	0.000103 U	0.000111	0.000115 U	0.000110 U
alpha-Chlordane (cis)	0.0069	0.00035	mg/kg	0.0000973 U	0.0000759 J	0.000447	0.000129 U	0.000403	0.000108 U	0.000490 U	0.0000746 J	0.000177	0.000115 U	0.000175
gamma-Chlordane	0.0069	0.00035	mg/kg	0.0000973 U	0.000103 J	0.000766	0.000129 U	0.000523	0.000135	0.000490 U	0.000107	0.000426	0.000115 U	0.000254
Metals														
Arsenic	20	20	mg/kg	3.4	3.1	7.5	9.0	4.8	11.8	18.9	5.4	12.9	10.8	5.5
Cadmium	80	80	mg/kg	0.1	0.1	0.6	0.2	0.3 J	0.6 J	2.2 J	0.3 J	1.0 J	0.2 J	0.2
Chromium	120000	120000	mg/kg	11.9	12.7	25.7	22.5	16.4	24.6	42.9	16.1	49	20.4	17.1
Copper	36	36	mg/kg	14.6	16.9	39.3	41.3	22.9	44.0	61.9	20.3	55.2	36.0	22.4
Lead	250	250	mg/kg	3.3	5.6	49.3	12.9	9.5 J	18.9 J	122 J	8.8 J	125 J	11.5 J	8.5
Mercury	0.07	0.07	mg/kg	0.03	0.07 J	0.11 J	0.16 J	0.08	0.22	0.33	0.07	1.75	0.16	0.10
Nickel	48	48	mg/kg	12.6	13.0	17.9	21.0	15.9	21.5	26.1	15.0	22.6	18.7	15.4
Silver	400	400	mg/Kg	0.2 U	0.2 U	0.5	0.3 U	0.3 U	0.4	0.6	0.3 U	0.8	0.3 U	0.2 U
Zinc	110	85	mg/kg	33	160	90	64	56	91	179	51	153	58	55

TABLE H-6 - Douglas Property Soil Data

Analyte	Screening Level		Unit	MW-16	MW-16	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MWA	MWB	MWC
	Vadose Zone	Saturated Zone		25	30	12.5	27.5	30	12.5	27.5	35	12.5	20	32.5	26	26	26
				7/10/2013	7/10/2013	7/12/2013	7/12/2013	7/12/2013	7/11/2013	7/11/2013	7/11/2013	7/10/2013	7/10/2013	7/10/2013	2/27/2015	2/27/2015	2/27/2015
PCBs																	
PCB-aroclor 1242	1.3	0.06	mg/Kg	0.032 U	0.0039 U	0.0037 U	1.3 U	0.0039 U	0.0038 U	0.039 U	0.0038 U	0.0039 U	0.0038 U	0.0040 U	0.004 U	0.0039 U	0.0039 U
PCB-aroclor 1248	1.9	.096	mg/kg	0.081 U	0.0039 U	0.037 U	21	0.16	0.034	0.19 U	0.0058 U	0.021	0.06	0.0040 U	0.012 U	0.039 U	0.0059 U
PCB-aroclor 1254	0.5	.049	mg/kg	0.35	0.0039 U	0.17	18	0.13	0.09	0.75	0.017	0.073	0.13	0.0040 U	0.023	0.014 J	0.014
PCB-aroclor 1260	0.5	.28	mg/kg	0.24	0.0039 U	0.043	8.8	0.063	0.028	0.28	0.0098	0.041	0.046	0.0040 U	0.0084	0.0063	0.0037 J
Total PCBs	0.5	.035	mg/kg	0.59 T	0.0039 UT	0.213 T	47.8 T	0.353 T	0.152 T	1.03 T	0.0268 T	0.135 T	0.236 T	0.0040 UT	0.045	0.048	0.028
Pesticides																	
2,4'-DDD	0.0052	0.00026	mg/kg	0.0346 J	0.0000809 J	0.000437 J	0.0814 J	0.000823	0.000742	0.00304	0.0000982 U	0.000295	0.000589	0.000124 U	-	-	-
2,4'-DDE	0.0098	0.00049	mg/kg	0.0140 J	0.000103 U	0.000106 U	0.00303	0.000145	0.000112 U	0.00200 J	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
2,4'-DDT	0.078	0.00389	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
4,4'-DDD	0.0052	0.00026	mg/kg	0.796 J	0.000857	0.00174 J	0.314 J	0.00438	0.00410	0.0391 J	0.000461	0.00121	0.00234	0.000124 U	-	-	-
4,4'-DDE	0.0098	0.00049	mg/kg	0.265 J	0.000425	0.000412 J	0.169 J	0.00186	0.00113	0.0330 J	0.000354	0.000321	0.000705	0.000124 U	-	-	-
4,4'-DDT	0.078	0.0039	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.00126	0.000125 U	0.0000973 J	0.000506 U	0.0000982 U	0.000102 U	0.000187	0.000124 U	-	-	-
Aldrin	0.006	0.0003	mg/Kg	0.00186 UJ	0.000160 U	0.000160 U	0.000412 U	0.000155 U	0.000158 U	0.000506 U	0.000157 U	0.000158 U	0.000160 U	0.000159 U	-	-	-
Alpha-BHC	0.159	0.159	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 UJ	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Beta-BHC	0.56	0.56	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 UJ	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Chlorpyrifos	0.01	0.0005	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Delta-BHC	NE	NE	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 UJ	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Dieldrin	0.029	0.0015	mg/kg	0.00284 UJ	0.000205 U	0.000212 U	0.0577 J	0.000250 U	0.000223 U	0.00102 U	0.000200 U	0.000203 U	0.000223 U	0.000247 U	-	-	-
Endosulfan II	480	480	mg/kg	0.00284 UJ	0.000205 U	0.000613 UJ	0.0123	0.000250 U	0.000701 U	0.00102 U	0.000200 U	0.000423 U	0.00342 U	0.000247 U	-	-	-
Endosulfan Sulfate	480	480	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Endrin	24	24	mg/Kg	0.00284 UJ	0.000205 U	0.000212 U	0.000823 U	0.000250 U	0.000223 U	0.00102 U	0.000200 U	0.000203 U	0.000223 U	0.000247 U	-	-	-
Endrin Ketone	24	24	mg/Kg	0.00284 UJ	0.000205 U	0.000212 U	0.000412 U	0.000250 U	0.000223 U	0.000506 U	0.000200 U	0.000203 U	0.000223 U	0.000247 U	-	-	-
Heptachlor	0.001	0.0001	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Heptachlor Epoxide	0.021	0.001	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Hexachlorobenzene	0.018	0.00091	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.000300 J	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Isodrin	NE	NE	mg/Kg	0.00284 UJ	0.000205 U	0.000212 U	0.000823 U	0.000250 U	0.000223 U	0.00102 U	0.000197 U	0.000203 U	0.000223 U	0.000247 U	-	-	-
Lindane (Gamma-BHC)	24	24	mg/Kg	0.00142 UJ	0.000103 U	0.0000777 J	0.000412 UJ	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Methoxychlor	400	400	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 U	0.000125 U	0.000112 U	0.00143	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
Mirex	16	16	mg/Kg	0.00142 UJ	0.000103 U	0.000106 U	0.000412 UJ	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
trans-Nonachlor	NE	NE	mg/kg	0.00142 UJ	0.000103 U	0.000106 U	0.00157	0.000125 U	0.000112 U	0.000506 U	0.0000982 U	0.000102 U	0.000112 U	0.000124 U	-	-	-
alpha-Chlordane (cis)	0.0069	0.00035	mg/kg	0.00142 UJ	0.000103 U	0.0000825 J	0.00499	0.0000801 J	0.0000902 J	0.000506 U	0.0000982 U	0.0000896 J	0.000136	0.000124 U	-	-	-
gamma-Chlordane	0.0069	0.00035	mg/kg	0.00142 UJ	0.000103 U	0.000109	0.00656	0.000123 J	0.000167	0.000506 U	0.0000982 U	0.000111	0.000182	0.000124 U	-	-	-
Metals																	
Arsenic	20	20	mg/kg	18.9	6.0	4.2	7.2	10.8	4.5	20.9	4.5	4.9	6.9	10.7	-	-	-
Cadmium	80	80	mg/kg	2.4	0.2	0.2	0.8	0.4	0.3	2.8	0.2	0.2	0.3	0.3	-	-	-
Chromium	120000	120000	mg/kg	59.6	16.1	13.8	41.0	28.2	14.4	70.1	17.2	16.1	17.6	29.9	-	-	-
Copper	36	36	mg/kg	97.4	21.1	16.0	62.6	49.8	17.1	75.4	14.2	18.5	25.0	47.9	-	-	-
Lead	250	250	mg/kg	402	5.3	5.7	223	23.3	7.1	508	11.7	8.8	11.7	12.6	-	-	-
Mercury	0.07	0.07	mg/kg	0.37	0.05	0.07 J	0.83 J	0.27 J	0.06	0.26	0.03 U	0.16	0.09	0.19	-	-	-
Nickel	48	48	mg/kg	27.6	14.6	11.6	13.7	24.0	12.5	28.3	10.8	15.0	16.1	30.3	-	-	-
Silver	400	400	mg/Kg	0.5	0.2 U	0.3 U	0.3	0.3 U	0.3 U	0.6	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-
Zinc	110	85	mg/kg	430	40	41	120	81	42	640	45	46	58	70	-	-	-

Notes:
J = estimated value
mg/kg = milligrams per kilogram
NE = A Screening Level was not established for this analytes (See Table 10)
PCBs = polychlorinatd biphenyls

T = summed result
U = not detected
v = vadose zone soil sample
Bold = detected value

Yellow Fill indicates detected result for saturated zone sample > the Screening Level for saturated soil
Orange Fill indicates detected result for vadose zone sample > the Screening Level for vadose zone soil
Blue Fill indicates not detected with reporting limit > the Screening Level

APPENDIX I
STORM WATER SYSTEM SAMPLE ANALYSES

REMEDIAL INVESTIGATION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025

- **TABLE I.1** – EARLY STORM WATER SYSTEM SOLIDS SAMPLE ANALYSES (1991 AND 2007)
- **TABLE I.2** – EARLY STORM WATER SYSTEM WATER SAMPLE ANALYSES (2007)
- **TABLE I.3** – STORM WATER SYSTEM SAMPLE ANALYSES (2012 AND 2015)

TABLE I.1 - Early Storm Water System Solids Sample Analyses

ICS/NW Cooperage Site
Seattle, Washington

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	Manhole 1991 (MH1) (a) ----- ----- ----- (mg/kg)	Sed. 5 (c) May-07 (b) ----- ----- <15 (mg/kg)
Total Solids (%)	-----	71.7
Total Organic Carbon (%)	-----	1.88
Petroleum Hydrocarbons		
Gasoline Range Organics	-----	<20
Diesel Range Organics	-----	280
Residual Range Organics	-----	1200
Total Metals		
Aluminum	-----	-----
Antimony	-----	-----
Arsenic	<12	7.8
Barium	-----	-----
Beryllium	-----	-----
Cadmium	<0.6	1.13
Calcium	-----	-----
Chromium	27.7	48.8
Cobalt	-----	-----
Copper	40	146
Iron	-----	-----
Lead	93.3	225
Magnesium	-----	-----
Manganese	-----	-----
Mercury	<0.12	0.296
Molybdenum	-----	-----
Nickel	26.6	-----
Potassium	-----	-----
Selenium	-----	-----
Silver	-----	0.918
Sodium	-----	-----
Thallium	-----	-----
Tin	-----	-----
Vanadium	-----	-----
Zinc	90.6	255
Volatile Organic Compounds		
1,1,1,2-Tetrachloroethane	-----	-----
1,1,1-Trichloroethane	<0.006	-----
1,1,2,2-Tetrachloroethane	<0.006	-----
1,1,2-Trichloroethane	<0.006	-----
1,1,2-Trichlorotrifluoroethane	-----	-----
1,1-Dichloroethane	<0.006	-----
1,1-Dichloroethene	<0.006	-----
1,1-Dichloropropene	-----	-----
1,2,3-Trichlorobenzene	-----	-----
1,2,3-Trichloropropane	-----	-----
1,2,4-Trimethylbenzene	-----	-----
1,2-Dibromo-3-chloropropane	-----	-----
1,2-Dibromoethane	-----	-----
1,2-Dichloroethane	<0.006	-----
1,2-Dichloropropane	<0.006	-----
1,3,5-Trimethylbenzene	-----	-----
1,3-Dichloropropane	-----	-----
1-Chlorobutane	-----	-----
2,2-Dichloropropane	-----	-----
2-Chlorotoluene	-----	-----
2-Hexanone	<0.012	-----
2-Nitropropane	-----	-----

TABLE I.1 - Early Storm Water System Solids Sample Analyses

ICS/NW Cooperage Site
Seattle, Washington

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	Manhole 1991 (MH1) (a) ----- ----- ----- (mg/kg)	Sed. 5 (c) May-07 (b) ----- ----- <15 (mg/kg)
4-Chlorotoluene	-----	-----
Acetone	<0.012	-----
Allyl chloride	-----	-----
Benzene	<0.006	-----
Bromobenzene	-----	-----
Bromochloromethane	-----	-----
Bromodichloromethane	<0.006	-----
Bromoform	<0.006	-----
Bromomethane	<0.012	-----
Carbon disulfide	<0.006	-----
Carbon Tetrachloride	<0.006	-----
Chlorobenzene	<0.006	-----
Chloroethane	<0.012	-----
Chloroform	<0.006	-----
Chloromethane	<0.012	-----
cis-1,2-Dichloroethene	-----	-----
cis-1,3-Dichloropropene	<0.006	-----
Dibromochloromethane	<0.006	-----
Dibromomethane	-----	-----
Dichlorodifluoromethane	-----	-----
Dichloromethane	<0.0066	-----
Diethyl ether	-----	-----
Ethy Methacrylate	-----	-----
Ethylbenzene	<0.006	-----
Iodomethane	-----	-----
Isopropylbenzene	-----	-----
Methacrylonitrile	-----	-----
Methyl Acrylate	-----	-----
Methyl ethyl ketone	<0.012	-----
Methyl isobutyl ketone	-----	-----
Methyl methacrylate	-----	-----
n-Butylbenzene	-----	-----
n-Propylbenzene	-----	-----
p-Cymene	-----	-----
Pentachloroethane	-----	-----
sec-Butylbenzene	-----	-----
Styrene	<0.006	-----
Tert-butyl methyl ether	-----	-----
tert-Butylbenzene	-----	-----
Tetrachloroethene	<0.006	-----
Toluene	<0.006	-----
trans-1,2-Dichloroethene	-----	-----
trans-1,3-Dichloropropene	-----	-----
Trichloroethene	<0.006	-----
Trichlorofluoromethane	-----	-----
Vinyl chloride	<0.012	-----
Xylene (m & p)	<0.006	-----
Xylene (o)	<0.006	-----
Semivolatile Organic Compounds		
1,2,4-Trichlorobenzene	-----	<0.1
1,2-Dichlorobenzene	-----	<0.1
1,3-Dichlorobenzene	-----	-----
1,4-Dichlorobenzene	-----	<0.1
1-Methylnaphthalene	-----	-----
2,4-Dichlorophenol	-----	-----

TABLE I.1 - Early Storm Water System Solids Sample Analyses

ICS/NW Cooperage Site
Seattle, Washington

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	Manhole 1991 (MH1) (a) ----- ----- ----- (mg/kg)	Sed. 5 (c) May-07 (b) ----- ----- <15 (mg/kg)
2,4-Dinitrophenol	-----	-----
2,4-Dinitrotoluene	-----	-----
2,6-Dinitrotoluene	-----	-----
2,4-Dimethylphenol	-----	<0.5
2,4,5-Trichlorophenol	-----	-----
2,4,6-Trichlorophenol	-----	-----
2-Chloronaphthalene	-----	-----
2-Chlorophenol	-----	-----
2-Methylnaphthalene	-----	0.035
2-Methylphenol	-----	<0.1
2-Nitroaniline	-----	-----
2-Nitrophenol	-----	-----
3,3-Dichlorobenzidine	-----	-----
3-Nitroaniline	-----	-----
4,6-Dinitro-o-cresol	-----	-----
4-Bromophenyl phenyl ether	-----	-----
4-Chloro-3-methylphenol	-----	-----
4-Chloroaniline	-----	-----
4-Chlorophenyl phenyl ether	-----	-----
4-Methylphenol	-----	<0.1
4-Nitroaniline	-----	-----
4-Nitrophenol	-----	-----
Acenaphthene	<0.40	<0.1
Acenaphthylene	<0.40	<0.1
Aniline	-----	-----
Anthracene	<0.40	0.035
Benzo(a)anthracene	<0.40	0.067
Benzo(a)pyrene	<0.40	0.07
Benzo(b)fluoranthene	<0.40	0.13
Benzo(e)pyrene	-----	-----
Benzo(ghi)perylene	<0.40	0.098
Benzo(k)fluoranthene	<0.40	0.036
Total Benzofluoranthenes	<0.40	0.134
Benzoic Acid	-----	<2
Benzyl Alcohol	-----	<0.2
Biphenyl	-----	-----
bis(2-chloroethoxy)methane	-----	-----
bis(2-chlorethyl)ether	-----	-----
bis(2-chloroisopropyl)ether	-----	-----
Bis(2-ethylhexyl)phthalate	-----	2.2
Butylbenzylphthalate	-----	0.88
Carbazole	-----	-----
Chrysene	<0.40	0.074
Dibenzo(ah)anthracene	<0.40	<0.1
Dibenzofuran	-----	<0.1
Diethylphthalate	-----	<0.1
Dimethylphthalate	-----	0.13
Di-N-Butylphthalate	-----	<0.12
Di-n-octyl phthalate	-----	<0.1
Fluoranthene	<0.40	0.17
Fluorene	<0.40	0.019
Hexachlorobenzene	-----	<0.1
Hexachlorobutadiene	-----	<0.1
Hexachlorocyclopentadiene	-----	-----
Hexachloroethane	-----	-----

TABLE I.1 - Early Storm Water System Solids Sample Analyses

ICS/NW Cooperage Site
Seattle, Washington

Location Date Source Coordinate X Coordinate Y Depth (cm) Units	Manhole 1991 (MH1) (a) ----- ----- ----- (mg/kg)	Sed. 5 (c) May-07 (b) ----- ----- ----- (mg/kg)
Indeno(123-cd)pyrene	<0.40	0.069
Isophorone	-----	-----
Naphthalene	<0.40	0.035
Nitrobenzene	-----	-----
N-Nitrosodimethylamine	-----	<0.1
N-Nitroso-di-n-propylamine	-----	-----
N-Nitrosodiphenylamine	-----	-----
Pentachlorophenol	-----	<1
Phenanthrene	<0.40	0.097
Phenol	-----	<0.3
Pyrene	<0.40	0.22
Pesticides/PCBs		
2,4'-DDD	-----	0.11
2,4'-DDE	-----	<0.0086
2,4'-DDT	-----	0.15
4,4'-DDD	<0.0082	0.035
4,4'-DDE	<0.0082	0.21
4,4'-DDT	<0.0082	<0.00099
Aldrin	<0.0041	<0.00099
alpha-BHC	<0.0041	-----
alpha-Chlordane	-----	-----
alpha-Endosulfan	-----	-----
beta-BHC	<0.0041	-----
beta-Endosulfan	-----	-----
delta-BHC	<0.0041	-----
Chlordane	-----	<0.16
Cis-Nonachlor	-----	-----
Dieldrin	<0.0082	<0.0025
Endosulfan sulfate	<0.0082	-----
Endrin	<0.0082	-----
Endrin aldehyde	<0.0082	-----
Endrin ketone	-----	-----
gamma-BHC	-----	-----
gamma-chlordane	-----	-----
Heptachlor	<0.0041	<0.00099
Heptachlor epoxide	<0.0041	-----
Lindane	<0.0041	0.0017
Methoxychlor	<0.041	-----
Mirex	-----	-----
Oxychlordane	-----	-----
Toxaphene	<0.082	-----
Trans-Nonachlor	-----	-----
PCB 1016	<0.041	<0.99
PCB 1221	<0.041	<2
PCB 1232	<0.041	<0.99
PCB 1242	<0.041	0.6
PCB 1248	<0.041	<0.99
PCB 1254	<0.041	1.3
PCB 1260	<0.041	1.7
Total PCBs	<0.041	3.6

Notes:

- (a) - Parametrix 1991
- (b) - SAIC 2007
- (c) - Outfall sediment

TABLE I.2 - Early Storm Water System Water Sample Analyses

ICS/NW Cooperage Site
Seattle, WA

Location Date Source	Outfall May-07 (a)
Petroleum Hydrocarbons (mg/l)	
Gasoline Range Organics	<250
Diesel Range Organics	<0.25
Residual Range Organics	<0.50
Dissolved Metals (ug/l)	
Arsenic	9.07
Cadmium	0.165
Chromium	1.5
Copper	8.91
Lead	0.249
Mercury	<0.2
Silver	0.006
Zinc	70.5
Total Metals (ug/l)	
Arsenic	8.77
Cadmium	0.171
Chromium	2.1
Copper	11.5
Lead	2.06
Mercury	<0.2
Silver	0.019
Zinc	57.8
Volatile Organic Compounds (ug/l)	
1,1-Dichloroethane	-----
1,3,5-Trimethylbenzene	-----
Acetone	-----
Benzene	-----
Chloroform	-----
Ethylbenzene	-----
m,p-Xylene	-----
Naphthalene	-----
n-Butylbenzene	-----
o-Xylene	-----
Toluene	-----
Semivolatile Organic Compounds (ug/l)	
1,2,4-Trichlorobenzene	<0.2
1,2-Dichlorobenzene	<0.2
1,4-Dichlorobenzene	<0.2
2,4-Dimethylphenol	<2
2-Methylnaphthalene	<0.2
2-Methylphenol	<0.5
4-Methylphenol	<0.5
Acenaphthene	<0.2
Acenaphthylene	0.033
Anthracene	<0.2
Benzo(a)anthracene	<0.2
Benzo(a)pyrene	<0.2
Benzo(b)fluoranthene	<0.2
Benzo(ghi)perylene	<0.2
Benzo(k)fluoranthene	<0.2
Benzoic Acid	<5
Benzyl Alcohol	<5
Bis(2-ethylhexyl)phthalate	<3.7
Butylbenzylphthalate	0.073
Chrysene	<0.2
Dibenzo(ah)anthracene	<0.2
Dibenzofuran	<0.2
Diethylphthalate	0.16
Dimethylphthalate	0.061

TABLE I.2 - Early Storm Water System Water Sample Analyses

ICS/NW Cooperage Site
Seattle, WA

Location Date Source	Outfall May-07 (a)
Di-N-Butylphthalate	0.13
Di-n-octyl phthalate	<4.6
Fluoranthene	0.038
Fluorene	<0.2
Hexachlorobenzene	<0.2
Hexachlorobutadiene	<0.2
Indeno(123-cd)pyrene	<0.2
Naphthalene	<0.2
N-Nitrosodiphenylamine	<0.2
Pentachlorophenol	<0.99
Phenanthrene	0.026
Phenol	1.2
Pyrene	0.038
Pesticides/PCBs (ug/l)	
2,4'-DDD	<0.0025
2,4'-DDE	<0.0025
2,4'-DDT	<0.0025
4,4'-DDD	0.0067
4,4'-DDE	0.0056
4,4'-DDT	<0.0025
Aldrin	0.0012
Chlordane	<0.05
cis-Chlordane	-----
Dieldrin	<0.0025
gamma-Chlordane	-----
Heptachlor	<0.0025
Lindane	<0.0025
PCB 1016	<0.021
PCB 1221	<0.055
PCB 1232	<0.047
PCB 1242	<0.029
PCB 1248	<0.031
PCB 1254	<0.021
PCB 1260	<0.02

Notes:

< - Less than indicated value

(a) - SAIC July 2007

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Matrix	Comments	ARI Delivery Group	% solids	pH	Conductivity	Temp.	Dissolved Oxygen	Ferrous Iron	Turbidity	TOC
					%	SU	uS	C	mg/l	mg/l	NTU	%
ICS-MH1-SW	8/3/12	water	Upstream	VE83	-----	7.4	21580	16.1	8.6	0	6.5	-----
ICS-MH1-SW	3/23/15	water	Upstream	AC32/AC33	-----	6.9	12120	12.1	7.8	0	427	
ICS-MH1-SW	9/22/15	water	Upstream	AMW5/ANM3	-----	6.9	12926	16.2	4.1	0.8	2.7	-----
ICS-OUTF-SW	8/3/12	water	Discharge	VE83	-----	7.4	23310	15.7	10	0	5.5	-----
ICS-OUTF-SW	3/23/15	water	Discharge	AC32/AC33	-----	6.8	25490	11.4	8.5	0	456	
ICS-OUTF-SW	9/22/15	water	Disharge	AMW5/ANM3	-----	6.8	20018	14.0	5.7	0.8	2.5	-----
Screening Level (a)						5-9	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Matrix	Comments	ARI Delivery Group	% solids	TOC	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper
					%	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ICS-MH1-SE	8/3/12	sediment	Upstream	VE84	77	4.20	7 U	8	0.1 U	1.3	62.3	86.8
Lower Screening Level(a)							-----	57	-----	5.1	260	390
Upper Screening Level(a)							-----	93	-----	6.7	270	390

Notes: (a) - Based on Ecology (2015) guidance.

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Chloride	Sulfate	Antimony		Arsenic		Beryllium		Cadmium	
		mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MH1-SW	8/3/12	6970	995	5 U	5 U	7	6	2 U	2 U	2 U	2 U
ICS-MH1-SW	3/23/15	382	51.7	3.4	3.3	1.2	4.5	0.2 U	0.2 U	0.1 U	0.6
ICS-MH1-SW	9/22/15	4640	542	5	5	2 U	2 U	2 U	2 U	1 U	1 U
ICS-OUTF-SW	8/3/12	7710	1100	5 U	5 U	8	10	2 U	2 U	2 U	2 U
ICS-OUTF-SW	3/23/15	728	93.4	2.8	2.9	1.6	5.0	0.2 U	0.2 U	0.2	0.6
ICS-OUTF-SW	9/22/15	7340	963	3	2	2 U	2 U	2 U	2 U	1 U	1 U
Screening Level (a)		-----	-----	-----	-----	36	36	-----	-----	9.3	9.4

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Iron	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons			Benzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	Gasoline-range mg/kg	Diesel-range mg/kg	Lube-range mg/kg	
ICS-MH1-SE	8/3/12	25,400	63	0.08	39	1.6	464	9.9 U	290	1400	25 U
Lower Screening Level(a)		-----	450	0.41	-----	6.1	410	-----	-----	-----	-----
Upper Screening Level(a)		-----	530	0.59	-----	6.1	960	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Calcium		Chromium		Copper		Lead		Magnesium	
		diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MH1-SW	8/3/12	-----	150,000	10 U	10 U	10 U	10 U	0.5 U	1 U	-----	453,000
ICS-MH1-SW	3/23/15	-----	30,000	1.0	13.7	7.1	64.8	0.1	23.6	-----	29,100
ICS-MH1-SW	9/22/15	-----	91,500	5 U	5 U	5 U	6	1 U	1 U	-----	266,000
ICS-OUTF-SW	8/3/12	-----	169,000	10 U	10 U	10 U	10 U	1 U	1 U	-----	521,000
ICS-OUTF-SW	3/23/15	-----	39,500	1.5	16	7.6	68.9	0.4	25.2	-----	47,600
ICS-OUTF-SW	9/22/15	-----	174,000	5 U	1.5	5 U	5 U	1 U	1 U	-----	484,000
Screening Level (a)		-----	-----	-----	-----	3.1	3.7	8..1	8.5	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Toluene	Ethylbenzene	m - & p - Xylenes	o -Xylene	Phenol	2-Chloro-phenol	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Benzyl alcohol	1,2-Dichloro-benzene
		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
ICS-MH1-SE	8/3/12	25 U	25 U	50 U	25 U	500	71	4100	2900	160	3400
Lower Screening Level(a)		-----	-----	-----	-----	420	-----	-----	110	57	35
Upper Screening Level(a)		-----	-----	-----	-----	1200	-----	-----	120	73	50

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

- Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Mercury		Nickel		Sodium		Silver		Zinc	
		diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MH1-SW	8/3/12	0.1 U	0.1 U	10 U	10 U	-----	-----	5 U	5 U	100 U	100 U
ICS-MH1-SW	3/23/15	20.0 U	38.2	1.4	16.6	-----	209,000	0.2 U	0.2 U	17	193
ICS-MH1-SW	9/22/15	0.02 U	0.02 U	5 U	5 U	-----	2,420,000	2 U	2 U	40 U	40 U
ICS-OUTF-SW	8/3/12	0.1 U	0.1 U	10 U	10 U	-----	-----	5 U	5 U	100 U	100 U
ICS-OUTF-SW	3/23/15	20.0 U	41.5	1.9	17.6	-----	356,000	0.2 U	0.2 U	29	199
ICS-OUTF-SW	9/22/15	0.02 U	0.02 U	5 U	5 U	-----	4,170,000	2 U	2 U	40 U	40 U
Screening Level (a)		0.025	0.025	-----	-----	-----	-----	1.9	2.2	81	86

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	2-Methyl-phenol	4-Methyl-phenol	N-Nitroso-di-n-propylamine	Hexachloro-ethane	Nitrobenzene	Isophorone	2,4-Dimethyl-phenol	Benzoic acid	2,4-Dichloro-phenol	1,2,4-Trichloro-benzene
		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
ICS-MH1-SE	8/3/12	23	90	18 U	18 U	18 U	18 U	18 U	770	180 U	5300
Lower Screening Level(a)		63	670	-----	-----	-----	-----	29	650		31
Upper Screening Level(a)		63	670	-----	-----	-----	-----	29	650		51

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Hardness mg-CaCO ₃ /L	Total Petroleum Hydrocarbons			Chloro- methane µg/L	Bromo- methane µg/L	Vinyl chloride µg/L	Chloroethane µg/L
			Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L				
ICS-MH1-SW	8/3/12	2200	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	200	0.25 U	0.75	2.3	0.50 U	1.0 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	1300	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	2600	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	290	0.25 U	0.89	1.7	0.50 U	1.0 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	2400	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U
Screening Level (a)		-----	-----	0.5(b)	0.5(b)	-----	-----	-----	-----

(b) - Based on Method A CULs in WAC 173-340-720

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Naphthalene	4-Chloro-3- methylphenol	2-Methyl- naphthalene	2,4,6- Trichloro- phenol	2,4,5-Trichloro- phenol	2-Chloro- naphthalene	Dimethyl- phthalate	Acenaphthylene
		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
ICS-MH1-SE	8/3/12	4100	93 U	70	93 U	93 U	2800	18 U	740
Lower Screening Level(a)		2100	-----	670	-----	-----	-----	71	1300
Upper Screening Level(a)		2400	-----	1400	-----	-----	-----	160	1300

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Methylene chloride µg/L	Acetone µg/L	Carbon disulfide µg/L	1,1-Dichloro-ethene µg/L	1,1-Dichloro-ethane µg/L	<i>trans</i> -1,2-Dichloroethene µg/L	<i>cis</i> -1,2-Dichloroethene µg/L	Chloroform µg/L
ICS-MH1-SW	8/3/12	1.0 U	16	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	1.0 U	22 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	1.0 U	5.6	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	1.0 U	26 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	1.0 U	7.6	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Acenaphthene µg/kg	Dibenzofuran µg/kg	2,6-Dinitro-toluene µg/kg	2,4-Dinitro-toluene µg/kg	Diethyl-phthalate µg/kg	4-Chlorophenyl-phenylether µg/kg	Fluorene µg/kg	N-Nitrosodi-phenylamine µg/kg
ICS-MH1-SE	8/3/12	18	20	93 U	93 U	46 U	18 U	32	18 U
Lower Screening Level(a)		500	-----	-----	-----	200	-----	540	28
Upper Screening Level(a)		730	-----	-----	-----	1200	-----	1000	40

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely biased high due to contribution from sampling/laboratory background or method blank..

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,2-Dichloroethane µg/L	2-Butanone µg/L	1,1,1-Tri-chloroethane µg/L	Carbon tetrachloride µg/L	Bromo-dichloromethane µg/L	1,2-Dichloro-propane µg/L	cis -1,3-Dichloro-propene µg/L	Trichloro-ethene µg/L
ICS-MH1-SW	8/3/12	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Pentachlorophenol µg/kg	Phenanthrene µg/kg	Carbazole µg/kg	Anthracene µg/kg	Di-n-butyl-phthalate µg/kg	Fluoranthene µg/kg	Pyrene µg/kg	Butylbenzyl-phthalate µg/kg
ICS-MH1-SE	8/3/12	44 U	1700	18 U	190	65	2200	1700	82
Lower Screening Level(a)		360	1500	-----	960	1400	1700	2600	63
Upper Screening Level(a)		690	5400	-----	4400	5100	2500	3300	900

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Dibromo- chloromethane µg/L	1,1,2-Trichloro- ethane µg/L	Benzene µg/L	<i>trans</i> -1,3- Dichloropr opene µg/L	Bromoform µg/L	4-Methyl-2- pentanone µg/L	2-Hexanone µg/L	Tetrachloroethene µg/L
ICS-MH1-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
ICS-MH1-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
ICS-MH1-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
ICS-OUTF-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
ICS-OUTF-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Benzo(a)- anthracene µg/kg	<i>bis</i> (2- Ethylhexyl)- phthalate µg/kg	Chrysene µg/kg	Di-n-octyl- phthalate µg/kg	total Benzo- fluoranthenes µg/kg	Benzo(a)- pyrene µg/kg	Indeno(1,2,3- cd)pyrene µg/kg	Dibenz(a,h)anthracene µg/kg
ICS-MH1-SE	8/3/12	240	3400	640	900	1400	500	260	44
Lower Screening Level(a)		1300	1300	1400	6200	3200	1600	600	230
Upper Screening Level(a)		1600	1900	2800	-----	3600	3000	690	540

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

----- - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,1,2,2-Tetra- chloroethane µg/L	Toluene µg/L	Chloro- benzene µg/L	Ethyl- benzene µg/L	Styrene µg/L	Trichloro- fluoromethane µg/L	1,1,2-Trichloro- 1,2,2- trifluoroethane µg/L	m - & p - Xylenes µg/L	o -Xylene µg/L
ICS-MH1-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.21	0.20 U	0.20 U	0.20 U	0.71	0.29
ICS-MH1-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U
ICS-MH1-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.21	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U
ICS-OUTF-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U
ICS-OUTF-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Benzo(g,h,i)- perylene µg/kg	LPAH µg/kg	HPAH µg/kg	alpha-BHC µg/kg	beta-BHC µg/kg	delta-BHC µg/kg	gamma-BHC (Lindane) µg/kg	Heptachlor µg/kg	Aldrin µg/kg
ICS-MH1-SE	8/3/12	210	6780	7194	6.0 U	4.0 U	39 U	1.6 U	1.6 U	1.6 U
Lower Screening Level(a)		670	5200	12000	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		720	13000	17000	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

- Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,2-Dichloro- benzene µg/L	1,3-Dichloro- benzene µg/L	1,4-Dichlorobenzene µg/L	Acrolein µg/L	Bromoethane µg/L	1,1-Dichloro- propene µg/L	Dibromo- methane µg/L	1,1,1,2-Tetra- chloroethane µg/L
ICS-MH1-SW	8/3/12	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Screening Level (a)		1300	-----	190	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Heptachlor epoxide µg/kg	Endosulfan I µg/kg	Dieldrin µg/kg	4,4'-DDE µg/kg	Endrin µg/kg	Endosulfan II µg/kg	4,4'-DDD µg/kg	Endosulfan sulfate µg/kg
ICS-MH1-SE	8/3/12	1.6 U	1.6 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,2,3-Trichloro-propane µg/L	<i>trans</i> -1,4-Dichloro-2-butene µg/L	1,3,5-Trimethyl-benzene µg/L	1,2,4-Trimethyl-benzene µg/L	Hexachloro-butadiene µg/L	Ethylene dibromide µg/L	Bromochloro-methane µg/L	2,2-Dichloro-propane µg/L	1,3-Dichloro-propane µg/L
ICS-MH1-SW	8/3/12	0.50 U	1.0 U	0.20 U	0.59	<i>see Cl pest.</i>	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	0.20 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	0.50 U	1.0 U	0.20 U	0.2 U	<i>see Cl pest.</i>	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U	0.20 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	4,4'-DDT µg/kg	Methoxychlor µg/kg	Endrin ketone µg/kg	Endrin aldehyde µg/kg	<i>trans</i> -Chlordane µg/kg	<i>cis</i> -Chlordane µg/kg	Hexachloro-benzene µg/kg	Hexachloro-butadiene µg/kg	Aroclor 1016 µg/kg
ICS-MH1-SE	8/3/12	6.4 U	16 U	3.2 U	3.2 U	6.7 U	2.8 U	230 J_Q	1.6 U	3.7 U
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	22	11	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	70	120	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

230 J_Q - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Isopropyl- benzene µg/L	n-Propyl- benzene µg/L	Bromo- benzene µg/L	2-Chloro- toluene µg/L	4-Chloro- toluene µg/L	tert -Butyl- benzene µg/L	sec -Butyl- benzene µg/L	4-Isopropyl- toluene µg/L	n-Butyl- benzene µg/L
ICS-MH1-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	8/3/12	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	3/23/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW	9/22/15	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	Aroclor 1242 µg/kg	Aroclor 1248 µg/kg	Aroclor 1254 µg/kg	Aroclor 1260 µg/kg	Aroclor 1221 µg/kg	Aroclor 1232 µg/kg	Total Detected PCBs µg/kg	gravel > 2000 µm %	very coarse sand 2000 - 1000 µm %
ICS-MH1-SE	8/3/12	3.7 U	31	36	38	3.7 U	3.7 U	105	15.2	23.0
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	130	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	1000	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,2,4-Trichloro- benzene µg/L	Naphtha-lene µg/L	1,2,3- Trichloro- benzene µg/L	Phenol µg/L	2-Chloro- phenol µg/L	1,3-Dichloro- benzene µg/L	1,4-Dichloro- benzene µg/L	Benzyl alcohol µg/L
ICS-MH1-SW	8/3/12	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U
ICS-MH1-SW	3/23/15	0.50 U	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	2.0 U
ICS-MH1-SW	9/22/15	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	2.0 U
ICS-OUTF-SW	8/3/12	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U
ICS-OUTF-SW	3/23/15	0.50 U	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	2.0 U
ICS-OUTF-SW	9/22/15	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	2.0 U
Screening Level (a)		-----	-----	-----	860000	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	coarse sand 1000 - 500 µm %	medium sand 500 - 250 µm %	fine sand 250 - 125 µm %	very fine sand 125 - 62 µm %	coarse silt 62 - 31 µm %	medium silt 31 - 15.6 µm %	fine silt 15.6 - 7.8 µm %	very fine silt 7.8 - 3.9 µm %
ICS-MH1-SE	8/3/12	22.5	12.5	6.8	3.7	2.6	6.3	4.6	1.6
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	1,2-Dichloro- benzene µg/L	2-Methyl- phenol µg/L	4-Methyl- phenol µg/L	N-Nitrosodi-n- propylamine µg/kg	Hexachloro- ethane µg/L	Nitrobenzene µg/L	Isophorone µg/L	2,4-Dimethyl- phenol µg/L
ICS-MH1-SW	8/3/12	see VOC's	1.0 U	1.0 U	-----	1.0 U	1.0 U	1.0 U	1.0 U
ICS-MH1-SW	3/23/15	see VOC's	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MH1-SW	9/22/15	see VOC's	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-OUTF-SW	8/3/12	see VOC's	1.0 U	1.0 U	-----	1.0 U	1.0 U	1.0 U	1.0 U
ICS-OUTF-SW	3/23/15	see VOC's	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-OUTF-SW	9/22/15	see VOC's	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	total silt 32 - 3.2 µm %	clay			total fines < 62 µm %	2,3,7,8-TCDF ng/kg, dry	total TCDF ng/kg, dry	2,3,7,8-TCDD ng/kg, dry
			3.9 - 2.0 µm %	2.0 - 1.0 µm %	< 1.0 µm %				
ICS-MH1-SE	8/3/12	15.1	0.2	0.2	0.8	16.3	1.54	25.0	0.772 J
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Benzoic acid µg/L	2,4-Dichloro-phenol µg/L	1,2,4-Trichloro-benzene µg/L	Naphthalene µg/L	4-Chloro-3-methylphenol µg/L	2-Methyl-naphthalene µg/L	2,4,6-Trichloro-phenol µg/L	2,4,5-Trichloro-phenol µg/L
ICS-MH1-SW	8/3/12	10 U	5.0 U	1.0 U	0.10 U	5.0 U	1.0 U	5.0 U	5.0 U
ICS-MH1-SW	3/23/15	20 U	3.0 U	-----	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
ICS-MH1-SW	9/22/15	20 U	3.0 U	1.0 U	0.10 U	3.0 U	1.0 U	0.025 U	5.0 U
ICS-OUTF-SW	8/3/12	10 U	5.0 U	1.0 U	0.10 U	5.0 U	1.0 U	5.0 U	5.0 U
ICS-OUTF-SW	3/23/15	20 U	3.0 U	-----	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U
ICS-OUTF-SW	9/22/15	20 U	3.0 U	1.0 U	0.10 U	3.0 U	1.0 U	0.025 U	5.0 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	total TCDD ng/kg, dry	1,2,3,7,8-PeCDF ng/kg, dry	2,3,4,7,8-PeCDF ng/kg, dry	total PeCDF ng/kg, dry	1,2,3,7,8-PeCDD ng/kg, dry	total PeCDD ng/kg, dry	1,2,3,4,7,8-HxCDF ng/kg, dry	1,2,3,6,7,8-HxCDF ng/kg, dry
ICS-MH1-SE	8/3/12	6.10	1.18 J	1.77 J	50.3	3.67 J	19.6	4.94 J	3.35 J
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	2-Chloro-naphthalene µg/L	Dimethyl-phthalate µg/L	Acenaphthylene µg/L	Acenaphthene µg/L	Dibenzo-furan µg/L	2,6-Dinitro-toluene µg/L	2,4-Dinitro-toluene µg/L	Diethyl-phthalate µg/L
ICS-MH1-SW	8/3/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	5.0 U	5.0 U	1.0 U
ICS-MH1-SW	3/23/15	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U
ICS-MH1-SW	9/22/15	1.0 U	1.0 U	0.10 U	0.10 U	0.1 U	3.0 U	3.0 U	190
ICS-OUTF-SW	8/3/12	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	5.0 U	5.0 U	1.0 U
ICS-OUTF-SW	3/23/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U
ICS-OUTF-SW	9/22/15	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	190
Screening Level (a)		-----	1,100,000	-----	990	-----	-----	-----	44,000

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	2,3,4,6,7,8-HxCDF ng/kg, dry	1,2,3,7,8,9-HxCDF ng/kg, dry	total HxCDF ng/kg, dry	1,2,3,4,7,8-HxCDD ng/kg, dry	1,2,3,6,7,8-HxCDD ng/kg, dry	1,2,3,7,8,9-HxCDD ng/kg, dry	total HxCDD ng/kg, dry	1,2,3,4,6,7,8-HpCDF ng/kg, dry
ICS-MH1-SE	8/3/12	4.78 J	1.20 J	89.1	5.41	17.7	12.0	117	59.2
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	4-Chlorophenyl-phenylether µg/L	Fluorene µg/L	N-Nitrosodi-phenylamine µg/L	Pentachloro-phenol µg/L	Phenanthrene µg/L	Carbazole µg/L	Anthracene µg/L	Di-n-butyl-phthalate µg/L
ICS-MH1-SW	8/3/12	1.0 U	0.10 U	1.0 U	5.0 U	0.10 U	1.0 U	0.10 U	1.0 U
ICS-MH1-SW	3/23/15	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U
ICS-MH1-SW	9/22/15	1.0 U	0.1 U	1.0 U	0.25 U	0.1 U	1.0 U	0.1 U	1.0 U
ICS-OUTF-SW	8/3/12	1.0 U	0.10 U	1.0 U	5.0 U	0.10 U	1.0 U	0.10 U	1.0 U
ICS-OUTF-SW	3/23/15	1.0 U	0.10 U	1.0 U	0.25 U	0.06 J	1.0 U	0.10 U	1.0 U
ICS-OUTF-SW	9/22/15	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U
Screening Level (a)		-----	5300	6	3	-----	-----	40,000	4500

**Storm Water -
Solids
Samples**

Sample Location	Collection Date	1,2,3,4,7,8,9-HpCDF	total HpCDF	1,2,3,4,6,7,8-HpCDD	total HpCDD	OCDF	OCDD	2,3,7,8-TCDD (TEQ)	
		ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ND=0 ng/kg, dry	ND/2 ng/kg, dry
ICS-MH1-SE	8/3/12	3.30 J	155	364	677	126	2590	15.2	15.2
Lower Screening Level(a)		-----	-----	-----	-----	-----	-----	25	25
Upper Screening Level(a)		-----	-----	-----	-----	-----	-----	-----	-----

Notes: (a) - Based on Ecology (2015) guidance

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

J - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Fluoranthene µg/L	Pyrene µg/L	Butylbenzyl- phthalate µg/L	Benzo(a)- anthracene µg/L	bis (2- Ethylhexyl)- phthalate µg/L	Chrysene µg/L	Di-n-octyl- phthalate µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene µg/L
ICS-MH1-SW	8/3/12	0.10 U	0.10 U	1.0 U	0.10 U	1.1	0.10 U	1.0 U	0.20 U	0.10 U
ICS-MH1-SW	3/23/15	0.11	0.12	1.0 U	0.10 U	3.0 U	0.07 J	1.0 U	0.10 U	0.10 U
ICS-MH1-SW	9/22/15	0.1 U	0.1 U	1.0 U	0.1 U	3.0 U	0.1 U	1.0 U	0.1 U	0.1 U
ICS-OUTF-SW	8/3/12	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-OUTF-SW	3/23/15	0.08 J	0.11	1.0 U	0.10 U	2.2 J	0.06 J	1.0 U	0.10 U	0.10 U
ICS-OUTF-SW	9/22/15	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U
Screening Level (a)		140	4000	1900	0.018	2.2	0.018	-----	-----	0.018

**Storm Water -
Solids
Samples**

Sample Location	Collection Date
ICS-MH1-SE	8/3/12
Lower Screening Level(a)	
Upper Screening Level(a)	

Notes:

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Indeno(1,2,3-cd)pyrene µg/L	Dibenz(a,h)-anthracene µg/L	Benzo(g,h,i)-perylene µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC µg/L	beta-BHC µg/L	delta-BHC µg/L	gamma-BHC (Lindane) µg/L	Heptachlor µg/L
ICS-MH1-SW	8/3/12	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-MH1-SW	3/23/15	0.10 U	0.10 U	0.10 U	0.10 U	0.30	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
ICS-MH1-SW	9/22/15	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
ICS-OUTF-SW	8/3/12	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-OUTF-SW	3/23/15	0.10 U	0.10 U	0.05 J	0.10 U	0.30	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
ICS-OUTF-SW	9/22/15	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Screening Level (a)		0.02	0.018	-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date
ICS-MH1-SE	8/3/12
Lower Screening Level(a)	
Upper Screening Level(a)	

Notes:

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Aldrin µg/L	Heptachlor epoxide µg/L	Endosulfan I µg/L	Dieldrin µg/L	4,4'-DDE µg/L	Endrin µg/L	Endosulfan II µg/L	4,4'-DDD µg/L	Endosulfan sulfate µg/L	4,4'-DDT µg/L
ICS-MH1-SW	8/3/12	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-MH1-SW	3/23/15	0.012 U	0.012 U	0.012 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
ICS-MH1-SW	9/22/15	0.0025 U	0.022 U	0.0025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
ICS-OUTF-SW	8/3/12	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-OUTF-SW	3/23/15	0.012 U	0.012 U	0.012 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
ICS-OUTF-SW	9/22/15	0.0025 U	0.022 U	0.0025 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date
ICS-MH1-SE	8/3/12
Lower Screening Level(a)	
Upper Screening Level(a)	

Notes:

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)**

ICS/NW Cooperage Site
Seattle, Washington

**Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Methoxychlor µg/L	Endrin ketone µg/L	Endrin aldehyde µg/L	trans- Chlordane µg/L	cis- Chlordane µg/L	Toxaphene µg/L	Hexachloro- benzene µg/L	Hexachloro- butadiene µg/L	Aroclor 1016 µg/L	Aroclor 1242 µg/L
ICS-MH1-SW	8/3/12	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U
ICS-MH1-SW	3/23/15	0.12 U	0.025 U	0.025 U	0.012 U	0.012 U	1.2 U	0.025 U	0.025 U	0.010 U	0.010 U
ICS-MH1-SW	9/22/15	0.025 U	0.005 U	0.005 U	0.0025 U	0.0025 U	-----	0.005 U	0.005 U	0.010 U	0.010 U
ICS-OUTF-SW	8/3/12	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	-----	0.050 U	0.050 U	0.010 U	0.010 U
ICS-OUTF-SW	3/23/15	0.12 U	0.025 U	0.025 U	0.012 U	0.012 U	1.2 U	0.025 U	0.025 U	0.010 U	0.010 U
ICS-OUTF-SW	9/22/15	0.025 U	0.005 U	0.005 U	0.0025 U	0.0025 U	-----	0.005 U	0.005 U	0.010 U	0.010 U
Screening Level (a)		-----	-----	-----	-----	-----	-----	0.00029	18	-----	-----

**Storm Water -
Solids
Samples**

Sample Location	Collection Date
ICS-MH1-SE	8/3/12
Lower Screening Level(a)	
Upper Screening Level(a)	

Notes:

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**TABLE I.3 - Results of Storm Water System
Sample Analyses (2012-2015)****Storm Water -
Liquid
Samples**

Sample Location	Collection Date	Aroclor 1248 µg/L	Aroclor 1254 µg/L	Aroclor 1260 µg/L	Aroclor 1221 µg/L	Aroclor 1232 µg/L	Total Detected PCBs µg/L
ICS-MH1-SW	8/3/12	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MH1-SW	3/23/15	0.020 U	0.039	0.04	0.010 U	0.010 U	0.079
ICS-MH1-SW	9/22/15	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-OUTF-SW	8/3/12	0.010 U	0.010 U	0.010 U	0.010 U	0.015 U	0.015 U
ICS-OUTF-SW	3/23/15	0.015 U	0.028	0.027	0.010 U	0.010 U	0.055
ICS-OUTF-SW	9/22/15	0.020 U	0.030 U	0.010 U	0.010 U	0.010 U	0.030 U
Screening Level (a)		-----	-----	-----	-----	-----	0.000064

**Storm Water -
Solids
Samples**

Sample Location	Collection Date
ICS-MH1-SE	8/3/12
Lower Screening Level(a)	
Upper Screening Level(a)	

Notes:

 J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

 J_Q = estimate; due to noncompliant CCV check.

J = estimate associated with value less than the verifiable lower quantitation limit.

 - Constituent exceeds screening level

**APPENDIX J
DMD DATA VALIDATION REPORTS
(ON CD)**

**REMEDIAL INVESTIGATION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025**



D.M.D., Inc.

Environmental & Toxicological Services

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: November 2, 2012

SUBJECT: Data Evaluation/Assessment for 33 Sediment Samples Collected during July 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA

Thirty three sediment samples were collected by Dalton, Olmsted & Fuglevand (DOF) staff during July 2-3 of 2012 for the evaluation of sediment quality. All sediment samples were delivered in two delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington on the same day of collection. Samples were received on ice at temperatures between 1.6 and 6.0 degrees C, and maintained at the project laboratory at 4 degrees C prior to analyses. No chemical preservatives were specified nor required.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). All analyses were performed by methods presented in Table SAP-3 of the SAP.

specific gravity	ASTM D854	Atterberg limits	ASTM D4318
grain size	ASTM D422/D421	bulk density	ASTM D7263
moisture content	ASTM D2216	TOC	Plumb, 1981 (PSEP)
SVOC's	SW846-M.8270	chlor. pesticides	SW846-M.8081
PCB's as Aroclors	SW846-M.8082	metals (exc Hg)	SW846-M.6020A
Hg	SW846-M.7471A	chlor. dioxins/furans	U.S. EPA 1613B
TBT	Krone/8270-SIM	total petroleum HC's	NWTPH-Dx

Atterberg limits are not reported in the attached data/results table. Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. These selected analytes include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Generally, [lower] **reporting limits** were consistent with specified-limits presented in the SAP (table SAP-3) and achieved the sediment PQL goals when contaminant levels allowed it. Exceptions are noted principally for organic compound analytes due to presence of chemical interferents and elevated levels of other target analytes. Specifically, samples 02, 04 (and its blind duplicate), 09 and 12 required extract dilutions due to elevated levels of organic contaminants resulting in the elevation of some analyte nondetection reporting limits. Sample 04, and its blind duplicate, exhibited elevated levels of petroleum hydrocarbons. Sample 12, for example, exhibited elevated levels of both target analytes and petroleum hydrocarbons necessitating extract dilutions in order to prevent instrumental overloading. Most of the elevated nondetects for the chlorinated pesticides are due to chemical interferences and elevated backgrounds for samples 04 (and its blind duplicate), 05, 06, 09, 12, 17, 19 and 27. Some Aroclors (commercial PCB mixtures) were reported with elevated reporting limits or nondetects due to elevated levels of other detected Aroclors that have the potential to contribute overlapping signals. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the “J” qualifier code.

Method blanks were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of *bis*(2-ethylhexyl)phthalate in both analytical groups at 15 and 41 $\mu\text{g/kg}$. *bis*(2-Ethylhexyl)phthalate results were qualified with the “B” qualifier code when results have the potential to be significantly impacted by laboratory background levels. Only two sample results required “B” qualification. No other data required qualification due to method blanks performance.

No field equipment **rinstate blanks** were specified in the project SAP nor were any collected.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. Some recoveries were nonevaluable due to high native levels of analyte interfering with [low] spike levels, such as Aroclor 1260 in sample 07, and Hg in sample 19. 2,4-Dimethylphenol MS and MSD recoveries in sample 23 (analytical group VB00) were reported at 13.6% and 21.1%. Associated samples with positive hits were previously qualified as estimated (“J” qualifier code) due to levels less than the lower verifiable calibration point. 2,4-Dimethylphenol LCS/LCSD recoveries were all within the acceptance range. MS/MSD recoveries for chlorinated pesticides in sample 29 were generally high and associated with elevated background interferences. LCS recoveries for heptachlor epoxide, 4,4'-DDE, and *trans*-chlordane were also high. No significant adverse effect on data quality is anticipated as a consequence. Antimony (Sb) matrix spike recoveries are reported consistently low in samples 13 and 19 at 7.2% and 1.7%, respectively. Sb LCS and SRM recoveries are determined to be acceptable. This behaviour for Sb is typical due to formation of Sb-SiO_4

complexes in the presence of soil minerals; however, positive hits for Sb are thus qualified with the “J_R” qualifier code to indicate results are considered estimates (biased low) due to low matrix spike recoveries. The polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/PCDF) OPR check sample exhibited good performance and acceptable recoveries. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exceptions noted above for 2,4-dimethylphenol and antimony; in the case of antimony, requiring qualification of associated results as estimates with the “J_R” code.

Surrogate compound recoveries (for organic analytes) were evaluated for SVOC’s, TPH-Dx, tributyl tin, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB’s, and polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/PCDF’s). PCDD/PCDF recovery performance is evaluated by the use of stable isotope labeled (¹³C) compounds for each of the reported target analytes as well as a representative ³⁷Cl-labeled compound. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB’s analytical performance. Tributyl tin recovery performance is evaluated by the use of tripropyl and triphenyl tin chlorides. *o*-Terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. The SVOC surrogate, d₁₄-terphenyl, showed low recoveries for the initial extract in samples 03, DUP-02, 05 and 06, while the diluted reruns showed compliant recoveries. The surrogates, TCMX and DCBP, for the analyses of PCB’s in sample 15 showed slightly elevated recoveries likely due to moderate levels of interferences manifested as an elevated chromatographic baseline. DCBP, only, showed moderately elevated responses in samples 04, DUP-02, 11, and 25 likely due to relatively high levels of Aroclor 1260, but not sufficient to adversely affect PCB’s data quality (Aroclor 1260 contains small amounts of DCBP). The TPH-Dx surrogate, *o*-terphenyl, exhibited slightly low recoveries (45% and 49%) in samples DUP-02 and 06 (acceptance range = 50-150% recovery). Sample 04 and its duplicate (DUP-02) exhibited good replication for TPH-Dx with less than 15 relative percent difference (RPD). Consequently, the noncompliant (slightly low) surrogate recoveries are considered sufficiently minor to not require qualification of associated TPH-Dx results. No qualification of results was required due to surrogate compounds performance.

SVOC continuing calibration verification (CCV) checks revealed elevated responses for phenol and butylbenzylphthalate (7/13/12), and butylbenzylphthalate (7/16/12, 7/19/12 & 7/20/12), and low for pentachlorophenol (7/13/12, 7/19/12, 7/23/12 & 7/25/12). Sample 19 was employed for MS/MSD evaluation and was also potentially affected by the noncompliant CCV for phenol and butylbenzylphthalate; where the MS/MSD recovery for phenol was 76.9% and 72.6% and the recovery for butylbenzylphthalate was 108% and 93.9% - all acceptable recoveries. In spite of the noncompliant CCVs, the actual recoveries for phenol and butylbenzylphthalate are well within acceptable ranges and thus the reported values for these analytes are considered acceptable. Reported data associated with noncompliant CCV’s are nonetheless qualified as estimates with the “J_Q” code, even though the data quality, by other measures, is within acceptance limits.

Two pairs of blind **field duplicate** samples were collected and submitted for analyses for the assessment of monitoring variability. Duplicate pairs are identified in the attached table of

sample results. Variability in terms of relative percent difference (RPD) for all parameters generally averaged 30% for duplicate pairs. Greatest RPDs (up to 100 & 140) were observed for organic contaminants, such as fluoranthene and pyrene, in sample 04 and its associated blind duplicate. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications). Grain size triplicate analyses were performed on a nonproject sample and yielded acceptable performance.

TPH-Dx analyses indicate the principal recognizable pattern is associated with the lube-range of hydrocarbons, which most resembles motor oil or lubricant. Bold type values are associated with the patterns that most likely identify the hydrocarbon mixture present, such as diesel fuel and/or motor/lubricant oil. Sample 12 also shows presence of weathered gasoline (pre n-C₁₂), which is not included in the quantitation of TPH reported in the attached results table.

Examination of the raw GC/MS (M.8270) data files reveals considerable amount of coelution of selected pesticides with PCB congeners in project samples. Also, additional nontarget pesticide compounds and phosphate/thiophosphate esters showed interference with pesticide target analytes. The PCB congener and nontarget chemical interferences elevated the reporting limits and interfered with accurate reporting of the following target analytes by M.8081: 4,4'-DDD, 4,4'-DDT, and the two Chlordane isomers. The DDT and benzo(a)pyrene GC/MS response factors were applied for estimating the levels of selected analytes where interferences were demonstrated to exist. Estimated concentrations (by M.8270) are reported in the attached results table with the "J_M" qualifier code.

Sample results reported here are determined to be in general compliance with method and SAP requirements. Most deviations of data quality from SAP and method specifications are associated with generally elevated levels of multiple contaminants in site sediments. All reported data for sediment samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Specific gravity	Wet density	Moisture content	Dry density	TOC	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9
					%	SU	lb/ft ³	%	lb/ft ³	%	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry
ICS-DSS-19-SE-070212	sediment	7/2/2012		1212564-VB00A	48	2.61	88.8	105.7	43.2	2.93	0.8 J_R	16.4	0.4 U	1.3
ICS-DSS-21-SE-070212	sediment	7/2/2012		1212565-VB00B	53					1.92	0.4 U	10.4	0.4 U	0.4
ICS-DSS-20-SE-070212	sediment	7/2/2012		1212566-VB00C	65					1.54	0.3 U	12.1	0.4	0.2
ICS-DSS-22-SE-070212	sediment	7/2/2012		1212567-VB00D	68					1.22	0.3 U	7.0	0.4	0.3
ICS-DSS-28-SE-070212	sediment	7/2/2012		1212568-VB00E	64					2.24	0.3 U	14.5	0.5	0.6
ICS-DSS-30-SE-070212	sediment	7/2/2012		1212569-VB00F	80	2.73	102.5	21.6	84.3	0.442	0.2 U	5.4	0.2 U	0.1 U
ICS-DSS-29-SE-070212	sediment	7/2/2012		1212570-VB00G	78					1.93	0.2 U	8.9	0.2 U	0.3
ICS-DSS-26-SE-070212	sediment	7/2/2012		1212571-VB00H	70					2.63	0.6 J_R	12.6	0.3 U	1.6
ICS-DSS-27-SE-070212	sediment	7/2/2012		1212572-VB00I	69					2.92	0.3 U	17.1	0.3 U	0.6
ICS-DSS-17-SE-070212	sediment	7/2/2012		1212573-VB00J	74	2.69	111.7	30.8	85.4	2.32	0.3 U	8.3	0.3	0.1 U
ICS-DSS-23-SE-070212	sediment	7/2/2012		1212574-VB00K	82					1.42	0.2 U	3.1	0.2 U	0.2
ICS-DSS-14-SE-070212	sediment	7/2/2012		1212575-VB00L	62					4.96	0.5 J_R	23.2	0.3 U	0.5
ICS-DSS-16-SE-070212	sediment	7/2/2012		1212576-VB00M	83					1.05	0.2 U	14.9	0.2 U	0.1
ICS-DSS-18-SE-070212	sediment	7/2/2012		1212577-VB00N	70					2.66	0.3 U	21.0	0.3 U	0.3
ICS-DSS-13-SE-070312	sediment	7/3/2012		1212707-VB16A	77					1.85	0.2 U	3.4	0.3	0.2
ICS-DUP-01-SE-070312	sediment	7/3/2012	field dup of 13	1212708-VB16B	79					1.55	0.2 U	3.3	0.3	0.1
ICS-DSS-12-SE-070312	sediment	7/3/2012		1212709-VB16C	69					30.9	2.2 J_R	8.3	0.3 U	4.3
ICS-DSS-10-SE-070312	sediment	7/3/2012		1212710-VB16D	79					0.553	0.3 U	4.2	0.3 U	0.3
ICS-DSS-11-SE-070312	sediment	7/3/2012		1212711-VB16E	69					2.73	0.3 J_R	8.1	0.3 U	1.0
ICS-DSS-24-SE-070312	sediment	7/3/2012		1212712-VB16F	45					2.64	0.4 U	11.1	0.5	0.2 U
ICS-DSS-25-SE-070312	sediment	7/3/2012		1212713-VB16G	44					3.48	0.4 U	9.7	0.4 U	0.4
ICS-DSS-15-SE-070312	sediment	7/3/2012		1212714-VB16H	59					4.25	0.3 U	19.1	0.4	0.4
ICS-DSS-08-SE-070312	sediment	7/3/2012		1212715-VB16I	76		106.4	11.3	95.6	2.92	0.3 J_R	13.9	0.3 U	0.9
ICS-DSS-09-SE-070312	sediment	7/3/2012		1212716-VB16J	71					18.1	1.9 J_R	13.0	0.3 U	8.2
ICS-DSS-07-SE-070312	sediment	7/3/2012		1212717-VB16K	76					3.34	0.3 U	10.6	0.3 U	0.2
ICS-DSS-02-SE-070312	sediment	7/3/2012		1212718-VB16L	76		137.1	17.0	117.2	3.24	0.2 U	10.0	0.2 U	0.2
ICS-DSS-03-SE-070312	sediment	7/3/2012		1212719-VB16M	49					3.45	0.4 U	17.2	0.4 U	0.6
ICS-DSS-04-SE-070312	sediment	7/3/2012		1212720-VB16N	64	2.60	103.6	55.1	66.8	2.83	0.7 J_R	13.2	0.3 U	5.3
ICS-DUP-02-SE-070312	sediment	7/3/2012	field dup of 04	1212721-VB16O	61					7.86	1.2 J_R	17.6	0.3 U	7.4
ICS-DSS-05-SE-070312	sediment	7/3/2012		1212722-VB16P	65					2.62	0.5 J_R	28.8	0.3 U	0.7
ICS-DSS-06-SE-070312	sediment	7/3/2012		1212723-VB16Q	62					5.55	0.5 J_R	7.1	0.3 U	2.6
ICS-DSS-31-SE-070312	sediment	7/3/2012		1212724-VB16R	61									
ICS-DSS-32-SE-070312	sediment	7/3/2012		1212725-VB16S	35									

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons		Phenol	2-Chloro-phenol	1,3-Dichloro-benzene
	7440-47-3	7440-50-8	7439-92-1	7439-97-6	7440-02-0	7440-22-4	7440-66-6	Diesel-range	Lube-range	108-95-2	95-57-8	541-73-1
	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-DSS-19-SE-070212	65	103	343	1.73	26	1.2	318	240	710	140 J _Q	20 U	12
ICS-DSS-21-SE-070212	29	54.4	55.9	0.54	20.5	0.4 U	146	49	150	67 J _Q	19 U	2.5 J
ICS-DSS-20-SE-070212	26	37.4	42.3	0.18	18.0	0.3 U	109	28	88	44 J _Q	19 U	4.7 U
ICS-DSS-22-SE-070212	21	33.4	22.3	0.17	18.2	0.3	81	58	170	11 J	19 U	4.8 U
ICS-DSS-28-SE-070212	33	55.5	47.5	0.34	25.7	0.60	121	170	570	28 J _Q	19 U	5.6
ICS-DSS-30-SE-070212	13.2	17.4	16.3	0.06	10.5	0.2 U	62	6.3 U	14	19 U	19 U	4.8 U
ICS-DSS-29-SE-070212	15.7	30.3	74.1	0.05	17.7	0.2 U	100	11	120	18 U	18 U	4.6 U
ICS-DSS-26-SE-070212	268	182	1690	0.83	70.8	0.4	1340	54	180	190 J _Q	18 U	4.6 U
ICS-DSS-27-SE-070212	39.6	120	683	0.92	26.5	0.5	242	150	520	35 J _Q	18 U	4.6 U
ICS-DSS-17-SE-070212	32	40.3	44.4	0.15	28.7	0.3 U	75	24	100	16 J	18 U	4.6 U
ICS-DSS-23-SE-070212	24.3	38.9	29.5	0.08	26.9	0.2 U	58	34	95	20 U	20 U	4.9 U
ICS-DSS-14-SE-070212	36.1	70.8	201	0.17	34.9	0.3 U	188	24	130	31 J _Q	20 U	4.9 U
ICS-DSS-16-SE-070212	15.3	24.6	18.0	0.03	23.5	0.2 U	66	8.5	35	19 U	19 U	4.8 U
ICS-DSS-18-SE-070212	21.2	46.8	55.5	0.20	24.7	0.3 U	150	18	83	12 J	19 U	4.7 U
ICS-DSS-13-SE-070312	25.0	24.8	42.1	0.12	25.3	0.2 U	52	43	90	14 J	19 U	2.4 J
ICS-DUP-01-SE-070312	20.1	22.5	48.3	0.11	21.6	0.2 U	55	40	67	14 J	19 U	4.8 U
ICS-DSS-12-SE-070312	1110	115	3930	0.16	151	0.4	3820	12,000	42,000	5700	1700 U	440 U
ICS-DSS-10-SE-070312	28.4	24.5	59.0	0.21	25.2	0.3 U	74	14	56	18 U	18 U	4.6 U
ICS-DSS-11-SE-070312	90.6	67.1	626	0.71	31.8	0.3 U	281	56	220	66	19 U	4.8 U
ICS-DSS-24-SE-070312	27	53	59.7	0.22	19	0.4 U	117	52	180	19 U	19 U	4.8 U
ICS-DSS-25-SE-070312	28	58	50.4	0.34	22	0.4 U	130	77	230	32	20 U	4.9 U
ICS-DSS-15-SE-070312	23.2	49.4	55.5	0.21	20.5	0.3 U	168	68	280	28	20 U	5.0 U
ICS-DSS-08-SE-070312	70.5	91.1	201	3.8	26.7	0.3	195	200	620	55	19 U	4.8 U
ICS-DSS-09-SE-070312	288	260	5920	14.3	39.1	1.3	1220	6700	15,000	650 J	720 U	900
ICS-DSS-07-SE-070312	24.0	36.1	75.6	0.25	26.6	0.3 U	141	17	83	19 U	19 U	4.7 U
ICS-DSS-02-SE-070312	26.4	88.3	35.5	0.12	32.1	0.2 U	98	52	280	55 U	55 U	14 U
ICS-DSS-03-SE-070312	37	90	92.3	0.45	27	0.4 U	289	120	440	28	19 U	4.8 U
ICS-DSS-04-SE-070312	167	217	1250	2.42	27.7	0.3	1270	1400	3000	83 U	83 U	21 U
ICS-DUP-02-SE-070312	298	224	2190	2.20	32.8	0.5	1590	1400	2600	50 J	84 U	21 U
ICS-DSS-05-SE-070312	84.6	144	150	0.28	41.3	0.3 U	190	76	240	18 J	20 U	5.0 U
ICS-DSS-06-SE-070312	612	115	633	7.7	25.9	1.3	400	570	1600	88	20 U	5.0 U
ICS-DSS-31-SE-070312												
ICS-DSS-32-SE-070312												

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J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry	N-Nitroso-di-N- propylamine 621-64-7 µg/kg, dry	Hexachloro- ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl- phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro- phenol 120-83-2 µg/kg, dry
ICS-DSS-19-SE-070212	30	110	17	22	90	20 U	20 U	20 U	22	20 J	380 J	200 U
ICS-DSS-21-SE-070212	8.1	200	3.0 J	18	29 J	19 U	19 U	19 U	19 U	8.9 J	360 J	190 U
ICS-DSS-20-SE-070212	4.7 U	52	4.7 U	4.7 U	11 J	19 U	19 U	19 U	19 U	3.0 J	1200	190 U
ICS-DSS-22-SE-070212	4.6 J	9.6 J	4.8 U	4.8 U	38 U	19 U	19 U	19 U	19 U	3.0 J	380 U	190 U
ICS-DSS-28-SE-070212	5.8	51	2.4 J	4.7 U	17 J	19 U	19 U	19 U	19 U	3.7 J	120 J	190 U
ICS-DSS-30-SE-070212	4.8 U	10 J	4.8 U	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-DSS-29-SE-070212	4.6 U	7.3 J	4.6 U	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U	180 U
ICS-DSS-26-SE-070212	8.5	33	16	43	71	18 U	18 U	18 U	500	13 J	610	20 J
ICS-DSS-27-SE-070212	4.4 J	19	3.6 J	6.6	17 J	18 U	18 U	18 U	21	5.7 J	220 J	180 U
ICS-DSS-17-SE-070212	4.6 U	7.4 J	4.6 U	21	12 J	18 U	18 U	18 U	18 U	3.4 J	370 U	180 U
ICS-DSS-23-SE-070212	4.9 U	8.2 J	4.9 U	4.9 U	39 U	20 U	20 U	20 U	20 U	20 U	390 U	200 U
ICS-DSS-14-SE-070212	4.9 U	40	4.9 U	2.8 J	39 U	20 U	20 U	20 U	20 U	20 U	230 J	200 U
ICS-DSS-16-SE-070212	4.8 U	8.5 J	4.8 U	4.8 U	39 U	19 U	19 U	19 U	19 U	19 U	390 U	190 U
ICS-DSS-18-SE-070212	4.7 U	21	4.7 U	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-DSS-13-SE-070312	3.9 J	7.3 J	4.1 J	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-DUP-01-SE-070312	2.5 J	8.8 J	4.8 U	4.8 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-DSS-12-SE-070312	440 U	20,000	1000	440 U	3500 U	14,000	1700 U	1700 U	1700 U	4400	35,000 U	17,000 U
ICS-DSS-10-SE-070312	4.6 U	7.1 J	4.6 U	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U	180 U
ICS-DSS-11-SE-070312	4.8	18 J	9.4	12	42	19 U	19 U	19 U	14 J	14 J	330 J	190 U
ICS-DSS-24-SE-070312	3.5 J	84	4.8 U	3.5 J	14 J	19 U	19 U	19 U	19 U	3.0 J	190 J	190 U
ICS-DSS-25-SE-070312	5.4	170	3.8 J	4.9 U	18 J	20 U	20 U	20 U	20 U	3.1 J	250 J	200 U
ICS-DSS-15-SE-070312	4.3 J	30	4.3 J	3.8 J	27 J	20 U	20 U	20 U	20 U	3.2 J	120 J	200 U
ICS-DSS-08-SE-070312	12	12 J	13	4.9	14 J	19 U	19 U	19 U	19 U	4.8 J	210 J	190 U
ICS-DSS-09-SE-070312	7600	640 J	12,000	620	1900	720 U	720 U	720 U	1400 U	830	14,000 U	1100 J
ICS-DSS-07-SE-070312	4.7 U	9.0 J	3.4 J	4.7 U	37 U	19 U	19 U	19 U	19 U	19 U	370 U	190 U
ICS-DSS-02-SE-070312	14 U	55 U	14 U	14 U	110 U	55 U	55 U	55 U	55 U	55 U	1100 U	550 U
ICS-DSS-03-SE-070312	4.1 J	62	4.8 U	4.6 J	13 J	19 U	19 U	19 U	19 U	4.8 J	160 J	190 U
ICS-DSS-04-SE-070312	21 U	83 U	21 U	21 U	79 J	83 U	83 U	83 U	50 J	50 J	1700 U	830 U
ICS-DUP-02-SE-070312	21 U	34 J	21 U	12 J	46 J	84 U	84 U	84 U	50 J	34 J	940 J	840 U
ICS-DSS-05-SE-070312	4.4 J	29	5.0 U	5.0 U	14 J	20 U	20 U	20 U	20 U	20 U	400 U	200 U
ICS-DSS-06-SE-070312	3.4 J	25	6.3	16	32 J	20 U	20 U	20 U	20 U	11 J	250 J	200 U
ICS-DSS-31-SE-070312												
ICS-DSS-32-SE-070312												

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	1,2,4-Trichloro- benzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	4-Chloro-3- methylphenol 59-50-7 µg/kg, dry	2-Methyl- naphthalene 91-57-6 µg/kg, dry	2,4,6-Trichloro- phenol 88-06-2 µg/kg, dry	2,4,5-Trichloro- phenol 95-95-4 µg/kg, dry	2-Chloro- naphthalene 91-58-7 µg/kg, dry	Dimethyl- phthalate 131-11-3 µg/kg, dry	Acenaph- thylene 208-96-8 µg/kg, dry	Acenaphthene 83-32-9 µg/kg, dry	Dibenzo-furan 132-64-9 µg/kg, dry
ICS-DSS-19-SE-070212	22	92	98 U	120	98 U	98 U	20 U	68	25	49	33
ICS-DSS-21-SE-070212	2.9 J	41	94 U	35	94 U	94 U	19 U	20	15 J	44	24
ICS-DSS-20-SE-070212	4.7 U	18 J	93 U	17 J	93 U	93 U	19 U	2900	10 J	19 U	15 J
ICS-DSS-22-SE-070212	4.8 U	64	96 U	21	96 U	96 U	19 U	19 U	12 J	31	20
ICS-DSS-28-SE-070212	3.6 J	21	94 U	21	94 U	94 U	19 U	19 U	19 U	19 U	14 J
ICS-DSS-30-SE-070212	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-29-SE-070212	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U	18 U	18 U	18 U	18 U
ICS-DSS-26-SE-070212	36	180	93 U	150	93 U	93 U	18 U	82	12 J	36	52
ICS-DSS-27-SE-070212	7.0	78	92 U	68	92 U	20 J	18 U	100	54	10 J	27
ICS-DSS-17-SE-070212	4.6 U	130	92 U	35	92 U	92 U	18 U	12 J	11 J	18 U	34
ICS-DSS-23-SE-070212	4.6 J	110	98 U	36	98 U	98 U	20 U	9.8 J	20 U	190	220
ICS-DSS-14-SE-070212	4.9 U	20	97 U	18 J	97 U	97 U	20 U	9.7 J	11 J	20 U	20 U
ICS-DSS-16-SE-070212	4.8 U	19 U	97 U	19 U	97 U	97 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-18-SE-070212	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-13-SE-070312	12	110	94 U	62	94 U	94 U	19 U	19 U	17 J	13 J	30
ICS-DUP-01-SE-070312	8.4	82	96 U	45	96 U	96 U	19 U	19 U	11 J	19 U	21
ICS-DSS-12-SE-070312	440 U	120,000	8700 U	50,000	8700 U	8700 U	1700 U	1700 U	8700	39,000	26,000
ICS-DSS-10-SE-070312	4.6 U	62	92 U	12 J	92 U	92 U	18 U	18 U	18 U	18 U	18 U
ICS-DSS-11-SE-070312	15	130	96 U	100	96 U	96 U	19 U	60	19 U	19 U	60
ICS-DSS-24-SE-070312	4.8 U	20	97 U	14 J	97 U	97 U	19 U	19 U	13 J	9.7 J	14 J
ICS-DSS-25-SE-070312	3.0 J	20	99 U	15 J	99 U	99 U	20 U	20 U	20 U	20 U	11 J
ICS-DSS-15-SE-070312	5.0 U	15 J	99 U	15 J	99 U	99 U	20 U	20 U	20 U	20 U	20 U
ICS-DSS-08-SE-070312	3.6 J	47	96 U	52	96 U	96 U	19 U	500	12 J	19 U	12 J
ICS-DSS-09-SE-070312	1400	12,000	3600 U	13,000	3600 U	3600 U	720 U	720 U	650 J	4600	3800
ICS-DSS-07-SE-070312	4.7 U	19 U	93 U	19 U	93 U	93 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-02-SE-070312	14 U	55 U	270 U	55 U	270 U	270 U	55 U	55 U	55 U	100	30 J
ICS-DSS-03-SE-070312	19 U	18 J	97 U	16 J	97 U	97 U	19 U	19 U	31	22	18 J
ICS-DSS-04-SE-070312	15 J	79 J	420 U	75 J	420 U	420 U	83 U	180	58 J	83 U	83 U
ICS-DUP-02-SE-070312	20 J	96	420 U	100	420 U	420 U	84 U	67 J	50 J	84 U	84 U
ICS-DSS-05-SE-070312	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U	11 J	23	20 U	20 U
ICS-DSS-06-SE-070312	6.8	43	99 U	80	99 U	99 U	20 U	54	11 J	20 U	20 U
ICS-DSS-31-SE-070312											
ICS-DSS-32-SE-070312											

J = estimate associated with value less than the verifiable lower quantitation limit.

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Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	2,6-Dinitro- toluene 606-20-2 µg/kg, dry	2,4-Dinitro- toluene 121-14-2 µg/kg, dry	Diethyl- phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl- phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi- phenylamine 86-30-6 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry
ICS-DSS-19-SE-070212	98 U	98 U	36 J	20 U	51	20 U	400	330	49	100	130	500
ICS-DSS-21-SE-070212	94 U	94 U	47 U	19 U	41	19 U	65 J	430	31	90	38	540
ICS-DSS-20-SE-070212	93 U	93 U	47 U	19 U	16 J	3.1 J	47 U	100	20	33	320	290
ICS-DSS-22-SE-070212	96 U	96 U	48 U	19 U	18 J	19 U	48 U	110	11 J	28	19 U	190
ICS-DSS-28-SE-070212	94 U	94 U	47 U	19 U	18 J	19	47 U	55	19 U	26	14 J	160
ICS-DSS-30-SE-070212	96 U	96 U	48 U	19 U	19 U	19 U	48 U	18 J	19 U	19 U	19 U	24
ICS-DSS-29-SE-070212	92 U	92 U	46 U	18 U	18 U	18 U	46 U	18 J	18 U	18 U	10 J	41
ICS-DSS-26-SE-070212	93 U	93 U	46 U	18 U	40	42	400	380	50	68	220	410
ICS-DSS-27-SE-070212	92 U	92 U	46 U	18 U	12 J	7.8 J	140 J	170	29	62	31	410
ICS-DSS-17-SE-070212	92 U	92 U	46 U	18 U	18 U	2.9 J	24 J	110	10 J	23	18 U	98
ICS-DSS-23-SE-070212	98 U	98 U	49 U	20 U	400	20 U	49 U	150	14 J	70	20 U	510
ICS-DSS-14-SE-070212	97 U	97 U	49 U	20 U	20 U	3.5 J	21 J	60	16 J	18 J	20 U	120
ICS-DSS-16-SE-070212	97 U	97 U	48 U	19 U	19 U	19 U	48 U	19 U	19 U	19 U	19 U	11 J
ICS-DSS-18-SE-070212	94 U	94 U	39 J	19 U	19 U	3.4 J	15 J	24	22	11 J	22	63
ICS-DSS-13-SE-070312	94 U	94 U	47 U	19 U	25	11 J	45 J	180	19 U	40	19 U	180
ICS-DUP-01-SE-070312	96 U	96 U	48 U	19 U	18 J	8.4 J	27 J	130	19 U	29	19 U	130
ICS-DSS-12-SE-070312	8700 U	8700 U	4400 U	1700 U	58,000	4800	1000 J	380,000	48,000	78,000	44,000	390,000
ICS-DSS-10-SE-070312	92 U	92 U	46 U	18 U	18 U	18 U	48 J _Q	28	18 U	18 U	18 J	29
ICS-DSS-11-SE-070312	96 U	96 U	48 U	19 U	14 J	14 J	290	200	15 J	36	43	160
ICS-DSS-24-SE-070312	97 U	97 U	48 U	19 U	16 J	19 U	18 J	230	20	35	19 U	370
ICS-DSS-25-SE-070312	99 U	99 U	49 U	20 U	12 J	2.7 J	28 J	90	16 J	28	13 J	200
ICS-DSS-15-SE-070312	99 U	99 U	50 U	20 U	20 U	3.3 J	51	61	9.9 J	15 J	20 U	130
ICS-DSS-08-SE-070312	96 U	96 U	48 U	19 U	10 J	9.1 J	920	110	19	33	72	150
ICS-DSS-09-SE-070312	3600 U	3600 U	1800 U	720 U	6200	4000	6500 J	14,000	4500	16,000	3400	7000
ICS-DSS-07-SE-070312	93 U	93 U	47 U	19 U	19 U	19 U	25 J	29	19 U	19 U	19 U	49
ICS-DSS-02-SE-070312	270 U	270 U	140 U	55 U	66	55 U	140 U	710	52 J	180	55 U	1100
ICS-DSS-03-SE-070312	97 U	97 U	48 U	19 U	23	19 U	56	270	70	85	19 U	1100
ICS-DSS-04-SE-070312	420 U	420 U	210 U	83 U	83 U	32 J	360	460	83 U	71 J	130	1100
ICS-DUP-02-SE-070312	420 U	420 U	210 U	84 U	84 U	38 J	400	160	84 U	50 J	120	200
ICS-DSS-05-SE-070312	99 U	99 U	50 U	20 U	12 J	3.5 J	22 J	390	32	29	20 U	1100
ICS-DSS-06-SE-070312	99 U	99 U	50 U	20 U	20 U	14 J	820	74	20 U	25	85	78
ICS-DSS-31-SE-070312												
ICS-DSS-32-SE-070312												

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J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Pyrene 129-00-0	Butylbenzyl- phthalate 85-68-7	Benzo(a)- anthracene 56-55-3	bis (2-Ethylhexyl)- phthalate 117-81-7	Chrysene 218-01-9	Di-n-octyl- phthalate 117-84-0	total Benzo- fluoranthenes	Benzo(a)- pyrene 50-32-8	Indeno(1,2,3- cd)pyrene 193-39-5	Dibenz(a,h)- anthracene 53-70-3	Benzo(g,h,i)- perylene 191-24-2	LPAH	HPAH
	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>
ICS-DSS-19-SE-070212	730	110 J _Q	260	1400	460	20 U	730	350	190	99	220	647	3539
ICS-DSS-21-SE-070212	540	150 J _Q	200	320	340	19 U	410	180	110	53	140	661	2513
ICS-DSS-20-SE-070212	280	19 U	160	98	370	19 U	300	82	51	21	53	177	1607
ICS-DSS-22-SE-070212	230	12 J	63	60	81	19 U	110	56	34	11 J	46	263	821
ICS-DSS-28-SE-070212	160	19 U	43	190	50	19 U	77	28	18 J	19 U	23	120	559
ICS-DSS-30-SE-070212	25	19 U	19 U	24	15 J	19 U	26 J	19 U	10 J	19 U	10 J	18	110
ICS-DSS-29-SE-070212	41	18 U	18 J	26	45	18 U	54	19	17 J	18 U	25	18	260
ICS-DSS-26-SE-070212	360	260 J _Q	170	550	240	18 U	420	200	160	47	200	716	2207
ICS-DSS-27-SE-070212	400	18 U	250	180	360	18 U	580	280	170	77	180	386	2707
ICS-DSS-17-SE-070212	89	14 J	42	49	66	18 U	98	41	18 U	18 U	45	274	479
ICS-DSS-23-SE-070212	350	20 U	71	84	92	20 U	110	41	27	20 U	32	920	1233
ICS-DSS-14-SE-070212	110	25 J _Q	47	83	100	20 U	140	46	38	14 J	47	109	662
ICS-DSS-16-SE-070212	9.7 J	19 U	19 U	16 JB	19 U	19 U	14 J	19 U	19 U	19 U	19 U	19	35
ICS-DSS-18-SE-070212	66	16 J	34	79	67	19 U	140	44	34	19 U	38	35	486
ICS-DSS-13-SE-070312	170	19 U	76	79	87	19 U	130	76	43	13 J	49	385	824
ICS-DUP-01-SE-070312	120	19 U	60	63	77	19 U	100	54	36	12 J	38	270	627
ICS-DSS-12-SE-070312	290,000	44,000 J _Q	130,000	180,000	180,000	1700 U	120,000	71,000	21,000	13,000	19,000	683,700	1,234,000
ICS-DSS-10-SE-070312	28	18 U	12 J	57	19	18 U	30 J	13 J	9.2 J	18 U	13 J	90	153
ICS-DSS-11-SE-070312	150	58 J _Q	80	330	130	19 U	190	96	65	21	73	380	965
ICS-DSS-24-SE-070312	280	28 J _Q	96	300	190	19 U	230	94	50	26	50	324	1386
ICS-DSS-25-SE-070312	180	27 J _Q	100	270	160	27	240	100	58	20	70	150	1128
ICS-DSS-15-SE-070312	130	31 J _Q	53	300	98	40	140	52	38	20	57	91	718
ICS-DSS-08-SE-070312	160	19 U	72	150	130	19 U	190	78	110	37	160	212	1087
ICS-DSS-09-SE-070312	6800	1100	2700	9600	5200	720 U	3300	1800	900	580 J	1100	53,450	29,380
ICS-DSS-07-SE-070312	41	19 U	20	36 B	36	19 U	52	24	19	10 J	24	29	275
ICS-DSS-02-SE-070312	1000	55 U	470	260	680	55 U	940	440	270	140	300	1056	5340
ICS-DSS-03-SE-070312	920	43 J _Q	340	620	770	19 U	850	260	140	70	140	449	4590
ICS-DSS-04-SE-070312	710	230 J _Q	190	1300	410	83 U	470	220	140	71 J	210	668	3521
ICS-DUP-02-SE-070312	250	84 U	120	1200	180	84 U	290	180	120	71 J	190	356	1601
ICS-DSS-05-SE-070312	770	20 U	110	320	310	20 U	360	95	51	27	58	454	2881
ICS-DSS-06-SE-070312	78	20 U	35	260	110	20 U	180	150	61	17 J	83	153	792
ICS-DSS-31-SE-070312													
ICS-DSS-32-SE-070312													

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

B = associated value may be biased high due to contribution from laboratory background or method blank.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Tributyltin ion 36643-28-4 µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry
ICS-DSS-19-SE-070212	16	1.0 U	1.0 U	1.0 U	8.2 U	22 U	10 U	130 U	10 U	120 U	380
ICS-DSS-21-SE-070212		1.7 U	2.4 U	0.49 U	1.6 U	2.2 U	4.9 U	9.9 U	4.9 U	9.9 U	41
ICS-DSS-20-SE-070212		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	1.6 U	3.1 U	0.49 U	4.8 U	8.8
ICS-DSS-22-SE-070212		0.46 U	0.46 U	0.46 U	0.46 U	1.6 U	0.46 U	9.2 U	4.6 U	9.2 U	28
ICS-DSS-28-SE-070212		0.48 U	0.48 U	0.48 U	2.4 U	5.2 U	4.8 U	9.6 U	4.8 U	24 U	40
ICS-DSS-30-SE-070212		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	1.3
ICS-DSS-29-SE-070212		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.93 U	0.46 U	0.93 U	1.5
ICS-DSS-26-SE-070212		4.8 U	4.8 U	0.48 U	4.8 U	3.5 U	4.8 U	9.7 U	0.48 U	32 U	70
ICS-DSS-27-SE-070212		2.5 U	1.1 U	4.4 U	5.7 U	0.70 U	7.0 U	69 U	7.0 U	120 U	310
ICS-DSS-17-SE-070212		0.48 U	2.4 U	1.2 U	0.48 U	1.8 U	4.8 U	18 U	27 U	25 U	110
ICS-DSS-23-SE-070212		0.48 U	0.48 U	0.48 U	1.6 U	0.76 U	2.2 U	0.96 U	0.48 U	4.5 U	5.4
ICS-DSS-14-SE-070212		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.93 U	0.47 U	7.2 U	9.1
ICS-DSS-16-SE-070212		0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U
ICS-DSS-18-SE-070212		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	1.5 U	3.3 U	0.48 U	5.6 U	12
ICS-DSS-13-SE-070312		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	3.0 U	15 U	0.48 U	8.1 U	22 U
ICS-DUP-01-SE-070312		0.49 U	0.49 U	0.49 U	1.1 U	0.49 U	1.2 U	4.9 U	0.49 U	8.7 U	25 U
ICS-DSS-12-SE-070312		300 U	300 U	300 U	300 U	300 U	300 U	600 U	300 U	600 U	600 U
ICS-DSS-10-SE-070312		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	17 U	28 U	1.6 U	14 U	400
ICS-DSS-11-SE-070312		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	15 U	3.3 U	26 U	180 U
ICS-DSS-24-SE-070312	4.3	0.49 U	1.2 U	3.4 U	1.4 U	2.5 U	4.9 U	9.8 U	4.9 U	9.8 U	60 U
ICS-DSS-25-SE-070312		1.1 U	3.3 U	37 U	2.4 U	0.48 U	4.8 U	9.6 U	0.48 U	9.6 U	57 U
ICS-DSS-15-SE-070312		0.84 U	3.1 U	1.8 U	2.7 U	2.2 U	4.8 U	14 U	0.48 U	9.6 U	37
ICS-DSS-08-SE-070312		1.6 U	1.6 U	1.6 U	1.6 U	2.8 U	1.6 U	32 U	16 U	69 U	120 U
ICS-DSS-09-SE-070312	150	54 U	34 U	34 U	680 U	2000 U	680 U	3200 U	200 U	1400 U	5000 J_M
ICS-DSS-07-SE-070312		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.80 U	3.8 U	0.48 U	9.5 U	9.5 U
ICS-DSS-02-SE-070312		0.47 U	3.8 U	0.47 U	2.2 U	0.47 U	4.7 U	9.4 U	0.47 U	9.4 U	3.2 U
ICS-DSS-03-SE-070312		2.8 U	2.3 U	4.9 U	4.5 U	4.6 U	0.49 U	23 U	0.49 U	17 U	68
ICS-DSS-04-SE-070312		3.8 U	30 U	3.8 U	15 U	44 U	190 U	380 U	27 U	1200 U	2000
ICS-DUP-02-SE-070312		3.8 U	3.8 U	3.8 U	14 U	37 U	190 U	380 U	24 U	930 U	1400 U
ICS-DSS-05-SE-070312		0.48 U	4.6 U	9.5 U	4.2 U	10 U	19 U	29 U	1.6 U	36 U	130
ICS-DSS-06-SE-070312	3.6 U	3.1 U	3.1 U	3.1 U	3.1 U	8.8 U	31 U	180 U	11 U	460 U	2000
ICS-DSS-31-SE-070312	10										
ICS-DSS-32-SE-070312	9.6										

U = nondetected at the associated lower reporting limit.

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD (M.8081).

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Endrin 72-20-8	Endosulfan II 33213-65-9	4,4'-DDD 72-54-8	Endosulfan sulfate 1031-07-8	4,4'-DDT 50-29-3	Methoxychlor 72-43-5	Endrin ketone 53494-70-5	Endrin aldehyde 7421-93-4	trans- Chlordane 5103-74-2	cis- Chlordane 5103-71-9	Toxaphene 8001-35-2
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-DSS-19-SE-070212	170 U	74 U	60 J_M	21 U	240 J_M	46 U	21 U	66 U	20 J_M	10 J_M	1800 U
ICS-DSS-21-SE-070212	0.99 U	9.2 U	16	9.9 U	28 U	14 U	9.9 U	16 U	4.9 U	1.6 U	99 U
ICS-DSS-20-SE-070212	8.7 U	0.98 U	2.3	0.98 U	9.8 U	4.9 U	7.3 U	4.3 U	0.49 U	0.49 U	98 U
ICS-DSS-22-SE-070212	0.92 U	9.2 U	5.9	0.92 U	26 U	4.6 U	5.3 U	0.92 U	0.46 U	0.46 U	92 U
ICS-DSS-28-SE-070212	9.6 U	9.6 U	39	8.9 U	44 U	16 U	0.96 U	9.6 U	4.8 U	2.2 U	340 U
ICS-DSS-30-SE-070212	0.97 U	0.97 U	0.97 U	0.97 U	2.6	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	97 U
ICS-DSS-29-SE-070212	0.93 U	0.93 U	0.93 U	0.93 U	2.3 U	4.6 U	0.93 U	0.93 U	0.46 U	0.46 U	93 U
ICS-DSS-26-SE-070212	0.97 U	58 U	21	0.97 U	22	13 U	9.7 U	16 U	29 J_M	17 J_M	430 U
ICS-DSS-27-SE-070212	160 U	100 U	40 J_M	14 U	400	33 U	14 U	78 U	10 J_M	7 J_M	1400 U
ICS-DSS-17-SE-070212	0.95 U	41 U	20 J_M	20 U	40 J_M	120 U	37 U	64 U	9.6 U	9.6 U	950 U
ICS-DSS-23-SE-070212	6.7 U	0.96 U	2.2	1.9 U	5.3 U	4.8 U	2.8 U	4.0 U	0.48 U	0.48 U	96 U
ICS-DSS-14-SE-070212	9.3 U	0.93 U	1.5	0.93 U	9.3 U	4.7 U	9.3 U	6.0 U	0.47 U	0.47 U	93 U
ICS-DSS-16-SE-070212	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	0.49 U	0.49 U	99 U
ICS-DSS-18-SE-070212	9.6 U	2.2 U	1.5	4.1 U	8.6 U	4.8 U	0.96 U	4.4 U	0.95 U	1.7 U	96 U
ICS-DSS-13-SE-070312	21 U	6.4 U	6.9 U	0.97 U	20 U	10 U	19 U	18 U	2.3 U	4.0 U	97 U
ICS-DUP-01-SE-070312	7.0 U	4.9 U	0.98 U	0.98 U	0.98 U	4.9 U	4.9 U	11 U	8.7 U	2.5 U	98 U
ICS-DSS-12-SE-070312	600 U	600 U	600 U	600 U	600 U	3000 U	600 U	600 U	300 U	300 U	60,000 U
ICS-DSS-10-SE-070312	48 U	17 U	0.97 U	24 U	48 U	4.8 U	35 U	22 U	8.1 U	9.5 U	240 U
ICS-DSS-11-SE-070312	100 U	15 U	15 U	15 U	15 U	15 U	15 U	64 U	24 U	25 U	590 U
ICS-DSS-24-SE-070312	9.8 U	9.8 U	0.98 U	9.8 U	0.98 U	8.7 U	9.8 U	23 U	4.9 U	2.7 U	98 U
ICS-DSS-25-SE-070312	9.6 U	9.6 U	0.96 U	9.6 U	9.6 U	14 U	9.6 U	9.6 U	4.8 U	4.8 U	150 U
ICS-DSS-15-SE-070312	9.6 U	9.6 U	0.96 U	7.3 U	9.6 U	5.6 U	9.6 U	9.6 U	4.8 U	1.4 U	96 U
ICS-DSS-08-SE-070312	32 U	32 U	3.2 U	3.2 U	32 U	16 U	32 U	49 U	31 U	16 U	730 U
ICS-DSS-09-SE-070312	68 U	1400 U	1000 J_M	1400 U	6600 J_M	340 U	990 U	1300 U	200 U	200 U	10,000 U
ICS-DSS-07-SE-070312	9.5 U	9.5 U	5.5 U	0.95 U	50 U	4.8 U	9.5 U	22 U	3.2 U	2.9 U	95 U
ICS-DSS-02-SE-070312	9.4 U	9.4 U	0.94 U	9.4 U	9.4 U	29 U	9.4 U	9.4 U	4.7 U	4.7 U	570 U
ICS-DSS-03-SE-070312	9.7 U	9.7 U	0.97 U	11 U	42	34 U	9.7 U	14 U	16 U	2.0 U	740 U
ICS-DSS-04-SE-070312	1600 U	380 U	400 J_M	7.7 U	2200 J_M	1900 U	380 U	380 U	140 J_M	100 J_M	8400 U
ICS-DUP-02-SE-070312	380 U	380 U	380 U	7.7 U	2200 U	1900 U	380 U	380 U	190 U	190 U	6300 U
ICS-DSS-05-SE-070312	34 U	12 U	9.3 U	9.3 U	50 J_M	19 U	25 U	18 U	5 J_M	0.48 U	97 U
ICS-DSS-06-SE-070312	650 U	110 U	400 J_M	6.2 U	820 J_M	310 U	62 U	330 U	50 J_M	40 J_M	2800 U
ICS-DSS-31-SE-070312											
ICS-DSS-32-SE-070312											

U = nondetected at the associated lower reporting limit.

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD (M.8081).

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	Hexachloro- benzene 118-74-1	Hexachloro- butadiene 87-68-3	Aroclor 1016 12674-11-2	Aroclor 1242 53469-21-9	Aroclor 1248 12672-29-6	Aroclor 1254 11097-69-1	Aroclor 1260 11096-82-5	Aroclor 1221 11104-28-2	Aroclor 1232 11141-16-5	total PCBs
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-DSS-19-SE-070212	9.8 U	1.0 U	410 U	410 U	4400	4700	3400	410 U	410 U	12,500
ICS-DSS-21-SE-070212	2.0 U	0.49 U	40 U	40 U	450	580	490	40 U	40 U	1520
ICS-DSS-20-SE-070212	0.49 U	0.49 U	39 U	39 U	240	320	230	39 U	39 U	790
ICS-DSS-22-SE-070212	0.46 U	0.46 U	38 U	38 U	540	760	400	38 U	38 U	1700
ICS-DSS-28-SE-070212	0.48 U	0.48 U	38 U	38 U	1100	1200	580	38 U	38 U	2880
ICS-DSS-30-SE-070212	0.49 U	0.49 U	3.9 U	3.9 U	39 U	130	44	3.9 U	3.9 U	174
ICS-DSS-29-SE-070212	0.46 U	0.46 U	3.8 U	3.8 U	11 U	30	29	3.8 U	3.8 U	59
ICS-DSS-26-SE-070212	3.3 U	0.48 U	39 U	39 U	1600	1800	770	39 U	39 U	4170
ICS-DSS-27-SE-070212	4.9 U	0.70 U	280 U	280 U	980 U	3100	2700	280 U	280 U	5800
ICS-DSS-17-SE-070212	0.60 U	0.48 U	39 U	39 U	190	270	280	39 U	39 U	740
ICS-DSS-23-SE-070212	0.48 U	0.48 U	20 U	20 U	180	200	180	20 U	20 U	560
ICS-DSS-14-SE-070212	0.47 U	0.47 U	39 U	39 U	72	180	330	39 U	39 U	582
ICS-DSS-16-SE-070212	0.49 U	0.49 U	4.0 U	4.0 U	8.0	12	22	4.0 U	4.0 U	42
ICS-DSS-18-SE-070212	0.48 U	0.48 U	40 U	40 U	110	190	200	40 U	40 U	500
ICS-DSS-13-SE-070312	0.48 U	0.48 U	39 U	39 U	280	230	200	39 U	39 U	710
ICS-DUP-01-SE-070312	1.0 U	0.49 U	39 U	39 U	260	260	210	39 U	39 U	730
ICS-DSS-12-SE-070312	300 U	300 U	240 U	11,000	240 U	8900	2600	240 U	240 U	22,500
ICS-DSS-10-SE-070312	0.85 U	0.48 U	39 U	39 U	690	630	600	39 U	39 U	1920
ICS-DSS-11-SE-070312	3.6 U	1.5 U	120 U	120 U	1500	1800	2000	120 U	120 U	5300
ICS-DSS-24-SE-070312	1.6 U	0.49 U	98 U	98 U	590	560	560	98 U	98 U	1710
ICS-DSS-25-SE-070312	4.3 U	0.48 U	96 U	96 U	500	530	420	96 U	96 U	1450
ICS-DSS-15-SE-070312	0.48 U	0.77 U	96 U	96 U	680	740	680	96 U	96 U	2100
ICS-DSS-08-SE-070312	2.0 U	1.6 U	63 U	63 U	950 U	2000	1400	63 U	63 U	3400
ICS-DSS-09-SE-070312	1300 U	150 U	5400 U	120,000	5400 U	44,000	30,000	5400 U	5400 U	194,000
ICS-DSS-07-SE-070312	0.48 U	0.48 U	38 U	38 U	71	190 U	520	38 U	38 U	591
ICS-DSS-02-SE-070312	2.9 U	0.47 U	38 U	38 U	190	210	170	38 U	38 U	570
ICS-DSS-03-SE-070312	4.2 U	0.86 U	97 U	97 U	450	530	560	97 U	97 U	1540
ICS-DSS-04-SE-070312	17 U	3.8 U	310 U	310 U	3800 J_M	10,000	14,000	310 U	310 U	27,800
ICS-DUP-02-SE-070312	15 U	3.8 U	770 U	770 U	5800 U	14,000	18,000	770 U	770 U	32,000
ICS-DSS-05-SE-070312	0.48 U	0.48 U	97 U	3500	97 U	1700	1200	97 U	97 U	6400
ICS-DSS-06-SE-070312	5.7 U	3.1 U	250 U	250 U	2500 J_M	5800	7000	250 U	250 U	15,300
ICS-DSS-31-SE-070312										
ICS-DSS-32-SE-070312										

U = nondetected at the associated lower reporting limit.

J_M = estimated value from GC/MS (M.8270) analysis due to chemical interference on GC/ECD (M.8082).

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Sediment Analyses, July 2012

Field I.D.	gravel	coarse sand	medium sand	fine sand	v. coarse silt	coarse silt	medium silt	fine silt	v. fine silt	total silt	clay		total fines
	> 4750 µm	4750 - 2000 µm	2000 - 425 µm	425 - 75 µm	75 - 32 µm	32 - 22 µm	22 - 13 µm	13 - 7 µm	7 - 3.2 µm	32 - 3.2 µm	3.2 - 1.3 µm	< 1.3 µm	< 32 µm
	%	%	%	%	%	%	%	%	%	%	%	%	%
ICS-DSS-19-SE-070212	0.0	0.2	4.6	35.3	1.7	8.7	9.6	15.7	9.6	45.3	3.5	11.3	60.1
ICS-DSS-21-SE-070212													
ICS-DSS-20-SE-070212													
ICS-DSS-22-SE-070212													
ICS-DSS-28-SE-070212													
ICS-DSS-30-SE-070212	8.1	2.7	14	56.5	4.7	2.7	1.3	3.1	1.3	13.1	0.9	4.0	18.0
ICS-DSS-29-SE-070212													
ICS-DSS-26-SE-070212													
ICS-DSS-27-SE-070212													
ICS-DSS-17-SE-070212	25.4	8.7	12.2	36.1	1.9	1.7	2.4	4.5	2.1	12.6	2.1	3.1	17.8
ICS-DSS-23-SE-070212													
ICS-DSS-14-SE-070212													
ICS-DSS-16-SE-070212													
ICS-DSS-18-SE-070212													
ICS-DSS-13-SE-070312													
ICS-DUP-01-SE-070312													
ICS-DSS-12-SE-070312													
ICS-DSS-10-SE-070312													
ICS-DSS-11-SE-070312													
ICS-DSS-24-SE-070312													
ICS-DSS-25-SE-070312													
ICS-DSS-15-SE-070312													
ICS-DSS-08-SE-070312	87.1	1.3	4.2	4.2	0.1	0.4	0.6	0.7	0.5	2.3	0.3	0.7	3.3
ICS-DSS-09-SE-070312													
ICS-DSS-07-SE-070312													
ICS-DSS-02-SE-070312	71.5	7.7	11.4	5.8	0.1	0.2	0.6	1.0	0.4	2.3	0.3	0.9	3.5
ICS-DSS-03-SE-070312													
ICS-DSS-04-SE-070312	23.9	7.9	21.4	32.6	0.4	1.1	2.6	2.5	2.2	8.8	1.5	4.0	14.3
ICS-DUP-02-SE-070312													
ICS-DSS-05-SE-070312													
ICS-DSS-06-SE-070312													
ICS-DSS-31-SE-070312													
ICS-DSS-32-SE-070312													

grain size analyses: % retained in each size fraction

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Sediment Analyses, July 2012

Field I.D.	2,3,7,8-TCDF 51207-31-9 ng/kg, dry	total TCDF 55722-27-5 ng/kg, dry	2,3,7,8-TCDD 1746-01-6 ng/kg, dry	total TCDD 41903-57-5 ng/kg, dry	1,2,3,7,8-PeCDF 57117-41-6 ng/kg, dry	2,3,4,7,8-PeCDF 57117-31-4 ng/kg, dry	total PeCDF 30402-15-4 ng/kg, dry	1,2,3,7,8-PeCDD 40321-76-4 ng/kg, dry	total PeCDD 36088-22-9 ng/kg, dry	1,2,3,4,7,8-HxCDF 70648-26-9 ng/kg, dry	1,2,3,6,7,8-HxCDF 57117-44-9 ng/kg, dry	2,3,4,6,7,8-HxCDF 60851-34-5 ng/kg, dry	1,2,3,7,8,9-HxCDF 72918-21-9 ng/kg, dry	total HxCDF 55684-94-1 ng/kg, dry
ICS-DSS-19-SE-070212	22.1	229	30.8	124	21.0	44.2	728	60.5	369	265	71.7	102	38.7	2750
ICS-DSS-21-SE-070212														
ICS-DSS-20-SE-070212														
ICS-DSS-22-SE-070212														
ICS-DSS-28-SE-070212														
ICS-DSS-30-SE-070212														
ICS-DSS-29-SE-070212														
ICS-DSS-26-SE-070212														
ICS-DSS-27-SE-070212														
ICS-DSS-17-SE-070212														
ICS-DSS-23-SE-070212														
ICS-DSS-14-SE-070212														
ICS-DSS-16-SE-070212														
ICS-DSS-18-SE-070212														
ICS-DSS-13-SE-070312														
ICS-DUP-01-SE-070312														
ICS-DSS-12-SE-070312														
ICS-DSS-10-SE-070312														
ICS-DSS-11-SE-070312														
ICS-DSS-24-SE-070312														
ICS-DSS-25-SE-070312														
ICS-DSS-15-SE-070312														
ICS-DSS-08-SE-070312	12.4	314	15.6	114	12.7	30.9	670	49.0	346	163	68.9	86.9	19.3	1810
ICS-DSS-09-SE-070312														
ICS-DSS-07-SE-070312														
ICS-DSS-02-SE-070312	1.76	31.0	2.37	15.9	1.42 J	2.93	58.4	5.52	36.2	11.4	4.22	3.80	1.86 J	162
ICS-DSS-03-SE-070312														
ICS-DSS-04-SE-070312														
ICS-DUP-02-SE-070312														
ICS-DSS-05-SE-070312														
ICS-DSS-06-SE-070312														
ICS-DSS-31-SE-070312														
ICS-DSS-32-SE-070312														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Sediment Analyses, July 2012

Field I.D.	1,2,3,4,7,8- HxCDD	1,2,3,6,7,8- HxCDD	1,2,3,7,8,9- HxCDD	total HxCDD	1,2,3,4,6,7,8- HpCDF	1,2,3,4,7,8,9- HpCDF	total HpCDF	1,2,3,4,6,7,8- HpCDD	total HpCDD	OCDF	OCDD	TEQ	
	39227-28-6	57653-85-7	19408-74-3	34465-46-8	67562-39-4	55673-89-7	38998-75-3	35822-46-9	37871-00-4	39001-02-0	3268-87-9	ND=0	ND/2
	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
ICS-DSS-19-SE-070212	67.1	367	306	3060	2090	117	6780	10,800	22,200	7250	117,000	396	396
ICS-DSS-21-SE-070212													
ICS-DSS-20-SE-070212													
ICS-DSS-22-SE-070212													
ICS-DSS-28-SE-070212													
ICS-DSS-30-SE-070212													
ICS-DSS-29-SE-070212													
ICS-DSS-26-SE-070212													
ICS-DSS-27-SE-070212													
ICS-DSS-17-SE-070212													
ICS-DSS-23-SE-070212													
ICS-DSS-14-SE-070212													
ICS-DSS-16-SE-070212													
ICS-DSS-18-SE-070212													
ICS-DSS-13-SE-070312													
ICS-DUP-01-SE-070312													
ICS-DSS-12-SE-070312													
ICS-DSS-10-SE-070312													
ICS-DSS-11-SE-070312													
ICS-DSS-24-SE-070312													
ICS-DSS-25-SE-070312													
ICS-DSS-15-SE-070312													
ICS-DSS-08-SE-070312	65.9	363	271	2780	1810	93.6	5000	8330	15,400	5080	70,100	304	304
ICS-DSS-09-SE-070312													
ICS-DSS-07-SE-070312													
ICS-DSS-02-SE-070312	7.05	26.9	27.3	236	144	5.09	381	771	1520	384	7400	28.8	28.8
ICS-DSS-03-SE-070312													
ICS-DSS-04-SE-070312													
ICS-DUP-02-SE-070312													
ICS-DSS-05-SE-070312													
ICS-DSS-06-SE-070312													
ICS-DSS-31-SE-070312													
ICS-DSS-32-SE-070312													

TEQ (TCDD toxicity equivalence) based on WHO 2005 relative toxicity factors.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)
FROM: Raleigh Farlow
DATE: December 10, 2012
SUBJECT: Data Evaluation/Assessment for 36 Soils and One NAPL Sample Collected during October 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA

Forty nine soil samples and an NAPL were collected by Dalton, Olmsted & Fuglevand (DOF) staff during October 15-17, 2012 for the evaluation of soil quality. All samples were delivered in four delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within two days of collection. Samples were received on ice at temperatures between 0.9 and 5.1 degrees C, and maintained at the project laboratory at 4 degrees C prior to analyses. No chemical preservatives were specified nor required. Analyses were requested on thirty six soils, the NAPL, and a VOC's transport/trip blank.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). All analyses were performed by methods presented in Table SAP-6 of the SAP.

VOC's	SW846-M.8260C	pH	SW846-M.9045
SVOC's	SW846-M.8270	SVOC's (selected)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. pesticides	SW846-M.8081
Hg	SW846-M.7471A	metals (exc Hg)	SW846-M.6020A
total organic halides	SW846-M.9076	total petroleum HC's	NWTPH-Dx & -Gx

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. These selected analytes include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses. Similarly, selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method and the volatile organic compound (VOC's) method (M.8260). The attached results table reports only one result, which is either one of the two

exhibiting the lowest reporting limit or the result with the least limitations in data quality. Naphthalene results generated by M.8260 (VOC's method) was not considered further for use due to generally elevated reporting limits as compared to the results generated by M.8270 (SVOC's method). Hexachlorobutadiene (HCBd) was analyzed and reported by both M.8260 (VOC's) and M.8081 (chlorinated pesticides). The result generated by M.8260 was not reported in the attached results table due to generally elevated reporting limits. NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps. Total organic halide (TOX) analyses in NAPL were subcontracted by ARI to Spectra Laboratories of Tacoma, Washington.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Generally, [lower] **reporting limits** were consistent with specified-limits presented in the SAP (Table SAP-6). Exceptions are noted principally for organic compound analytes due to presence of chemical interferences and elevated levels of other target analytes. Specifically, samples LP3-SO-B, MW6-A and MW6-B (and its blind duplicate) required extract dilutions due to elevated levels of organic contaminants resulting in the elevation of some analyte nondetection reporting limits. These samples also exhibited elevated levels of petroleum hydrocarbons that necessitated extract dilutions in order to prevent instrumental overloading. Most of the elevated nondetects for the chlorinated pesticides are due to chemical interferences and elevated backgrounds for samples MW6-B (and its blind duplicate), MW7-A, LP3-SO-A, LP3-SO-B, LP4-SO-A and LP4-SO-B. Interferences in the determination of chlorinated pesticides are principally attributed to relatively elevated levels of PCB's. Selected pesticide data were qualified as estimated with the "J_p" qualifier code due to variability observed between the two GC [confirmation] columns; this is likely due to interferences from PCB's found in the same samples. Some Aroclors (commercial PCB mixtures) were reported with elevated reporting limits or nondetects due to elevated levels of other detected Aroclors that have the potential to contribute overlapping signals and imperfect pattern matches with standard Aroclor reference mixtures. Congener peak ratios showed sufficient variability within apparent PCB mixtures in some samples to warrant qualification of reported Aroclor mixtures with the "J_p" qualifier code, indicating an estimated concentration due to > 40% variability (or RPD/CV) in relative congener level contributions compared to the reference standard and/or > 40 RPD in Aroclor concentrations between the two GC column determinations. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

<u>Parameter detected in MB</u>	<u>Detected level (µg/kg)</u>	<u>Potentially affected groups</u>
Methylene chloride	2.3	VN71, VN72
Methylene chloride	0.9	VO10, VO11
Naphthalene (VOC's)	0.6	VN72
Naphthalene (VOC's)	0.7	VO10, VO11
1,2,3-Trichlorobenzene	0.5	VO10, VO11
1,2,4-Trichlorobenzene	0.6	VO10, VO11
Phenol	1.3	VN71, VN72
<i>bis</i> (2-Ethylhexyl)phthalate	25	VN71, VN72
<i>bis</i> (2-Ethylhexyl)phthalate	35	VO10

Levels detected in MB's were generally less than or approximate to the lower reporting limits. Concentrations reported in project samples greater than 2x the MB level (with consideration of any sample/extract dilutions) are determined to be not adversely impacted by potential bias associated with laboratory background levels. Only phenol and *bis*(2-ethylhexyl)phthalate results in some samples are determined to be potentially biased [high] due to blank contamination and are thus qualified with the "J_B" qualifier code. No other data required qualification due to method blanks performance.

No field equipment **rinsate blanks** were specified in the project SAP nor were any collected. A single **trip/transport blank** was generated and submitted for analysis and determination of potential contamination during handling of VOC's and TPH-Gx samples. Results of analysis are reported in the attached table. Only acetone was detected at approximately 3.3 µg/L, which is less than the lower reporting limit of 5.0 µg/L. This level is sufficiently low to not adversely impact reported results. No data required qualification due to field blank performance.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. Some recoveries were nonevaluable due to high native levels of analyte interfering with [low] spike levels, such as hexachlorobutadiene (HCBd) in sample MW6-SO-A, and elevated chemical interferences with δ-BHC and endrin aldehyde in sample LP2-SO-A. Several analytes, such as hexachloroethane, acetone, methylene chloride, *trans*-1,2-dichloroethene, acrolein, δ-BHC, and endrin ketone exhibited MS/MSD recoveries outside specification, but not sufficient to require qualification of associated results, which were all nondetects. Associated LCS/LCSD recoveries for these specific analytes were all within the acceptance range. LCS/LCSD recoveries were outside the specified ranges for N-nitrosodiphenylamine, carbazole, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene, and total benzofluoranthenes for delivery groups VN71 and VN72, however, associated MS/MSD performances were acceptable. No associated data required qualification. Antimony (Sb) matrix spike recoveries are reported consistently low in soil samples at 7.5%, 10.7% and 11.2%. Sb LCS and SRM recoveries are determined to be acceptable. This behaviour for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; however, positive hits for Sb are thus qualified with the "J_R" qualifier code to indicate results are considered estimates (biased low) due to low matrix spike recoveries. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exception noted above for antimony, requiring qualification of associated results as estimates with the "J_R" code.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-Gx, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), and PCB's. Four labeled compounds were utilized for the evaluation of VOC's recovery performance. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance. Trifluorotoluene and bromobenzene were used as surrogates for the TPH-Gx analyses, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. All surrogate recoveries were within specification, with the exception of elevated DCBP, for the analyses of PCB's in samples LP1-SO-B, LP3-SO-A, LP3-SO-B, LP4-SO-A, and LP4-SO-B due to moderate levels of interferences manifested as an elevated chromatographic baseline and relatively high levels of Aroclor 1260, but not sufficient to adversely affect PCB's data quality (Aroclor 1260 contains small amounts of DCBP). No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV) checks revealed occasional [minor] noncompliant responses for bromomethane, 2-butanone, acetone, 1,1-dichloroethene, carbon disulfide, 1,1,1,2-tetrachloroethane, bromoform, naphthalene (VOC's), pentachlorophenol (M.8270-SIM), butylbenzylphthalate (M.8279-SIM), carbazole, isophorone, chlorophenyl phenylether, and 4,4'-DDT. Reported data associated with noncompliant CCV's are nonetheless qualified as estimates with the "J_Q" code, even though the data quality, by other measures, is generally within acceptance limits.

Two pairs of blind **field duplicate** samples were collected and submitted for analyses for the assessment of monitoring variability. Duplicate pairs are identified in the attached table of sample results; MW3-A / DUP1 and MW6-B / DUP2. Variability in terms of relative percent difference (RPD) for all parameters generally averaged less than 25% for duplicate pairs. Greatest RPDs (up to 116 & 135) were observed for organic contaminants, such as trimethylbenzene and dibenzofuran, in soils from MW6-A and its associated blind duplicate. Greatest variabilities were generally associated with contaminants exhibiting relatively high concentrations. This is characteristic of high heterogeneity in contaminated environmental media. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications).

TPH-Dx analyses indicate there to be relatively high variability across the site regarding the type of hydrocarbon mixtures present. Bold type values are associated with the patterns that most likely identify the hydrocarbon mixtures present, such as gasoline, diesel fuel and/or motor/lubricant oil. Samples LP3-SO-B and LP3-SO-C also show presence of a light hydrocarbon solvent overlaying a diesel pattern and lube-type hydrocarbon mixture. LP4-NAPL exhibits hydrocarbon patterns resembling gasoline, light hydrocarbon solvent, diesel fuel, and motor oil lubricant.

Sample results reported here are determined to be in general compliance with method and SAP requirements. Most deviations of data quality from SAP and method specifications are

associated with generally elevated levels of multiple contaminants in site soils. All reported data for soil and NAPL samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	pH	Antimony 7440-36-0 mg/kg, dry	Arsenic 7440-38-2 mg/kg, dry	Beryllium 7440-41-7 mg/kg, dry	Cadmium 7440-43-9 mg/kg, dry	Chromium 7440-47-3 mg/kg, dry	Copper 7440-50-8 mg/kg, dry	Lead 7439-92-1 mg/kg, dry
					%	SU							
ICS-LP1-SO-A-101512	soil	10/15/2012	3 - 5'	1220278-VN72E	90		0.4 J_R	14.5	0.2	0.4	30.1	44.6	403
ICS-LP1-SO-B-101512	soil	10/15/2012	6.5 - 8'	1220274-VN72A	58	7.41	0.3 U	21.4	0.4	1.7	60.5	103	448
ICS-LP1-SO-C-101512	soil	10/15/2012	10.5 - 12'	1220279-VN72F	75		0.3 U	2.2	0.3 U	0.1 U	12.9	19.7	2.5
ICS-LP1-SO-D-101512	soil	10/15/2012	16 - 18'	1220287-VN72N									
ICS-LP2-SO-A-101512	soil	10/15/2012	3 - 5'	1220280-VN72G	83		0.2 U	5.9	0.2 U	0.7	31.4	160	106
ICS-LP2-SO-B-101512	soil	10/15/2012	5.5 - 7.5'	1220275-VN72B	73	7.45	0.3 U	4.8	0.3 U	0.1 U	17.4	23.1	4.3
ICS-LP2-SO-C-101512	soil	10/15/2012	8 - 10'	1220281-VN72H	72		0.3 U	3.4	0.3 U	0.1 U	12.6	23.2	3.4
ICS-LP2-SO-D-101512	soil	10/15/2012	15 - 16'	1220288-VN72O									
ICS-LP3-SO-A-101512	soil	10/15/2012	3 - 5'	1220282-VN72I	94		0.2 U	2.7	0.2 U	0.4	41.0	24.6	110
ICS-LP3-SO-B-101512	soil	10/15/2012	6 - 8'	1220276-VN72C	82	6.85	0.8 J_R	6.7	0.2 U	5.8	910	450	3600
ICS-LP3-SO-C-101512	soil	10/15/2012	10 - 12'	1220283-VN72J	75		0.3 U	3.4	0.3 U	0.1 U	21.1	24.1	4.2
ICS-LP3-SO-D-101512	soil	10/15/2012	15 - 16'	1220289-VN72P									
ICS-LP4-SO-A-101512	soil	10/15/2012	8 - 10'	1220284-VN72K	81		0.2 U	5.2	0.3	0.7	66.3	38.7	748
ICS-LP4-SO-B-101512	soil	10/15/2012	10 - 12'	1220277-VN72D	67	8.34	0.3 U	10.1	0.4	0.8	37.4	41.7	118
ICS-LP4-SO-C-101512	soil	10/15/2012	14 - 15'	1220285-VN72L	77		0.2 U	1.3	0.2 U	0.1 U	10.2	9.6	1.6
ICS-LP4-SO-D-101512	soil	10/15/2012	17 - 18'	1220290-VN72Q									
ICS-LP4-NAPL-101512	NAPL	10/15/2012	4 - 5'	1220286-VN72M									
ICS-DOF-MW1-A-101512	soil	10/15/2012	4 - 5'	1220271-VN71A	92		0.2 U	3.0	0.2 U	0.1 U	15.8	14.0	11.0
ICS-DOF-MW1-B-101512	soil	10/15/2012	6.5 - 7.5'	1220272-VN71B	72		0.3 U	3.2	0.3 U	0.1 U	15.0	22.1	3.0
ICS-DOF-MW1-C-101512	soil	10/15/2012	11 - 12'	1220273-VN71C	71		0.3 U	2.0	0.3 U	0.1	13.6	17.3	2.0
ICS-DOF-MW2-A-101612	soil	10/16/2012	2 - 3'	1220473-VO10G	97		0.2 U	2.0	0.2 U	0.1 U	10.0	9.6	1.8
ICS-DOF-MW2-B-101612	soil	10/16/2012	8 - 9'	1220474-VO10H	85		0.2 U	2.5	0.2 U	0.1 U	12.9	14.9	2.9
ICS-DOF-MW2-C-101612	soil	10/16/2012	12 - 13'	1220475-VO10I	71		0.3 U	4.7	0.4	0.1 U	19.6	26.5	4.7
ICS-DOF-MW2-D-101612	soil	10/16/2012	16 - 17'	1220483-VO10Q									
ICS-DOF-MW3-A-101612	soil	10/16/2012	2 - 4'	1220476-VO10J	93		0.2 U	2.4	0.2 U	0.1 U	10.5	10.4	3.4
ICS-DOF-DUP1-101612	soil	10/16/2012	dup of MW3-A	1220507-VO11F	93		0.2 U	2.7	0.2 U	0.1 U	10.9	10.2	4.1
ICS-DOF-MW3-B-101612	soil	10/16/2012	7 - 8'	1220477-VO10K	85		0.2 U	2.1	0.2 U	0.1 U	11.2	11.7	2.8
ICS-DOF-MW3-C-101612	soil	10/16/2012	12 - 13'	1220484-VO10R									
ICS-DOF-MW3-D-101612	soil	10/16/2012	17 - 18'	1220485-VO10S									
ICS-DOF-MW4-A-101712	soil	10/17/2012	3 - 4'	1220478-VO10L	89		0.2 U	2.4	0.2 U	0.1 U	10.5	10.8	2.1
ICS-DOF-MW4-B-101712	soil	10/17/2012	7 - 8'	1220479-VO10M	75		0.2 U	2.8	0.3	0.1	12.0	17.7	3.9
ICS-DOF-MW4-C-101712	soil	10/17/2012	10 - 11'	1220480-VO10N	78		0.2 U	2.0	0.2 U	0.1	12.8	22.7	6.3
ICS-DOF-MW4-D-101712	soil	10/17/2012	16 - 17'	1220486-VO10T									
ICS-DOF-MW5-A-101712	soil	10/17/2012	3 - 4'	1220502-VO11A	91		0.2 U	2.2	0.2 U	0.1 U	9.6	12.9	2.3
ICS-DOF-MW5-B-101712	soil	10/17/2012	7 - 8'	1220503-VO11B	77		0.2 U	2.0	0.2 U	0.1 U	10.0	11.2	1.9
ICS-DOF-MW5-C-101712	soil	10/17/2012	12 - 13'	1220510-VO11I									
ICS-DOF-MW5-D-101712	soil	10/17/2012	17 - 18'	1220511-VO11J									

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	<u>Lab I.D.</u>	% solids	pH	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9	Chromium 7440-47-3	Copper 7440-50-8	Lead 7439-92-1
					%	SU	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry
ICS-DOF-MW6-A-101712	soil	10/17/2012	3 - 5'	1220504-VO11C	79		0.2 U	3.0	0.2 U	0.1 U	11.8	13.9	2.6
ICS-DOF-MW6-B-101712	soil	10/17/2012	6 - 8'	1220505-VO11D	78		0.3 U	2.6	0.3 U	0.1 U	11.6	13.0	2.3
ICS-DOF-DUP2-101712	soil	10/17/2012	dup of MW6-B	1220508-VO11G	78		0.3 U	3.0	0.3 U	0.1 U	12.8	14.9	2.5
ICS-DOF-MW6-C-101712	soil	10/17/2012	9 - 10'	1220506-VO11E	62		0.3 U	8.0	0.3	0.1 U	17.3	28.0	4.2
ICS-DOF-MW6-D-101712	soil	10/17/2012	12 - 13'	1220512-VO11K									
ICS-DOF-MW7-A-101612	soil	10/16/2012	3 - 4'	1220470-VO10D	77		0.3 U	3.5	0.3 U	0.1 U	13.0	18.2	8.4
ICS-DOF-MW7-B-101612	soil	10/16/2012	7 - 8'	1220471-VO10E	72		0.3 U	3.2	0.3 U	0.1 U	14.7	21.6	3.0
ICS-DOF-MW7-C-101612	soil	10/16/2012	11 - 12'	1220472-VO10F	70		0.3 U	2.6	0.3 U	0.1 U	13.1	20.8	2.4
ICS-DOF-MW7-D-101612	soil	10/16/2012	16 - 17'	1220482-VO10P									
ICS-DOF-MW8-A-101612	soil	10/16/2012	3 - 4'	1220467-VO10A	95		0.2 U	1.7	0.2 U	0.1 U	8.4	10.2	1.5
ICS-DOF-MW8-B-101612	soil	10/16/2012	7 - 8'	1220468-VO10B	73		0.3 U	2.5	0.3 U	0.1 U	14.4	20.9	3.0
ICS-DOF-MW8-C-101612	soil	10/16/2012	11 - 12'	1220469-VO10C	74		0.3 U	3.2	0.3 U	0.1 U	12.9	18.3	2.4
ICS-DOF-MW8-D-101612	soil	10/16/2012	15 - 16'	1220481-VO10O									
Trip Blank (µg/L)	water	10/17/2012	VOC's trip blank	1220509-VO11H	-								

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone
	7439-97-6 mg/kg, dry	7440-02-0 mg/kg, dry	7440-22-4 mg/kg, dry	7440-66-6 mg/kg, dry		Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	74-87-3 µg/kg, dry	74-83-9 µg/kg, dry	75-01-4 µg/kg, dry	75-00-3 µg/kg, dry	75-09-2 µg/kg, dry	67-64-1 µg/kg, dry
ICS-LP1-SO-A-101512	0.14	36.7	0.2 U	90			23	70						
ICS-LP1-SO-B-101512	3.12	31.5	0.8	349			820	1700	1.7 U	1.7 U	1.7 U	1.7 U	3.8	680
ICS-LP1-SO-C-101512	0.3 U	10.0	0.3 U	30			8.2	18						
ICS-LP1-SO-D-101512														
ICS-LP2-SO-A-101512	0.18	52.7	0.2 U	238			7.2	31						
ICS-LP2-SO-B-101512	0.06	13.3	0.3 U	95			6.8 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U	2.3 U	99
ICS-LP2-SO-C-101512	0.03	9.0	0.3 U	85			6.9 U	14 U						
ICS-LP2-SO-D-101512														
ICS-LP3-SO-A-101512	0.37	21.6	0.2 U	165			32	100						
ICS-LP3-SO-B-101512	8.7	54.5	0.4	2120		<i>incl lt HC solvent</i>	6200	11,000	2500 U	2500 U	2500 U	2500 U	5100 U	9900 J
ICS-LP3-SO-C-101512	0.13	9.5	0.3 U	33		<i>incl lt HC solvent</i>	120	170						
ICS-LP3-SO-D-101512														
ICS-LP4-SO-A-101512	0.74	22.2	0.2 U	196			620	1300						
ICS-LP4-SO-B-101512	2.06	20.9	0.4	116			760	440	110 U	110 U	110 U	110 U	86 J	430 J
ICS-LP4-SO-C-101512	0.03 U	7.7	0.2 U	22			10	18						
ICS-LP4-SO-D-101512														
ICS-LP4-NAPL-101512					270	> 2000	> 5000	> 10,000						
ICS-DOF-MW1-A-101512	0.04	10.3	0.2 U	55		6.3 U	8.1	16	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	4.9 U
ICS-DOF-MW1-B-101512	0.05	10.7	0.3 U	33		9.2 U	6.8 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	160
ICS-DOF-MW1-C-101512	0.03	11.8	0.3 U	31		9.3 U	7.1 U	14 U	1.3 U	1.3 U	1.3 U	1.3 U	2.5 U	65
ICS-DOF-MW2-A-101612	0.02 U	9.0	0.2 U	25		5.7 U	5.0 U	10 U	0.9 U	0.9 U	0.9 U	0.9 U	1.9 U	4.7 U
ICS-DOF-MW2-B-101612	0.23	9.8	0.2 U	28		6.8 U	5.2 U	10 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	48 J_Q
ICS-DOF-MW2-C-101612	0.04	16.3	0.3 U	37		8.8 U	6.7 U	13 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	100 J_Q
ICS-DOF-MW2-D-101612														
ICS-DOF-MW3-A-101612	0.03 U	9.1	0.2 U	26		5.7 U	5.3 U	11 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	5.3 U
ICS-DOF-DUP1-101612	0.02 U	9.0	0.2 U	27		6.3 U	6.2	11 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	5.3 U
ICS-DOF-MW3-B-101612	0.02 U	11.7	0.2 U	29		7.0 U	22	17	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	5.6 U
ICS-DOF-MW3-C-101612														
ICS-DOF-MW3-D-101612														
ICS-DOF-MW4-A-101712	0.02 U	9.5	0.2 U	27		6.7 U	8.4	11 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1 U	21 J_Q
ICS-DOF-MW4-B-101712	0.03 U	11.0	0.2 U	29		8.2 U	15	18	1.3 U	1.3 U	1.3 U	1.3 U	3.1	150
ICS-DOF-MW4-C-101712	0.04	10.7	0.2 U	34		8.1 U	17	27	1.1 U	1.1 U	1.1 U	1.1 U	1.6 J_B	42
ICS-DOF-MW4-D-101712														
ICS-DOF-MW5-A-101712	0.02 U	10.1	0.2 U	28		6.4 U	23	22	0.9 U	0.9 U	0.9 U	0.9 U	1.9 U	4.7 U
ICS-DOF-MW5-B-101712	0.02 U	9.0	0.2 U	26		7.7 U	22	25	1.1 U	1.1 U	1.1 U	1.1 U	1.1 J	59 J_Q
ICS-DOF-MW5-C-101712														
ICS-DOF-MW5-D-101712														

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Mercury	Nickel	Silver	Zinc	TOX	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone
	7439-97-6 mg/kg, dry	7440-02-0 mg/kg, dry	7440-22-4 mg/kg, dry	7440-66-6 mg/kg, dry	mg/kg	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	74-87-3 µg/kg, dry	74-83-9 µg/kg, dry	75-01-4 µg/kg, dry	75-00-3 µg/kg, dry	75-09-2 µg/kg, dry	67-64-1 µg/kg, dry
ICS-DOF-MW6-A-101712	0.04	9.6	0.2 U	25		3000	19,000	1200 U	280 U	280 U	280 U	280 U	550 U	1400 U
ICS-DOF-MW6-B-101712	0.02 U	8.8	0.3 U	25		2300	12,000	1200 U	270 U	270 U	270 U	270 U	550 U	1400 U
ICS-DOF-DUP2-101712	0.02	9.5	0.3 U	25		2500	9000	1300 U	270 U	270 U	270 U	270 U	540 U	1400 U
ICS-DOF-MW6-C-101712	0.04 U	14.6	0.3 U	36		10 U	34	40	1.6 U	1.6 U	1.6 U	1.6 U	3.3	220 J_Q
ICS-DOF-MW6-D-101712														
ICS-DOF-MW7-A-101612	0.03	10.3	0.3 U	34		54	970	820	91 U	91 U	91 U	91 U	180 U	460 U
ICS-DOF-MW7-B-101612	0.03	10.1	0.3 U	31		8.9 U	6.6 U	13 U	1.2 U	1.2 U	1.2 U	6.0	1.0 J	74 J_Q
ICS-DOF-MW7-C-101612	0.03 U	10.5	0.3 U	32		7.8 U	6.5 U	13 U	1.3 U	1.3 U	1.3 U	1.4	2.6 U	58 J_Q
ICS-DOF-MW7-D-101612														
ICS-DOF-MW8-A-101612	0.02 U	7.3	0.2 U	36		8.2	5.2	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.7 J	400 J_Q
ICS-DOF-MW8-B-101612	0.03	10.5	0.3 U	32		8.6 U	6.5 U	13 U	1.3 U	1.3 U	1.3 U	1.9	3.1	110 J_Q
ICS-DOF-MW8-C-101612	0.03 U	10.5	0.3 U	28		7.8 U	6.5 U	13 U	1.2 U	1.2 U	1.2 U	1.4	2.3 U	66 J_Q
ICS-DOF-MW8-D-101612														
Trip Blank (µg/L)						0.25 U (mg/L)			1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	3.3 J

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

<u>Field I.D.</u>	Carbon disulfide 75-15-0 <u>µg/kg. dry</u>	1,1-Dichloro- ethene 75-35-4 <u>µg/kg. dry</u>	1,1-Dichloro- ethane 75-34-3 <u>µg/kg. dry</u>	<i>trans</i> -1,2- Dichloroethene 156-60-5 <u>µg/kg. dry</u>	<i>cis</i> -1,2- Dichloroethene 156-59-2 <u>µg/kg. dry</u>	Chloroform 67-66-3 <u>µg/kg. dry</u>	1,2-Dichloro- ethane 107-06-2 <u>µg/kg. dry</u>	2-Butanone 78-93-3 <u>µg/kg. dry</u>	1,1,1-Tri- chloroethane 71-55-6 <u>µg/kg. dry</u>	Carbon tetrachloride 56-23-5 <u>µg/kg. dry</u>	Bromo- dichloromethane 75-27-4 <u>µg/kg. dry</u>	1,2-Dichloro- propane 78-87-5 <u>µg/kg. dry</u>	<i>cis</i> -1,3-Dichloro- propene 10061-01-5 <u>µg/kg. dry</u>
ICS-LP1-SO-A-101512													
ICS-LP1-SO-B-101512	20	1.7 U	3.1	1.7 U	1.7 U	1.7 U	1.7 U	140	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-LP1-SO-C-101512													
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512													
ICS-LP2-SO-B-101512	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	20 J_Q	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C-101512													
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512													
ICS-LP3-SO-B-101512	2500 U	2500 U	2500 U	2500 U	2400 J	2500 U	2500 U	13,000 U	2500 U	2500 U	2500 U	2500 U	2500 U
ICS-LP3-SO-C-101512													
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512													
ICS-LP4-SO-B-101512	130	110 U	110 U	110 U	110 U	110 U	110 U	550 U	110 U	110 U	110 U	110 U	110 U
ICS-LP4-SO-C-101512													
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.9 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B-101512	1.9	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	30 J_Q	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C-101512	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	14	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A-101612	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B-101612	5.4	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	8.5	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C-101612	1.0 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	29	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	1.4	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B-101712	3.1 J_Q	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	23 J_Q	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C-101712	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	11	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B-101712	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	10	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Carbon disulfide 75-15-0 µg/kg, dry	1,1-Dichloro-ethene 75-35-4 µg/kg, dry	1,1-Dichloro-ethane 75-34-3 µg/kg, dry	trans -1,2-Dichloroethene 156-60-5 µg/kg, dry	cis -1,2-Dichloroethene 156-59-2 µg/kg, dry	Chloroform 67-66-3 µg/kg, dry	1,2-Dichloro-ethane 107-06-2 µg/kg, dry	2-Butanone 78-93-3 µg/kg, dry	1,1,1-Tri-chloroethane 71-55-6 µg/kg, dry	Carbon tetrachloride 56-23-5 µg/kg, dry	Bromo-dichloromethane 75-27-4 µg/kg, dry	1,2-Dichloro-propane 78-87-5 µg/kg, dry	cis -1,3-Dichloro-propene 10061-01-5 µg/kg, dry
ICS-DOF-MW6-A-101712	280 U	280 U	280 U	280 U	280 U	280 U	280 U	1400 U	280 U	280 U	280 U	280 U	280 U
ICS-DOF-MW6-B-101712	270 U	270 U	270 U	270 U	270 U	270 U	270 U	1400 U	270 U	270 U	270 U	270 U	270 U
ICS-DOF-DUP2-101712	270 U	270 U	270 U	270 U	270 U	270 U	270 U	1400 U	270 U	270 U	270 U	270 U	270 U
ICS-DOF-MW6-C-101712	4.9	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	48	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	91 U	91 U	91 U	91 U	130	91 U	91 U	460 U	91 U	91 U	91 U	91 U	91 U
ICS-DOF-MW7-B-101612	1.2 U	1.2 U	2.0	1.1 J	1.2 U	1.2 U	1.2 U	18	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW7-C-101612	1.7	1.3 U	1.3 U	1.3 U	4.3	1.3 U	1.3 U	16	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	39	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B-101612	4.1	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	21	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-C-101612	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	19	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Soils Analyses, October 2012

Field I.D.	Trichloro- ethene 79-01-6 µg/kg. dry	Dibromo- chloromethane 124-48-1 µg/kg. dry	1,1,2-Trichloro- ethane 79-00-5 µg/kg. dry	Benzene 71-43-2 µg/kg. dry	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/kg. dry	Bromo-form 75-25-2 µg/kg. dry	4-Methyl-2- pentanone 108-10-1 µg/kg. dry	2-Hexanone 591-78-6 µg/kg. dry	Tetrachloro- ethene 127-18-4 µg/kg. dry	1,1,2,2-Tetra- chloroethane 79-34-5 µg/kg. dry	Toluene 108-88-3 µg/kg. dry	Chloro- benzene 108-90-7 µg/kg. dry	Ethyl- benzene 100-41-4 µg/kg. dry	Styrene 100-42-5 µg/kg. dry
ICS-LP1-SO-A-101512														
ICS-LP1-SO-B-101512	1.7 U	1.7 U	1.7 U	1.1 J	1.7 U	1.7 U	8.5 U	8.5 U	1.7 U	1.7 U	4.0	1.7 U	1.1 J	1.7 U
ICS-LP1-SO-C-101512														
ICS-LP1-SO-D-101512														
ICS-LP2-SO-A-101512														
ICS-LP2-SO-B-101512	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.8 U	5.8 U	1.2 U	1.2 U	16	1.2 U	8.3	1.2 U
ICS-LP2-SO-C-101512														
ICS-LP2-SO-D-101512														
ICS-LP3-SO-A-101512														
ICS-LP3-SO-B-101512	2000 J	2500 U	2500 U	1600 J	2500 U	2500 U	13,000 U	13,000 U	2500 U	2500 U	120,000	2500 U	130,000	2500 U
ICS-LP3-SO-C-101512														
ICS-LP3-SO-D-101512														
ICS-LP4-SO-A-101512														
ICS-LP4-SO-B-101512	200	110 U	110 U	78 J	110 U	110 U	550 U	550 U	110 U	110 U	810	110 U	1800	100 J
ICS-LP4-SO-C-101512														
ICS-LP4-SO-D-101512														
ICS-LP4-NAPL-101512														
ICS-DOF-MW1-A-101512	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.9 U	4.9 U	0.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B-101512	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C-101512	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.3 U	6.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A-101612	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B-101612	4.2	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C-101612	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.5 U	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-D-101612														
ICS-DOF-MW3-A-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	5.3 U	0.6 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	5.3 U	0.8 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B-101612	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	5.6 U	1.9	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-C-101612														
ICS-DOF-MW3-D-101612														
ICS-DOF-MW4-A-101712	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	5.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B-101712	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C-101712	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	5.6 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-D-101712														
ICS-DOF-MW5-A-101712	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B-101712	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-C-101712														
ICS-DOF-MW5-D-101712														

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Trichloro- ethene 79-01-6 <u>µg/kg. dry</u>	Dibromo- chloromethane 124-48-1 <u>µg/kg. dry</u>	1,1,2-Trichloro- ethane 79-00-5 <u>µg/kg. dry</u>	Benzene 71-43-2 <u>µg/kg. dry</u>	<i>trans</i> -1,3- Dichloropropene 10061-02-6 <u>µg/kg. dry</u>	Bromo-form 75-25-2 <u>µg/kg. dry</u>	4-Methyl-2- pentanone 108-10-1 <u>µg/kg. dry</u>	2-Hexanone 591-78-6 <u>µg/kg. dry</u>	Tetrachloro- ethene 127-18-4 <u>µg/kg. dry</u>	1,1,2,2-Tetra- chloroethane 79-34-5 <u>µg/kg. dry</u>	Toluene 108-88-3 <u>µg/kg. dry</u>	Chloro- benzene 108-90-7 <u>µg/kg. dry</u>	Ethyl- benzene 100-41-4 <u>µg/kg. dry</u>	Styrene 100-42-5 <u>µg/kg. dry</u>
ICS-DOF-MW6-A-101712	280 U	280 U	280 U	280 U	280 U	280 U	1400 U	1400 U	280 U	280 U	2500	280 U	3300	280 U
ICS-DOF-MW6-B-101712	270 U	270 U	270 U	270 U	270 U	270 U	1400 U	1400 U	270 U	270 U	1700	270 U	2300	270 U
ICS-DOF-DUP2-101712	270 U	270 U	270 U	270 U	270 U	270 U	1400 U	1400 U	270 U	270 U	550	270 U	640	270 U
ICS-DOF-MW6-C-101712	1.6 U	1.6 U	1.6 U	3.2	1.6 U	1.6 U	8.0 U	8.0 U	1.6 U	1.6 U	4.2	1.6 U	4.1	1.6 U
ICS-DOF-MW6-D-101712														
ICS-DOF-MW7-A-101612	120	91 U	91 U	91 U	91 U	91 U	460 U	460 U	91 U	91 U	1300	91 U	1500	91 U
ICS-DOF-MW7-B-101612	1.2 U	1.2 U	1.2 U	2.1	1.2 U	1.2 U	6.1 U	6.1 U	1.2 U	1.2 U	1.4	1.2 U	5.3	1.2 U
ICS-DOF-MW7-C-101612	1.3 U	1.3 U	1.3 U	0.8 J	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U	1.3 U	6.6	1.3 U	6.7	1.3 U
ICS-DOF-MW7-D-101612														
ICS-DOF-MW8-A-101612	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 J	9.8	1.0 U	1.0 U	3.8	1.0 U	10	1.0 U
ICS-DOF-MW8-B-101612	1.3 U	1.3 U	1.3 U	15	1.3 U	1.3 U	6.7 U	6.7 U	1.3 U	1.3 U	1.8	3.1	22	1.3 U
ICS-DOF-MW8-C-101612	1.2 U	1.2 U	1.2 U	29	1.2 U	1.2 U	5.8 U	5.8 U	1.2 U	1.2 U	1.2	2.5	0.9 J	1.2 U
ICS-DOF-MW8-D-101612														
Trip Blank (<u>µg/L</u>)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Trichloro- fluoromethane 75-69-4 µg/kg, dry	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/kg, dry	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/kg, dry	<i>o</i> -Xylene 95-47-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Acrolein 107-02-8 µg/kg, dry	Bromoethane 74-96-4 µg/kg, dry	1,1-Dichloro- propene 563-58-6 µg/kg, dry	Dibromo- methane 74-95-3 µg/kg, dry	1,1,1,2-Tetra- chloroethane 630-20-6 µg/kg, dry	1,2,3-Trichloro- propane 96-18-4 µg/kg, dry
ICS-LP1-SO-A-101512													
ICS-LP1-SO-B-101512	1.7 U	3.4 U	1.9	1.2 J	1.7 U	1.7 U	see SVOC's	85 U	3.4 U	1.7 U	1.7 U	1.7 U	3.4 U
ICS-LP1-SO-C-101512													
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512													
ICS-LP2-SO-B-101512	1.2 U	2.3 U	7.1	1.4	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U	1.2 U	1.2 U	2.3 U
ICS-LP2-SO-C-101512													
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512													
ICS-LP3-SO-B-101512	2500 U	5100 U	120,000	34,000	see SVOC's	see SVOC's	see SVOC's	130,000 U	5100 U	2500 U	2500 U	2500 U	5100 U
ICS-LP3-SO-C-101512													
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512													
ICS-LP4-SO-B-101512	110 U	220 U	2900	550	150	see SVOC's	200	5500 U	220 U	110 U	110 U	110 U	220 U
ICS-LP4-SO-C-101512													
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	49 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U
ICS-DOF-MW1-B-101512	1.2 U	2.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	62 U	2.5 U	1.2 U	1.2 U	1.2 U	2.5 U
ICS-DOF-MW1-C-101512	1.3 U	2.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	63 U	2.5 U	1.3 U	1.3 U	1.3 U	2.5 U
ICS-DOF-MW2-A-101612	0.9 U	1.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	47 U	1.9 U	0.9 U	0.9 U	0.9 U	1.9 U
ICS-DOF-MW2-B-101612	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	55 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U
ICS-DOF-MW2-C-101612	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U	1.3 U	1.3 U	2.6 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	1.1 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	53 U	2.1 U	1.1 U	1.1 U	1.1 U	2.1 U
ICS-DOF-DUP1-101612	1.1 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	53 U	2.1 U	1.1 U	1.1 U	1.1 U	2.1 U
ICS-DOF-MW3-B-101612	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	56 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	1.0 U	2.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	52 U	2.1 U	1.0 U	1.0 U	1.0 U	2.1 U
ICS-DOF-MW4-B-101712	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U	1.3 U	1.3 U	2.6 U
ICS-DOF-MW4-C-101712	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	56 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	0.9 U	1.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	47 U	1.9 U	0.9 U	0.9 U	0.9 U	1.9 U
ICS-DOF-MW5-B-101712	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	55 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Trichloro- fluoromethane 75-69-4 <u>µg/kg, dry</u>	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 <u>µg/kg, dry</u>	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 <u>µg/kg, dry</u>	<i>o</i> -Xylene 95-47-6 <u>µg/kg, dry</u>	1,2-Dichloro- benzene 95-50-1 <u>µg/kg, dry</u>	1,3-Dichloro- benzene 541-73-1 <u>µg/kg, dry</u>	1,4-Dichloro- benzene 106-46-7 <u>µg/kg, dry</u>	Acrolein 107-02-8 <u>µg/kg, dry</u>	Bromoethane 74-96-4 <u>µg/kg, dry</u>	1,1-Dichloro- propene 563-58-6 <u>µg/kg, dry</u>	Dibromo- methane 74-95-3 <u>µg/kg, dry</u>	1,1,1,2-Tetra- chloroethane 630-20-6 <u>µg/kg, dry</u>	1,2,3-Trichloro- propane 96-18-4 <u>µg/kg, dry</u>
ICS-DOF-MW6-A-101712	280 U	550 U	7700	2500	660	770	2100	14,000 U	550 U	280 U	280 U	280 U	550 U
ICS-DOF-MW6-B-101712	270 U	550 U	5200	1700	490	640	1800	14,000 U	550 U	270 U	270 U	270 U	550 U
ICS-DOF-DUP2-101712	270 U	540 U	1500	500	200 J	320	870	14,000 U	540 U	270 U	270 U	270 U	540 U
ICS-DOF-MW6-C-101712	1.6 U	3.2 U	2.7	2.3	<i>see SVOC's</i>	<i>see SVOC's</i>	<i>see SVOC's</i>	80 U	3.2 U	1.6 U	1.6 U	1.6 U	3.2 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	91 U	180 U	2400	940	<i>see SVOC's</i>	<i>see SVOC's</i>	<i>see SVOC's</i>	4600 U	180 U	91 U	91 U	91 U	180 U
ICS-DOF-MW7-B-101612	1.2 U	2.4 U	3.4	1.4	<i>see SVOC's</i>	<i>see SVOC's</i>	<i>see SVOC's</i>	61 U	2.4 U	1.2 U	1.2 U	1.2 U	2.4 U
ICS-DOF-MW7-C-101612	1.3 U	2.6 U	25	4.4	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U	1.3 U	1.3 U	2.6 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	1.0 U	2.1 U	17	5.0	1.0 U	1.0 U	1.0 U	51 U	2.1 U	1.0 U	1.0 U	1.0 U	2.1 U
ICS-DOF-MW8-B-101612	1.3 U	2.7 U	160	1.3 U	1.5	1.3 U	1.3 U	67 U	2.7 U	1.3 U	1.3 U	1.3 U	2.7 U
ICS-DOF-MW8-C-101612	1.2 U	2.3 U	28	1.0 J	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U	1.2 U	1.2 U	2.3 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Soils Analyses, October 2012

Field I.D.	<i>trans</i> -1,4-Dichloro- 2-butene 110-57-6 µg/kg, dry	1,3,5-Trimethyl- benzene 108-67-8 µg/kg, dry	1,2,4-Trimethyl- benzene 95-63-6 µg/kg, dry	Ethylene dibromide 106-93-4 µg/kg, dry	Bromochloro- methane 74-97-5 µg/kg, dry	2,2-Dichloro- propane 294-20-7 µg/kg, dry	1,3-Dichloro- propane 142-28-9 µg/kg, dry	Isopropyl- benzene 98-82-8 µg/kg, dry	n-Propyl- benzene 103-65-1 µg/kg, dry	Bromo- benzene 108-86-1 µg/kg, dry	2-Chloro- toluene 95-49-8 µg/kg, dry	4-Chloro- toluene 106-43-4 µg/kg, dry
ICS-LP1-SO-A-101512												
ICS-LP1-SO-B-101512	8.5 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 J	1.7 U
ICS-LP1-SO-C-101512												
ICS-LP1-SO-D-101512												
ICS-LP2-SO-A-101512												
ICS-LP2-SO-B-101512	5.8 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-LP2-SO-C-101512												
ICS-LP2-SO-D-101512												
ICS-LP3-SO-A-101512												
ICS-LP3-SO-B-101512	13,000 U	7500	24,000	2500 U	2500 U	2500 U	2500 U	2000 J	4100	2500 U	2500 U	2500 U
ICS-LP3-SO-C-101512												
ICS-LP3-SO-D-101512												
ICS-LP4-SO-A-101512												
ICS-LP4-SO-B-101512	550 U	330	1500	110 U	110 U	110 U	110 U	110	310	110 U	110 U	110 U
ICS-LP4-SO-C-101512												
ICS-LP4-SO-D-101512												
ICS-LP4-NAPL-101512												
ICS-DOF-MW1-A-101512	4.9 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW1-B-101512	62 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW1-C-101512	63 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-A-101612	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW2-B-101612	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW2-C-101612	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW2-D-101612												
ICS-DOF-MW3-A-101612	5.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-DUP1-101612	5.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-B-101612	5.6 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW3-C-101612												
ICS-DOF-MW3-D-101612												
ICS-DOF-MW4-A-101712	5.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW4-B-101712	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW4-C-101712	5.6 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW4-D-101712												
ICS-DOF-MW5-A-101712	4.7 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-DOF-MW5-B-101712	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-DOF-MW5-C-101712												
ICS-DOF-MW5-D-101712												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	<i>trans</i> -1,4-Dichloro- 2-butene 110-57-6 <u>µg/kg, dry</u>	1,3,5-Trimethyl- benzene 108-67-8 <u>µg/kg, dry</u>	1,2,4-Trimethyl- benzene 95-63-6 <u>µg/kg, dry</u>	Ethylene dibromide 106-93-4 <u>µg/kg, dry</u>	Bromochloro- methane 74-97-5 <u>µg/kg, dry</u>	2,2-Dichloro- propane 294-20-7 <u>µg/kg, dry</u>	1,3-Dichloro- propane 142-28-9 <u>µg/kg, dry</u>	Isopropyl- benzene 98-82-8 <u>µg/kg, dry</u>	n-Propyl- benzene 103-65-1 <u>µg/kg, dry</u>	Bromo- benzene 108-86-1 <u>µg/kg, dry</u>	2-Chloro- toluene 95-49-8 <u>µg/kg, dry</u>	4-Chloro- toluene 106-43-4 <u>µg/kg, dry</u>
ICS-DOF-MW6-A-101712	1400 U	4600	13,000	280 U	280 U	280 U	280 U	1300	2400	280 U	280 U	280 U
ICS-DOF-MW6-B-101712	1400 U	3100	8600	270 U	270 U	270 U	270 U	920	1600	270 U	270 U	270 U
ICS-DOF-DUP2-101712	1400 U	1000	2800	270 U	270 U	270 U	270 U	280	510	270 U	270 U	270 U
ICS-DOF-MW6-C-101712	8.0 U	1.6 U	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-DOF-MW6-D-101712												
ICS-DOF-MW7-A-101612	460 U	130	380	91 U	91 U	91 U	91 U	91 U	91 U	91 U	91 U	91 U
ICS-DOF-MW7-B-101612	6.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW7-C-101612	6.6 U	1.5	2.3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-DOF-MW7-D-101612												
ICS-DOF-MW8-A-101612	5.1 U	1.7	4.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-DOF-MW8-B-101612	6.7 U	4.7	17	1.3 U	1.3 U	1.3 U	1.3 U	4.4	2.1	1.3 U	1.3 U	1.3 U
ICS-DOF-MW8-C-101612	5.8 U	1.2 U	0.6 J	1.2 U	1.2 U	1.2 U	1.2 U	2.4	1.2 U	1.2 U	1.2 U	1.2 U
ICS-DOF-MW8-D-101612												
Trip Blank (µg/L)	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/kg, dry	<i>sec</i> -Butyl- benzene 135-98-8 µg/kg, dry	4-Isopropyl- toluene 99-87-6 µg/kg, dry	n-Butyl- benzene 104-51-8 µg/kg, dry	Phenol 108-95-2 µg/kg, dry	2-Chloro- phenol 95-57-8 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry
ICS-LP1-SO-A-101512					18 U	18 U	4.4 U	4.4 U	18 U	4.4 U	4.4 U	35 U
ICS-LP1-SO-B-101512	1.7 U	1.7 U	1.7 U	1.7 U	72	63 U	see VOC's	11 J	63 U	see VOC's	9.1 J	120 J
ICS-LP1-SO-C-101512					9.5 J_B	19 U	4.7 U	4.7 U	12 J	4.7 U	4.7 U	38 U
ICS-LP1-SO-D-101512					18 U	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	37 U
ICS-LP2-SO-A-101512					19 U	19 U	see VOC's	see VOC's	9.0 J	see VOC's	4.7 U	38 U
ICS-LP2-SO-B-101512	1.2 U	1.2 U	1.2 U	1.2 U	19 U	19 U	4.8 U	4.8 U	19	4.8 U	4.8 U	38 U
ICS-LP2-SO-C-101512												
ICS-LP2-SO-D-101512					31	19 U	4.7 U	4.7 U	19 U	3.4 J	7.5	12 J
ICS-LP3-SO-A-101512					2800	670 U	77 J	470	340 U	1800	3200	4900
ICS-LP3-SO-B-101512	2500 U	1500 J	2300 J	2600	38	18 U	7.5	21	18 U	37	28	68
ICS-LP3-SO-C-101512												
ICS-LP3-SO-D-101512					74	57 U	11 J	11 J	57 U	45	33	54 J
ICS-LP4-SO-A-101512					250	19 U	2.7 J	see VOC's	19 U	see VOC's	81	700
ICS-LP4-SO-B-101512	110 U	58 J	150	110	18 U	18 U	4.5 U	4.5 U	18 U	2.6 J	4.5 U	36 U
ICS-LP4-SO-C-101512												
ICS-LP4-SO-D-101512												
ICS-LP4-NAPL-101512												
ICS-DOF-MW1-A-101512	1.0 U	1.0 U	1.0 U	1.0 U	20 U	20 U	see VOC's	see VOC's	20 U	see VOC's	4.9 U	39 U
ICS-DOF-MW1-B-101512	1.2 U	1.2 U	1.2 U	1.2 U	14 J_B	19 U	see VOC's	see VOC's	19 U	see VOC's	4.7 U	9.4 J
ICS-DOF-MW1-C-101512	1.3 U	1.3 U	1.3 U	1.3 U	12 J_B	19 U	see VOC's	see VOC's	25	4.2 J	4.6 U	37 U
ICS-DOF-MW2-A-101612	0.9 U	0.9 U	0.9 U	0.9 U	18 U	18 U	see VOC's	see VOC's	18 U	see VOC's	4.6 U	37 U
ICS-DOF-MW2-B-101612	1.1 U	1.1 U	1.1 U	1.1 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.8 U	38 U
ICS-DOF-MW2-C-101612	1.3 U	1.3 U	1.3 U	1.3 U	20 U	20 U	see VOC's	see VOC's	20 U	see VOC's	4.9 U	39 U
ICS-DOF-MW2-D-101612												
ICS-DOF-MW3-A-101612	1.1 U	1.1 U	1.1 U	1.1 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.8 U	38 U
ICS-DOF-DUP1-101612	1.1 U	1.1 U	1.1 U	1.1 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.7 U	38 U
ICS-DOF-MW3-B-101612	1.1 U	1.1 U	1.1 U	1.1 U	20 U	20 U	see VOC's	see VOC's	20 U	see VOC's	5.0 U	40 U
ICS-DOF-MW3-C-101612												
ICS-DOF-MW3-D-101612												
ICS-DOF-MW4-A-101712	1.0 U	1.0 U	1.0 U	1.0 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.8 U	38 U
ICS-DOF-MW4-B-101712	1.3 U	1.3 U	1.3 U	1.3 U	19 U	19 U	see VOC's	see VOC's	9.1 J	see VOC's	4.7 U	38 U
ICS-DOF-MW4-C-101712	1.1 U	1.1 U	1.1 U	1.1 U	14 J	20 U	see VOC's	see VOC's	42	see VOC's	5.0 U	14 J
ICS-DOF-MW4-D-101712												
ICS-DOF-MW5-A-101712	0.9 U	0.9 U	0.9 U	0.9 U	18 U	18 U	see VOC's	see VOC's	18 U	see VOC's	4.5 U	36 U
ICS-DOF-MW5-B-101712	1.1 U	1.1 U	1.1 U	1.1 U	20 U	20 U	see VOC's	see VOC's	17 J	see VOC's	5.0 U	14 J
ICS-DOF-MW5-C-101712												
ICS-DOF-MW5-D-101712												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

<u>Field I.D.</u>	<i>tert</i> -Butyl- benzene 98-06-6 <u>µg/kg, dry</u>	<i>sec</i> -Butyl- benzene 135-98-8 <u>µg/kg, dry</u>	4-Isopropyl- toluene 99-87-6 <u>µg/kg, dry</u>	n-Butyl- benzene 104-51-8 <u>µg/kg, dry</u>	Phenol 108-95-2 <u>µg/kg, dry</u>	2-Chloro- phenol 95-57-8 <u>µg/kg, dry</u>	1,3-Dichloro- benzene 541-73-1 <u>µg/kg, dry</u>	1,4-Dichloro- benzene 106-46-7 <u>µg/kg, dry</u>	Benzyl alcohol 100-51-6 <u>µg/kg, dry</u>	1,2-Dichloro- benzene 95-50-1 <u>µg/kg, dry</u>	2-Methyl- phenol 95-48-7 <u>µg/kg, dry</u>	4-Methyl- phenol 106-44-5 <u>µg/kg, dry</u>
ICS-DOF-MW6-A-101712	280 U	2100	4000	4400	100 U	100 U	see VOC's	see VOC's	100 U	see VOC's	45	210 U
ICS-DOF-MW6-B-101712	270 U	1400	2600	2900	44 U	44 U	see VOC's	see VOC's	44 U	see VOC's	17	89 U
ICS-DOF-DUP2-101712	270 U	480	890	1000	61 U	61 U	see VOC's	see VOC's	61 U	see VOC's	27	120 U
ICS-DOF-MW6-C-101712	1.6 U	1.6 U	1.6 U	1.6 U	650	19 U	26	120	19 U	7.2	8.8	42
ICS-DOF-MW6-D-101712												
ICS-DOF-MW7-A-101612	91 U	91 U	91 U	91 U	260	19 U	19 U	19 U	19 U	17 J	36	520
ICS-DOF-MW7-B-101612	1.2 U	1.2 U	1.2 U	1.2 U	19 U	19 U	2.8 J	4.7 J	19 U	6.8	7.6	80
ICS-DOF-MW7-C-101612	1.3 U	1.3 U	1.3 U	1.3 U	9.4 J	19 U	see VOC's	see VOC's	15 J	see VOC's	12	58
ICS-DOF-MW7-D-101612												
ICS-DOF-MW8-A-101612	1.0 U	1.0 U	1.0 U	1.0 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.2 J	31 J
ICS-DOF-MW8-B-101612	1.3 U	1.3 U	9.0	1.3 U	19 U	19 U	see VOC's	see VOC's	19 U	see VOC's	4.8 U	38 U
ICS-DOF-MW8-C-101612	1.2 U	1.2 U	1.2 U	1.2 U	20 U	20 U	see VOC's	see VOC's	14 J	see VOC's	4.9 U	11 J
ICS-DOF-MW8-D-101612												
Trip Blank (<u>µg/L</u>)	1.0 U	1.0 U	1.0 U	1.0 U								

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	N-Nitroso-di-N-propylamine 621-64-7 µg/kg, dry	Hexachloroethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethylphenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichlorophenol 120-83-2 µg/kg, dry	1,2,4-Trichlorobenzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	4-Chloro-3-methylphenol 59-50-7 µg/kg, dry	2-Methylnaphthalene 91-57-6 µg/kg, dry	2,4,6-Trichlorophenol 88-06-2 µg/kg, dry	2,4,5-Trichlorophenol 95-95-4 µg/kg, dry
ICS-LP1-SO-A-101512	18 U	18 U	18 U	18 U	8.7 J	350 U	180 U	4.4 U	45	87 U	31	87 U	87 U
ICS-LP1-SO-B-101512	63 U	63 U	63 U	63 U	15 J	1300 U	630 U	10 J	91	320 U	66	320 U	320 U
ICS-LP1-SO-C-101512	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19 U	95 U	19 U	95 U	95 U
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512	18 U	18 U	18 U	18 U	18 U	370 U	180 U	18 U	28	92 U	14 J	92 U	92 U
ICS-LP2-SO-B-101512	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	18 J	95 U	13 J	95 U	95 U
ICS-LP2-SO-C-101512	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512	19 U	19 U	19 U	19 U	3.4 J	370 U	190 U	4.7 U	210	93 U	90	93 U	93 U
ICS-LP3-SO-B-101512	670 U	670 U	670 U	670 U	2000	13,000 U	6700 U	340	51,000	3400 U	34,000	3400 U	1000 J
ICS-LP3-SO-C-101512	18 U	18 U	18 U	18 U	120	370 U	180 U	38	190	150	160	91 U	91 U
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512	57 U	57 U	57 U	57 U	18 J	1100 U	570 U	170	770	280 U	540	280 U	280 U
ICS-LP4-SO-B-101512	19 U	19 U	19 U	19 U	2600	380 U	170 J	19	560	1200	240	94 U	52 J
ICS-LP4-SO-C-101512	18 U	18 U	18 U	18 U	18 J	360 U	180 U	4.5 U	18 U	90 U	18 U	90 U	90 U
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	20 U	20 U	20 U	20 U	20 U	390 U	200 U	4.9 U	840	98 U	89	98 U	98 U
ICS-DOF-MW1-B-101512	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19 U	94 U	19 U	94 U	94 U
ICS-DOF-MW1-C-101512	19 U	19 U	19 U	19 U	19 U	370 U	190 U	4.6 U	19 U	93 U	19 U	93 U	93 U
ICS-DOF-MW2-A-101612	18 U	18 U	18 U	18 U	18 U	370 U	180 U	4.6 U	18 U	92 U	18 U	92 U	92 U
ICS-DOF-MW2-B-101612	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U
ICS-DOF-MW2-C-101612	20 U	20 U	20 U	20 U	20 U	390 U	200 U	4.9 U	20 U	98 U	20 U	98 U	98 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	19 U	96 U	19 U	96 U	96 U
ICS-DOF-DUP1-101612	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19 U	94 U	12 J	94 U	94 U
ICS-DOF-MW3-B-101612	20 U	20 U	20 U	20 U	20 U	400 U	200 U	5.0 U	12 J	100 U	23	100 U	100 U
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.8 U	19 U	95 U	9.5 J	95 U	95 U
ICS-DOF-MW4-B-101712	19 U	19 U	19 U	19 U	19 U	380 U	190 U	4.7 U	19	95 U	36	95 U	95 U
ICS-DOF-MW4-C-101712	20 U	20 U	20 U	20 U	20 U	120 J	200 U	5.0 U	24	99 U	24	99 U	99 U
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	18 U	18 U	18 U	18 U	18 U	360 U	180 U	4.5 U	14 J	90 U	25	90 U	90 U
ICS-DOF-MW5-B-101712	20 U	20 U	20 U	20 U	20 U	400 U	200 U	5.0 U	46	99 U	56	99 U	99 U
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	N-Nitroso-di-N-propylamine 621-64-7 µg/kg, dry	Hexachloro-ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl-phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro-phenol 120-83-2 µg/kg, dry	1,2,4-Trichloro-benzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	4-Chloro-3-methylphenol 59-50-7 µg/kg, dry	2-Methyl-naphthalene 91-57-6 µg/kg, dry	2,4,6-Trichloro-phenol 88-06-2 µg/kg, dry	2,4,5-Trichloro-phenol 95-95-4 µg/kg, dry
ICS-DOF-MW6-A-101712	100 U	100 U	100 U	100 U	210 U	2100 U	1000 U	1100	10,000	520 U	62,000	520 U	520 U
ICS-DOF-MW6-B-101712	44 U	44 U	44 U	44 U	89 U	890 U	440 U	200	2900	220 U	17,000	220 U	220 U
ICS-DOF-DUP2-101712	61 U	61 U	61 U	61 U	120 U	1200 U	610 U	460	5200	300 U	33,000	300 U	300 U
ICS-DOF-MW6-C-101712	19 U	19 U	19 U	19 U	350	370 U	190 U	4.7 U	49	93 U	98	93 U	93 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	19 U	19 U	19 U	19 U	200	370 U	32 J	240	680	93 U	91,000	93 U	93 U
ICS-DOF-MW7-B-101612	19 U	19 U	19 U	19 U	26	380 U	190 U	11	19 U	95 U	93	95 U	95 U
ICS-DOF-MW7-C-101612	19 U	19 U	19 U	19 U	33	380 U	190 U	19 U	55	94 U	470	94 U	94 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	19 U	19 U	19 U	19 U	3.4 J	380 U	190 U	4.7 U	11 J	95 U	16 J	95 U	95 U
ICS-DOF-MW8-B-101612	19 U	19 U	19 U	19 U	14 J	380 U	190 U	4.8 U	64	95 U	150	95 U	95 U
ICS-DOF-MW8-C-101612	20 U	20 U	20 U	20 U	4.7 J	390 U	200 U	4.9 U	24	98 U	240	98 U	98 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	2-Chloro-naphthalene 91-58-7 µg/kg, dry	Dimethyl-phthalate 131-11-3 µg/kg, dry	Acenaphthylene 208-96-8 µg/kg, dry	Acenaphthene 83-32-9 µg/kg, dry	Dibenzo-furan 132-64-9 µg/kg, dry	2,6-Dinitro-toluene 606-20-2 µg/kg, dry	2,4-Dinitro-toluene 121-14-2 µg/kg, dry	Diethyl-phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl-phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi-phenylamine 86-30-6 µg/kg, dry	Pentachloro-phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry
ICS-LP1-SO-A-101512	18 U	18 U	23	18 U	18 U	87 U	87 U	44 U	18 U	18 U	18 U	15 J	52
ICS-LP1-SO-B-101512	63 U	63 U	63 U	50 J	63 U	320 U	320 U	160 U	63 U	50 J	38 J	140 J	200
ICS-LP1-SO-C-101512	19 U	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U	19 U	19 U	47 U	19 U
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512	18 U	18 U	18 U	18 U	18 U	92 U	92 U	46 U	18 U	18 U	18 U	46 U	42
ICS-LP2-SO-B-101512	19 U	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U	19 U	19 U	47 U	9.5 J
ICS-LP2-SO-C-101512	19 U	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U	19 U	19 U	48 U	19 U
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512	19 U	460	18 J	23	48	93 U	93 U	1300	19 U	45	12 J	460	220
ICS-LP3-SO-B-101512	670 U	540 J	670 U	9700	7100	3400 U	3400 U	2200	670 U	12,000	1400	5300 J	42,000
ICS-LP3-SO-C-101512	18 U	18 U	18 U	46	36	91 U	91 U	34 J	18 U	78	28	56 J	330
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512	57 U	57 U	57 U	250	190	280 U	280 U	140 U	57 U	310	94	210 J	1100
ICS-LP4-SO-B-101512	760	19 U	19 U	20	24	94 U	94 U	47 U	19 U	45	41	150 J	250
ICS-LP4-SO-C-101512	18 U	18 U	18 U	18 U	18 U	90 U	90 U	45 U	18 U	18 U	18 U	45 U	18 U
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	20 U	20 U	20 U	20 U	19 J	98 U	98 U	49 U	20 U	20 U	20 U	49 U	86
ICS-DOF-MW1-B-101512	19 U	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U	19 U	19 U	47 U	19 U
ICS-DOF-MW1-C-101512	19 U	19 U	19 U	19 U	19 U	93 U	93 U	46 U	19 U	19 U	19 U	46 U	19 U
ICS-DOF-MW2-A-101612	18 U	18 U	18 U	18 U	18 U	92 U	92 U	46 U	18 U	18 U	18 U	46 U	18 U
ICS-DOF-MW2-B-101612	19 U	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U	19 U	19 U	48 U	19 U
ICS-DOF-MW2-C-101612	20 U	20 U	20 U	20 U	20 U	98 U	98 U	49 U	20 U	20 U	20 U	49 U	20 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	19 U	19 U	19 U	19 U	19 U	96 U	96 U	48 U	19 U	19 U	19 U	48 U	19 U
ICS-DOF-DUP1-101612	19 U	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U	19 U	19 U	47 U	19 U
ICS-DOF-MW3-B-101612	20 U	20 U	20 U	20 U	20 U	100 U	100 U	50 U	20 U	20 U	13 J	50 U	30
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	19 U	19 U	19 U	19 U	19 U	95 U	95 U	48 U	19 U	19 U	19 U	48 U	19 U
ICS-DOF-MW4-B-101712	19 U	19 U	19 U	19 U	15 J	95 U	95 U	47 U	19 U	10 J	15 J	47 U	51
ICS-DOF-MW4-C-101712	20 U	20 U	20 U	16 J	22	99 U	99 U	50 U	20 U	25	20 U	50 U	69
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	18 U	18 U	18 U	18 U	12 J	90 U	90 U	45 U	18 U	18 U	18 U	45 U	36
ICS-DOF-MW5-B-101712	20 U	20 U	20 U	11 J	24	99 U	99 U	50 U	20 U	14 J	20 U	50 U	61
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

<u>Field I.D.</u>	2-Chloro- naphthalene 91-58-7 <u>µg/kg, dry</u>	Dimethyl- phthalate 131-11-3 <u>µg/kg, dry</u>	Acenaph- thylene 208-96-8 <u>µg/kg, dry</u>	Acenaphthene 83-32-9 <u>µg/kg, dry</u>	Dibenzo-furan 132-64-9 <u>µg/kg, dry</u>	2,6-Dinitro- toluene 606-20-2 <u>µg/kg, dry</u>	2,4-Dinitro- toluene 121-14-2 <u>µg/kg, dry</u>	Diethyl- phthalate 84-66-2 <u>µg/kg, dry</u>	4-Chlorophenyl- phenylether 7005-72-3 <u>µg/kg, dry</u>	Fluorene 86-73-7 <u>µg/kg, dry</u>	N-Nitrosodi- phenylamine 86-30-6 <u>µg/kg, dry</u>	Pentachloro- phenol 87-86-5 <u>µg/kg, dry</u>	Phenanthrene 85-01-8 <u>µg/kg, dry</u>
ICS-DOF-MW6-A-101712	100 U	100 U	100 U	3200	100 U	520 U	520 U	260 U	100 U	8400	100 U	260 U	9500
ICS-DOF-MW6-B-101712	44 U	44 U	44 U	620	330	220 U	220 U	110 U	44 U	1600	44 U	110 U	2400
ICS-DOF-DUP2-101712	61 U	61 U	61 U	1500	61 U	300 U	300 U	150 U	61 U	3500	61 U	150 U	4900
ICS-DOF-MW6-C-101712	19 U	19 U	19 U	19 U	19 U	93 U	93 U	47 U	19 U	12 J	19 U	47 U	19 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	19 U	19 U	73	420	72	93 U	93 U	47 U	19 U	340	19 U	160,000	1000
ICS-DOF-MW7-B-101612	19 U	19 U	19 U	19 U	19 U	95 U	95 U	48 U	19 U	25	4.4 J	88	13 J
ICS-DOF-MW7-C-101612	19 U	19 U	19 U	19 U	19 U	94 U	94 U	47 U	19 U	19 U	19 U	62	19 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	19 U	19 U	19 U	19 U	19 U	95 U	95 U	47 U	19 U	19 U	19 U	190 U	19 U
ICS-DOF-MW8-B-101612	19 U	19 U	27	110	160	95 U	95 U	48 U	19 U	220	19 U	24 J	620
ICS-DOF-MW8-C-101612	20 U	20 U	20 U	20 U	20 U	98 U	98 U	49 U	20 U	20 U	20 U	250	20 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Carbazole 86-74-8 µg/kg. dry	Anthracene 120-12-7 µg/kg. dry	Di-n-butyl- phthalate 84-74-2 µg/kg. dry	Fluoranthene 206-44-0 µg/kg. dry	Pyrene 129-00-0 µg/kg. dry	Butylbenzyl- phthalate 85-68-7 µg/kg. dry	Benzo(a)- anthracene 56-55-3 µg/kg. dry	bis(2-Ethylhexyl)- phthalate 117-81-7 µg/kg. dry	Chrysene 218-01-9 µg/kg. dry	Di-n-octyl- phthalate 117-84-0 µg/kg. dry	total Benzo- fluoranthenes µg/kg. dry	Benzo(a)- pyrene 50-32-8 µg/kg. dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg. dry
ICS-LP1-SO-A-101512	18 U	21	9.6 J	68	66	4.4 U	34	170	53	18 U	93	62	51
ICS-LP1-SO-B-101512	63 U	110	63 U	540	600	63 U	220	2100	350	63 U	510	230	110
ICS-LP1-SO-C-101512	19 U	19 U	19 U	10 J	10 J	4.7 U	19 U	19 J_B	19 U	19 U	38 U	19 U	19 U
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512	18 U	18 U	10 J	55	50	4.6 U	21	37	38	18 U	56	25	23
ICS-LP2-SO-B-101512	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	22 J_B	19 U	19 U	38 U	19 U	19 U
ICS-LP2-SO-C-101512	19 U	19 U	19 U	19 U	19 U	4.8 U	19 U	24 J_B	19 U	19 U	38 U	19 U	19 U
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512	34	34	420	200	130	180	88	380	110	19 U	270	150	170
ICS-LP3-SO-B-101512	6000	7900	16,000	32,000	23,000	14,000	13,000	55,000	14,000	670 U	18,000	10,000	4500
ICS-LP3-SO-C-101512	33	42	81	120	120	48	49	340	64	18 U	78	38	16 J
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512	60	220	300	850	650	57	240	1400	300	57 U	350	200	99
ICS-LP4-SO-B-101512	19 U	19 U	19 U	130	140	4.7 U	50	120	79	19 U	84	41	19 U
ICS-LP4-SO-C-101512	18 U	18 U	18 U	18 U	18 U	4.5 U	18 U	22 J_B	18 U	18 U	36 U	18 U	18 U
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	20 U	20 U	20 U	36	35	20 U	12 J	20 J_B	17 J	20 U	20 J	20 U	20 U
ICS-DOF-MW1-B-101512	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	22 J_B	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW1-C-101512	19 U	19 U	19 U	19 U	19 U	4.6 U	19 U	30 J_B	19 U	19 U	37 U	19 U	19 U
ICS-DOF-MW2-A-101612	18 U	18 U	18 U	18 U	18 U	4.6 U	18 U	17 J_B	18 U	18 U	37 U	18 U	18 U
ICS-DOF-MW2-B-101612	19 U	19 U	19 U	19 U	19 U	4.8 U	19 U	14 J_B	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW2-C-101612	20 U	20 U	20 U	20 U	20 U	4.9 U	20 U	16 J_B	20 U	20 U	39 U	20 U	20 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	19 U	19 U	19 U	19 U	19 U	13	19 U	260	19 U	19 U	38 U	19 U	19 U
ICS-DOF-DUP1-101612	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	24 U	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW3-B-101612	20 U	20 U	20 U	20 U	20 U	5.0 U	20 U	25 U	20 U	20 U	40 U	20 U	20 U
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	19 U	19 U	19 U	19 U	19 U	4.8 U	19 U	24 U	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW4-B-101712	19 U	19 U	19 U	24	18 J	4.7 U	19 U	16 J_B	10 J	19 U	38 U	19 U	19 U
ICS-DOF-MW4-C-101712	20 U	17 J	20 U	85	56	5.0 U	19 J	20 J_B	23	20 U	27 J	14 J	20 U
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	18 U	18 U	18 U	14 J	14 J	4.5 U	18 U	23 U	13 J	18 U	9.0 J	18 U	18 U
ICS-DOF-MW5-B-101712	20 U	11 J	20 U	34	32	5.0 U	11 J	25 U	12 J	20 U	13 J	20 U	20 U
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry	Pyrene 129-00-0 µg/kg, dry	Butylbenzyl- phthalate 85-68-7 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry	Di-n-octyl- phthalate 117-84-0 µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene 50-32-8 µg/kg, dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg, dry
ICS-DOF-MW6-A-101712	100 U	100 U	100 U	99 J	300	26 U	100 U	88 J	100 U	100 U	88 J	100 U	100 U
ICS-DOF-MW6-B-101712	44 U	44 U	44 U	47	78	11 U	29 J	62	62	44 U	31 J	44 U	44 U
ICS-DOF-DUP2-101712	61 U	61 U	61 U	94	180	15 U	70	76 U	120	61 U	42 J	61 U	61 U
ICS-DOF-MW6-C-101712	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	23 U	19 U	19 U	37 U	19 U	19 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	34 J_Q	270	600	580	530	130	250	400	220	19 U	240	150	52
ICS-DOF-MW7-B-101612	19 U	19 U	19 U	19 U	19 U	4.8 U	19 U	24 U	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW7-C-101612	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	24 U	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	19 U	19 U	19 U	19 U	19 U	4.7 U	19 U	17 J_B	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW8-B-101612	200 J_Q	94	19 U	12 J	19 U	4.8 U	19 U	18 J_B	19 U	19 U	38 U	19 U	19 U
ICS-DOF-MW8-C-101612	20 U	20 U	20 U	20 U	20 U	4.9 U	20 U	23 J_B	20 U	20 U	39 U	20 U	20 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)													

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Dibenz(a,h)- anthracene 53-70-3 µg/kg, dry	Benzo(g,h,i)- perylene 191-24-2 µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry
ICS-LP1-SO-A-101512	11 J	77	141	515	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U	4.9 U	4.9 U
ICS-LP1-SO-B-101512	63 U	130	501	2690	17 U	17 U	52 U	17 U	19 U	17 U	180 U	17 U	96 U	430
ICS-LP1-SO-C-101512	19 U	19 U	19 U	20	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-LP1-SO-D-101512														
ICS-LP2-SO-A-101512	18 U	31	70	299	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	2.7 U	0.94 U
ICS-LP2-SO-B-101512	19 U	19 U	27.5	38 U	0.46 U	0.76 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U
ICS-LP2-SO-C-101512	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-LP2-SO-D-101512														
ICS-LP3-SO-A-101512	48	190	550	1356	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	110 U	130 U	12 U	79 U
ICS-LP3-SO-B-101512	2300	4400	122,600	121,200	120 U	350 U	120 U	120 U	620 U	120 U	2400 U	120 U	240 U	2900 J_p
ICS-LP3-SO-C-101512	18 U	19	686	504	4.9 U	13 U	50 U	4.9 U	20 U	4.9 U	70 U	4.9 U	56 U	170 J_p
ICS-LP3-SO-D-101512														
ICS-LP4-SO-A-101512	34 J	120	2650	2843	20 U	20 U	290 U	20 U	120 U	20 U	220 U	20 U	41 U	380 J_p
ICS-LP4-SO-B-101512	19 U	19 U	875	524	2.8 U	16 U	12 U	2.8 U	12 U	2.8 U	46 U	2.8 U	20 U	94 J_p
ICS-LP4-SO-C-101512	18 U	18 U	18 U	36 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.91 U	0.46 U	0.91 U	5.6
ICS-LP4-SO-D-101512														
ICS-LP4-NAPL-101512														
ICS-DOF-MW1-A-101512	20 U	20 U	926	120	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	3.9 U	0.47 U	12 U	0.94 U
ICS-DOF-MW1-B-101512	19 U	19 U	19 U	38 U	0.47 U	1.5 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-DOF-MW1-C-101512	19 U	19 U	19 U	37 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U
ICS-DOF-MW2-A-101612	18 U	18 U	18 U	37 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U
ICS-DOF-MW2-B-101612	19 U	19 U	19 U	38 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-DOF-MW2-C-101612	20 U	20 U	20 U	39 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-DOF-MW2-D-101612														
ICS-DOF-MW3-A-101612	19 U	19 U	19 U	38 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U
ICS-DOF-DUP1-101612	19 U	19 U	19 U	38 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-DOF-MW3-B-101612	20 U	20 U	42	40 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U
ICS-DOF-MW3-C-101612														
ICS-DOF-MW3-D-101612														
ICS-DOF-MW4-A-101712	19 U	19 U	19 U	38 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U
ICS-DOF-MW4-B-101712	19 U	19 U	80	52	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-DOF-MW4-C-101712	20 U	12 J	151	236	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U
ICS-DOF-MW4-D-101712														
ICS-DOF-MW5-A-101712	18 U	18 U	50	50	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U
ICS-DOF-MW5-B-101712	20 U	20 U	143	102	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-DOF-MW5-C-101712														
ICS-DOF-MW5-D-101712														

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

<u>Field I.D.</u>	Dibenz(a,h)- anthracene 53-70-3 <u>µg/kg, dry</u>	Benzo(g,h,i)- perylene 191-24-2 <u>µg/kg, dry</u>	LPAH <u>µg/kg, dry</u>	HPAH <u>µg/kg, dry</u>	alpha-BHC 319-84-6 <u>µg/kg, dry</u>	beta-BHC 319-85-7 <u>µg/kg, dry</u>	delta-BHC 319-86-8 <u>µg/kg, dry</u>	gamma-BHC (Lindane) 58-89-9 <u>µg/kg, dry</u>	Heptachlor 76-44-8 <u>µg/kg, dry</u>	Aldrin 309-00-2 <u>µg/kg, dry</u>	Heptachlor epoxide 1024-57-3 <u>µg/kg, dry</u>	Endosulfan I 959-98-8 <u>µg/kg, dry</u>	Dieldrin 60-57-1 <u>µg/kg, dry</u>	4,4'-DDE 72-55-9 <u>µg/kg, dry</u>
ICS-DOF-MW6-A-101712	100 U	100 U	31,100	487	2.5 U	16 U	2.5 U	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U	4.9 U	4.9 U
ICS-DOF-MW6-B-101712	44 U	44 U	7520	247	2.4 U	10 U	2.4 U	2.4 U	2.4 U	2.4 U	10 U	2.4 U	36 U	4.8 U
ICS-DOF-DUP2-101712	61 U	61 U	15,100	247	2.4 U	8.5 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U	33 U	4.8 U
ICS-DOF-MW6-C-101712	19 U	19 U	61	37 U	13 U	4.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	6.0 U	0.99 U	0.99 U
ICS-DOF-MW6-D-101712														
ICS-DOF-MW7-A-101612	15 J	100	2783	2137	4.4 U	200 U	95 U	4.4 U	4.4 U	4.4 U	15 U	40 U	8.8 U	23 J_p
ICS-DOF-MW7-B-101612	19 U	19 U	38	38 U	0.49 U	0.55 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U
ICS-DOF-MW7-C-101612	19 U	19 U	55	38 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U
ICS-DOF-MW7-D-101612														
ICS-DOF-MW8-A-101612	19 U	19 U	11	38 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.68	0.93 U	0.46 U	0.93 U	0.93 U
ICS-DOF-MW8-B-101612	19 U	19 U	1135	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.2	0.99 U	0.50 U	0.99 U	0.99 U
ICS-DOF-MW8-C-101612	20 U	20 U	24	39 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-DOF-MW8-D-101612														
Trip Blank (µg/L)														

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	trans- Chlordane 5103-74-2 µg/kg, dry	cis- Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachloro- butadiene 87-68-3 µg/kg, dry
ICS-LP1-SO-A-101512	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	25 U	4.9 U	4.9 U	2.5 U	2.5 U	490 U	4.9 U	4.9 U
ICS-LP1-SO-B-101512	34 U	86 U	1000	34 U	270 U	170 U	120 U	74 U	83 U	17 U	3400 U	34 U	34 U
ICS-LP1-SO-C-101512	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-LP1-SO-D-101512													
ICS-LP2-SO-A-101512	1.4 U	3.7 U	0.94 U	0.94 U	4.6 U	4.7 U	4.2 U	2.3 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-LP2-SO-B-101512	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U	0.92 U
ICS-LP2-SO-C-101512	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U
ICS-LP2-SO-D-101512													
ICS-LP3-SO-A-101512	120 U	49 U	6.7 U	6.7 U	180 U	33 U	6.7 U	17 U	38 U	3.3 U	670 U	6.7 U	6.7 U
ICS-LP3-SO-B-101512	1200 U	1000 U	3000 J _p	240 U	2900 U	1200 U	240 U	810 U	690 U	120 U	24,000 U	240 U	240 U
ICS-LP3-SO-C-101512	47 U	9.8 U	56 J _p	9.8 U	62 U	49 U	30 U	18 U	26 U	4.9 U	980 U	9.8 U	9.8 U
ICS-LP3-SO-D-101512													
ICS-LP4-SO-A-101512	250 U	130 U	970	41 U	450 U	200 U	41 U	210 U	20 U	20 U	4100 U	41 U	41 U
ICS-LP4-SO-B-101512	30 U	16 U	60 J _p	5.5 U	56 U	28 U	5.5 U	20 U	9.8 U	2.8 U	550 U	21 U	5.5 U
ICS-LP4-SO-C-101512	0.91 U	0.91 U	2.7	0.91 U	2.5 U	4.6 U	0.91 U	0.91 U	0.46 U	0.46 U	91 U	0.91 U	0.91 U
ICS-LP4-SO-D-101512													
ICS-LP4-NAPL-101512													
ICS-DOF-MW1-A-101512	25 U	0.94 U	4.6 U	0.94 U	42 U	4.7 U	31 U	17 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-DOF-MW1-B-101512	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-DOF-MW1-C-101512	2.0 U	0.97 U	0.97 U	0.97 U	3.2 U	4.8 U	0.97 U	1.4 U	0.48 U	0.48 U	97 U	0.97 U	0.97 U
ICS-DOF-MW2-A-101612	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.49 U	0.49 U	97 U	0.97 U	0.97 U
ICS-DOF-MW2-B-101612	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-DOF-MW2-C-101612	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U
ICS-DOF-MW2-D-101612													
ICS-DOF-MW3-A-101612	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	95 U	0.95 U	0.95 U
ICS-DOF-DUP1-101612	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	1.2 U	0.47 U	94 U	0.94 U	0.94 U
ICS-DOF-MW3-B-101612	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U	0.92 U
ICS-DOF-MW3-C-101612													
ICS-DOF-MW3-D-101612													
ICS-DOF-MW4-A-101712	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	95 U	0.95 U	0.95 U
ICS-DOF-MW4-B-101712	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U
ICS-DOF-MW4-C-101712	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	0.48 U	0.48 U	97 U	0.97 U	0.97 U
ICS-DOF-MW4-D-101712													
ICS-DOF-MW5-A-101712	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U	0.92 U	0.92 U
ICS-DOF-MW5-B-101712	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U	0.94 U	0.94 U
ICS-DOF-MW5-C-101712													
ICS-DOF-MW5-D-101712													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Soils Analyses, October 2012

Field I.D.	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	trans- Chlordane 5103-74-2 µg/kg, dry	cis- Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachloro- butadiene 87-68-3 µg/kg, dry
ICS-DOF-MW6-A-101712	4.9 U	19 U	4.9 U	4.9 U	10 U	25 U	4.9 U	4.9 U	7.4 U	11 U	490 U	4.9 U	73
ICS-DOF-MW6-B-101712	48 U	68 U	4.8 U	4.8 U	72 U	24 U	4.8 U	43 U	7.5 U	11 U	480 U	4.8 U	52
ICS-DOF-DUP2-101712	44 U	27 U	4.8 U	4.8 U	67 U	24 U	59 U	41 U	9.1 U	14 U	480 U	4.8 U	65
ICS-DOF-MW6-C-101712	2.0 U	3.1 U	0.99 U	0.99 U	2.5 U	5.0 U	0.99 U	8.5 U	0.50 U	0.50 U	99 U	0.99 U	0.99 U
ICS-DOF-MW6-D-101712													
ICS-DOF-MW7-A-101612	8.8 U	8.8 U	8.8 U	8.8 U	22 U	44 U	23 U	22 U	13 U	4.4 U	880 U	34	8.8 U
ICS-DOF-MW7-B-101612	0.98 U	1.8 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	98 U	0.98 U	0.98 U
ICS-DOF-MW7-C-101612	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	98 U	0.98 U	0.98 U
ICS-DOF-MW7-D-101612													
ICS-DOF-MW8-A-101612	0.93 U	0.93 U	1.7	0.93 U	0.93 U	4.6 U	0.93 U	0.93 U	0.46 U	0.46 U	93 U	0.93 U	0.93 U
ICS-DOF-MW8-B-101612	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	99 U	0.99 U	0.99 U
ICS-DOF-MW8-C-101612	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U	0.96 U	0.96 U
ICS-DOF-MW8-D-101612													
Trip Blank (µg/L)													

J_p = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Soils Analyses, October 2012

Field I.D.	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-LP1-SO-A-101512	3.8 U	3.8 U	17 J _p	26	49	3.8 U	3.8 U	92
ICS-LP1-SO-B-101512	140 U	140 U	4100	4600	1900	140 U	140 U	10,600
ICS-LP1-SO-C-101512	3.9 U	3.9 U	10	12	12	3.9 U	3.9 U	34
ICS-LP1-SO-D-101512								
ICS-LP2-SO-A-101512	3.8 U	3.8 U	3.8 U	16	33	3.8 U	3.8 U	49
ICS-LP2-SO-B-101512	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-LP2-SO-C-101512	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-LP2-SO-D-101512								
ICS-LP3-SO-A-101512	130 U	130 U	1900 U	3300	520 U	130 U	130 U	3300
ICS-LP3-SO-B-101512	980 U	980 U	53,000	36,000	24,000	980 U	980 U	113,000
ICS-LP3-SO-C-101512	37 U	37 U	1000	760	310	37 U	37 U	2070
ICS-LP3-SO-D-101512								
ICS-LP4-SO-A-101512	200 U	200 U	7400	4000	3900	200 U	200 U	15,300
ICS-LP4-SO-B-101512	55 U	55 U	810	780	560	55 U	55 U	2150
ICS-LP4-SO-C-101512	3.8 U	3.8 U	31	21	12	3.8 U	3.8 U	64
ICS-LP4-SO-D-101512								
ICS-LP4-NAPL-101512								
ICS-DOF-MW1-A-101512	3.7 U	3.7 U	9.3 U	83 U	470	3.7 U	3.7 U	470
ICS-DOF-MW1-B-101512	3.8 U	3.8 U	3.8 U	5.8	9.8	3.8 U	3.8 U	15.6
ICS-DOF-MW1-C-101512	3.8 U	3.8 U	6.4	7.6 U	26	3.8 U	3.8 U	32.4
ICS-DOF-MW2-A-101612	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-DOF-MW2-B-101612	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW2-C-101612	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW2-D-101612								
ICS-DOF-MW3-A-101612	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-DUP1-101612	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW3-B-101612	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-DOF-MW3-C-101612								
ICS-DOF-MW3-D-101612								
ICS-DOF-MW4-A-101712	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW4-B-101712	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-DOF-MW4-C-101712	3.9 U	3.9 U	3.9 U	3.1 J	2.3 J	3.9 U	3.9 U	5.4
ICS-DOF-MW4-D-101712								
ICS-DOF-MW5-A-101712	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-DOF-MW5-B-101712	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW5-C-101712								
ICS-DOF-MW5-D-101712								

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Soils Analyses, October 2012

<u>Field I.D.</u>	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-DOF-MW6-A-101712	19 U	19 U	130	160	180	19 U	19 U	470
ICS-DOF-MW6-B-101712	20 U	20 U	260 J_p	390 U	1200	20 U	20 U	1460
ICS-DOF-DUP2-101712	19 U	19 U	200 J_p	240 U	740	19 U	19 U	940
ICS-DOF-MW6-C-101712	4.0 U	4.0 U	9.9 J_p	12 U	32	4.0 U	4.0 U	41.9
ICS-DOF-MW6-D-101712								
ICS-DOF-MW7-A-101612	140 U	140 U	220	210 U	670	140 U	140 U	890
ICS-DOF-MW7-B-101612	3.9 U	3.9 U	3.2 J	2.3 J	4.1 J_p	3.9 U	3.9 U	9.6
ICS-DOF-MW7-C-101612	3.9 U	3.9 U	3.3 J	2.4 J	2.5 J_p	3.9 U	3.9 U	8.2
ICS-DOF-MW7-D-101612								
ICS-DOF-MW8-A-101612	3.7 U	3.7 U	3.7 U	5.3	3.1 J	3.7 U	5.6 U	8.4
ICS-DOF-MW8-B-101612	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.9 U	4.9 U
ICS-DOF-MW8-C-101612	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-DOF-MW8-D-101612								
Trip Blank (µg/L)								

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: December 30, 2012

SUBJECT: Data Evaluation/Assessment for 5 Surface Waters and 3 Solids (manhole/catch basin sediment, ash and baghouse dust) Collected during July and August 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA

Five surface water samples and three solids were collected by Dalton, Olmsted & Fuglevand (DOF) staff on July 5, August 3, and August 13, 2012 for chemical characterization. All samples were delivered in four delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within six hours of collection. Samples were received on ice at temperatures between 3.6 and 13.6 degrees C, and maintained at the project laboratory at 4 degrees C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. One field rinsate and three VOC's trip/transport blanks were also submitted and analyzed for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). All analyses were performed by methods presented in Tables SAP-3 through SAP-6 of the SAP.

VOC's	SW846-M.8260C	pH	SW846-M.9045
SVOC's	SW846-M.8270	SVOC's (selected)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. pesticides	SW846-M.8081
PCDD/PCDF's	EPA 1613B	chlor. phenols	SW846-M.8041
Hg	SW846-M.7470/7471A	metals (exc Hg)	SW846-M.6010C & EPA 200.8
total organic carbon	SW846-M.9060M	total petroleum HC's	NWTPH-Dx & -G
BTEX	SW846-M.8021M	Cl & SO ₄	EPA 300.0
sediment grain size	PSEP		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. These selected analytes include

the PAH's, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses. Similarly, selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method and the volatile organic compound (VOC's) method (M.8260). The attached results table reports only one result, which is either one of the two exhibiting the lowest reporting limit or the result with the least limitations in data quality. Naphthalene and hexachlorobutadiene (HCBD) results generated by M.8260 (VOC's method) were only considered when SVOC (in the case of naphthalene) and chlorinated pesticides (by M.8081 in the case of HCBD) analyses were not requested or reported. The lower reporting limit for chlorinated phenols was improved over M.8270 by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

For the environmental samples, [lower] **reporting limits** were consistent with specified-limits presented in the SAP. Some Aroclors (commercial PCB mixtures) were reported with slightly elevated reporting limits or nondetects due to slightly elevated or busy baselines. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. In the case of polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/PCDF's), analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of some analyte carryover exhibited in delivery groups VE84 and VF62 due to elevated analyte levels in solids samples. This includes PCDD/PCDF's at levels significantly less than ($< 10\times$) lower reporting limits and significantly less than levels reported in the project sample, and selected SVOC analytes (isophorone, naphthalene, dimethylphthalate, benzyl alcohol, and *bis*(2-ethylhexyl)phthalate) at levels significantly less than that reported in project samples. SVOC analyses were reformed by reextraction and reanalyses until associated method blanks were determined to be acceptable. Sample results presented in the attached table are unaffected by any potential bias associated with either sample carryover and/or laboratory background. No results required qualification due to method blanks performance.

A single field equipment **rinsate blank** was generated and submitted for analysis of chloride, sulfate, dissolved metals, TPH, VOC's, SVOC's, chlorinated pesticides and PCB's. Only toluene was detected at 0.22 µg/L. No toluene was found in project samples greater than the lower reporting limit of 0.20 µg/L. Three **trip/transport blanks** were generated and submitted for analysis and determination of potential contamination during handling of VOC's, BTEX and TPHG samples. Results of these analyses are reported in the attached table – no target analytes were detected. No data required qualification due to field blanks performance.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. Some MS recoveries were nonevaluable due to high native levels of analyte interfering with [low] spike levels, such as iron and zinc in analytical group VE84 (MH1-SE). Several analytes, such as benzoic acid, anthracene, and chrysene exhibited LCS recoveries outside specification in single incidences, however the associated MS recoveries were acceptable. No associated data required qualification. Copper (Cu) matrix spike recovery was reported high (199%) in manhole/catchbasin sediment MH1-SE, requiring the qualification of the associated Cu result as likely biased high with the “J_R” qualifier code. Silver (Ag) matrix spike recovery in the ash sample (ASH) was reported low at 6.7% requiring the assignment of the “J_R” qualifier code to indicate results are considered estimated (biased low) due to a low matrix spike recovery. The presence of high chloride levels in the ash sample could yield depressed Ag recoveries. No other results required qualification of sample results due to unacceptable analyte recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, BTEX, chlorinated pesticides (including hexachlorobutadiene [HCBD] and hexachlorobenzene [HCB]), PCB's, and PCDD/PCDF's. Four labeled compounds were utilized for the evaluation of VOC's recovery performance. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance. Trifluorotoluene and bromobenzene were used as surrogates for the TPH-G and BTEX analyses, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM utilized the surrogate compounds d₁₀-2-methylnaphthalene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. PCDD/PCDF's recoveries were evaluated with the stable isotope labeled C-13 analogs of the target analytes. All surrogate recoveries were within specification, with the exception of 2,4,6-tribromophenol and d₁₄-*p*-terphenyl in the DUST sample. Reextraction and reanalysis of the DUST showed a consistently low d₁₄-*p*-terphenyl recovery at 8.0% while the bromophenol was within the specified acceptance range. A single neutral surrogate compound out of four falling outside the acceptance range does not require the qualification of associated results. Results from the reextraction and reanalysis of DUST are reported in the attached table. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV) checks revealed occasional [minor] noncompliant responses for chloroethane, *t*-1,4-dichloro-2-butene, bromoform, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene (VOC's), pentachlorophenol (M.8270), hexachlorobenzene

(M.8270), and pyrene (M.8270-SIM). Associated results were mostly reported as nondetected, with the exception of hexachlorobenzene (HCB by GC/MS [M.8270]) in manhole/catch basin sediment at 230 µg/kg (J_Q). Reported data associated with noncompliant CCV's are nonetheless qualified as estimated with the "J_Q" code, even though the data quality, by other measures, is generally within specified acceptance limits.

A single pair of blind **field duplicate** samples were collected and submitted for analysis for the assessment of monitoring variability. A duplicate pair is identified in the attached table of sample results; SEEP1 / DUP1. Most analytes, with the exception of a few metals, were not detected. Results for detected parameters were essentially the same. Significant sample heterogeneity was exhibited in sample MH1 (manhole/catch basin sediment) for hexachlorobenzene – GC/MS (M.8270) analyses reported 230 µg/kg while GC/ECD (M.8081) analyses reported nondetected at 1.6 µg/kg U. Careful inspection of both data sets revealed no apparent error in analyses or reporting. The GC/MS result for HCB in sample MH1 is reported in the attached results table. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications).

TPH-Dx analyses indicate principally lube-range hydrocarbons present in the manhole/catch basin sediment sample MH1. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present. No TPH was detected in any of the surface water samples collected.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for solids and water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	TOC	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7	
					%	%	mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		1212872-VB38A			2430	321	1 U	-	5	-	1 U	-
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	1212873-VB38B			2440	327	1 U	-	5	-	1 U	-
ICS-SEEP2-GW-070512	grd water	7/5/2012		1212874-VB38C			2220	303	1 U	-	4	-	1 U	-
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	1212875-VB38D			0.1 U	0.1 U	0.2 U	-	0.2 U	-	0.2 U	-
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	1212876-VB38E										
ICS-OUTF-SW-080312	water	8/3/2012		1214841-VE83D / 1214862-VE83A			7710	1100	5 U	5 U	8	10	2 U	2 U
ICS-MH1-SW-080312	water	8/3/2012		1214865-VE83E / 1214863-VE83B			6970	995	5 U	5 U	7	6	2 U	2 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	1214864-VE83C										
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	1214866-VE84A	77	4.20			7 mg/kg U		8 mg/kg		0.1 mg/kg U	
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank	1214867-VE84B										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	1215324-VF62A	71				33.7 mg/kg		4.7 mg/kg		0.2 mg/kg U	
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	1215325-VF62B	100				0.5 mg/kg		8.3 mg/kg		0.2 mg/kg U	

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Cadmium 7440-43-9		Calcium 7440-70-2		Chromium 7440-47-3		Copper 7440-50-8		Iron 7439-89-6	Lead 7439-92-1	
				diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	mg/kg	diss. µg/L	total µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.5 U	-	74,100	-	2 U	-	2 U	-		0.2 U	-
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.5 U	-	74,100	-	2	-	2 U	-		0.2 U	-
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.5 U	-	76,200	-	2	-	2 U	-		0.2 U	-
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.1 U	-	50 U	-	0.5 U	-	0.5 U	-		0.1 U	-
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank											
ICS-OUTF-SW-080312	water	8/3/2012		2 U	2 U	-	169,000	10 U	10 U	10 U	10 U		1 U	1 U
ICS-MH1-SW-080312	water	8/3/2012		2 U	2 U	-	150,000	10 U	10 U	10 U	10 U		0.5 U	1 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank											
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)		1.3 mg/kg				62.3 mg/kg		86.8 mg/kg J _R	25,400		63 mg/kg
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank											
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)		3.9 mg/kg				2110 mg/kg		1830 mg/kg			226 mg/kg
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)		0.3 mg/kg				1150 mg/kg		653 mg/kg			1200 mg/kg

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Magnesium 7439-95-4		Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Zinc 7440-66-6		Hardness mg-CaCO ₃ /L
				diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
ICS-SEEP1-GW-070512	grd water	7/5/2012		173,000	-	0.1 U	-	4	-	1 U	-	20 U	-	900
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	173,000	-	0.1 U	-	4	-	1 U	-	20 U	-	900
ICS-SEEP2-GW-070512	grd water	7/5/2012		179,000	-	0.1 U	-	6	-	1 U	-	210	-	930
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	50 U	-	0.1 U	-	0.5 U	-	0.2 U	-	4 U	-	0.33 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank											
ICS-OUTF-SW-080312	water	8/3/2012		-	521,000	0.1 U	0.1 U	10 U	10 U	5 U	5 U	100 U	100 U	2600
ICS-MH1-SW-080312	water	8/3/2012		-	453,000	0.1 U	0.1 U	10 U	10 U	5 U	5 U	100 U	100 U	2200
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank											
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)				0.08 mg/kg		39 mg/kg		1.6 mg/kg		464 mg/kg	
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank											
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)				0.05 mg/kg		171 mg/kg		13.7 mg/kg J _R		3680 mg/kg	
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)				0.02 mg/kg U		107 mg/kg		1.6 mg/kg		2380 mg/kg	

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane
				Gasoline-range	Diesel-range	Lube-range	74-87-3	74-83-9	75-01-4	75-00-3	75-09-2	67-64-1	75-15-0	75-35-4	75-34-3
				mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.6	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	16	0.20 U	0.20 U	0.20 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	9.9 mg/kg U	290 mg/kg	1400 mg/kg									
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank	0.10 U											
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)												
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)												

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	<i>trans</i> -1,2-	<i>cis</i> -1,2-	Chloroform	1,2-Dichloro-	2-Butanone	1,1,1-Tri-	Carbon	Bromo-	1,2-Dichloro-	<i>cis</i> -1,3-Dichloro-	Trichloro-
				Dichloroethene	Dichloroethene		ethane		chloroethane	tetrachloride	dichloromethane	propane	propene	ethene
				156-60-5	156-59-2		107-06-2		71-55-6	56-23-5	75-27-4	78-87-5	10061-01-5	79-01-6
				<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)											
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank											
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)											
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)											

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)			25 U							25 U		25 U
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank			0.25 U							0.25 U		0.25 U
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)												
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)												

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Styrene	Trichloro-	1,1,2-Trichloro-1,2,2-	m - & p -	o -Xylene	1,2-Dichloro-	1,3-Dichloro-	1,4-Dichloro-	Acrolein	Bromoethane
				100-42-5 µg/L	fluoromethane 75-69-4 µg/L	trifluoroethane 76-13-1 µg/L	Xylenes 179601-23-1 µg/L		benzene 95-50-1 µg/L	benzene 541-73-1 µg/L	benzene 106-46-7 µg/L		
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.71	0.29	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)				50 U	25 U					
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank				0.50 U	0.25 U					
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)										
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)										

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Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	1,1-Dichloro- propene 563-58-6 <u>µg/L</u>	Dibromo- methane 74-95-3 <u>µg/L</u>	1,1,1,2-Tetra- chloroethane 630-20-6 <u>µg/L</u>	1,2,3-Trichloro- propane 96-18-4 <u>µg/L</u>	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 <u>µg/L</u>	1,3,5-Trimethyl- benzene 108-67-8 <u>µg/L</u>	1,2,4-Trimethyl- benzene 95-63-6 <u>µg/L</u>	Hexachloro- butadiene 87-68-3 <u>µg/L</u>	Ethylene dibromide 106-93-4 <u>µg/L</u>	Bromochloro- methane 74-97-5 <u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.59	<i>see Cl pest.</i>	0.20 U	0.20 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)										
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)										
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)										

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	2,2-Dichloro-	1,3-Dichloro-	Isopropyl-	n-Propyl-	Bromo-	2-Chloro-	4-Chloro-	tert -Butyl-	sec -Butyl-	4-Isopropyl-
				propane	propane	benzene	benzene	benzene	toluene	toluene	benzene	benzene	toluene
				294-20-7	142-28-9	98-82-8	103-65-1	108-86-1	95-49-8	106-43-4	98-06-6	135-98-8	99-87-6
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)										
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)										
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)										

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	n-Butyl- benzene 104-51-8 <u>µg/L</u>	1,2,4-Trichloro- benzene 120-82-1 <u>µg/L</u>	Naphthalene 91-20-3 <u>µg/L</u>	1,2,3-Trichloro- benzene 87-61-6 <u>µg/L</u>	Phenol 108-95-2 <u>µg/L</u>	2-Chloro- phenol 95-57-8 <u>µg/L</u>	1,3-Dichloro- benzene 541-73-1 <u>µg/L</u>	1,4-Dichloro- benzene 106-46-7 <u>µg/L</u>	Benzyl alcohol 100-51-6 <u>µg/L</u>	1,2-Dichloro- benzene 95-50-1 <u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	0.20 U	0.50 U	0.50 U	0.50 U			see VOC's	see VOC's		see VOC's
ICS-OUTF-SW-080312	water	8/3/2012		0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-MH1-SW-080312	water	8/3/2012		0.20 U	see SVOC's	see SVOC's	0.50 U	1.0 U	1.0 U	see VOC's	see VOC's	5.0 U	see VOC's
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	0.20 U	0.50 U	0.50 U	0.50 U			see VOC's	see VOC's		see VOC's
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)					500	71	4100	2900	160	3400
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)					45,000	190 U	48 U	48 U	3300	48 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)					350	18 U	4.5 U	6.3	60	7.0

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/kg	Hexachloro- ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank										see VOC's
ICS-OUTF-SW-080312	water	8/3/2012		1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-MH1-SW-080312	water	8/3/2012		1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank										see VOC's
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	23	90	18 U	18 U	18 U	18 U	18 U	770	180 U	5300
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	1900	1000	190 U	190 U	190 U	220,000	790	3900 U	1900 U	48 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	33	47	18 U	18 U	18 U	210	18 U	730	180 U	4.5 U

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	Naphthalene 91-20-3 <u>µg/L</u>	4-Chloro-3- methylphenol 59-50-7 <u>µg/L</u>	2-Methyl- naphthalene 91-57-6 <u>µg/L</u>	2,4,6-Trichloro- phenol 88-06-2 <u>µg/L</u>	2,4,5-Trichloro- phenol 95-95-4 <u>µg/L</u>	2-Chloro- naphthalene 91-58-7 <u>µg/L</u>	Dimethyl- phthalate 131-11-3 <u>µg/L</u>	Acenaph- thylene 208-96-8 <u>µg/L</u>	Acenaphthene 83-32-9 <u>µg/L</u>	Dibenzo-furan 132-64-9 <u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.10 U	5.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.10 U	5.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.10 U	5.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.10 U	5.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank	see VOC's									
ICS-OUTF-SW-080312	water	8/3/2012		0.10 U	5.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-MH1-SW-080312	water	8/3/2012		0.10 U	5.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank	see VOC's									
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	4100	93 U	70	93 U	93 U	2800	18 U	740	18	20
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	91,000	970 U	22,000	970 U	970 U	190 U	81,000	190 U	360	190 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	160	90 U	39	90 U	90 U	18 U	18 U	18 U	18 U	18 U

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	2,6-Dinitro- toluene 606-20-2 <u>µg/L</u>	2,4-Dinitro- toluene 121-14-2 <u>µg/L</u>	Diethyl- phthalate 84-66-2 <u>µg/L</u>	4-Chlorophenyl- phenylether 7005-72-3 <u>µg/L</u>	Fluorene 86-73-7 <u>µg/L</u>	N-Nitrosodi- phenylamine 86-30-6 <u>µg/L</u>	Pentachloro- phenol 87-86-5 <u>µg/L</u>	Phenanthrene 85-01-8 <u>µg/L</u>	Carbazole 86-74-8 <u>µg/L</u>	Anthracene 120-12-7 <u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank										
ICS-OUTF-SW-080312	water	8/3/2012		5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	5.0 U	0.10 U	1.0 U	0.10 U
ICS-MH1-SW-080312	water	8/3/2012		5.0 U	5.0 U	1.0 U	1.0 U	0.10 U	1.0 U	5.0 U	0.10 U	1.0 U	0.10 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank										
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	93 U	93 U	46 U	18 U	32	18 U	44 U	1700	18 U	190
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	970 U	970 U	480 U	190 U	640	2800	480 U	760	190 U	190 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	90 U	90 U	45 U	18 U	18 U	18 U	45 U	18 U	18 U	18 U

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Di-n-butyl- phthalate 84-74-2 <u>µg/L</u>	Fluoranthene 206-44-0 <u>µg/L</u>	Pyrene 129-00-0 <u>µg/L</u>	Butylbenzyl- phthalate 85-68-7 <u>µg/L</u>	Benzo(a)- anthracene 56-55-3 <u>µg/L</u>	bis (2-Ethylhexyl)- phthalate 117-81-7 <u>µg/L</u>	Chrysene 218-01-9 <u>µg/L</u>	Di-n-octyl- phthalate 117-84-0 <u>µg/L</u>	total Benzo- fluoranthenes <u>µg/L</u>	Benzo(a)- pyrene 50-32-8 <u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank										
ICS-OUTF-SW-080312	water	8/3/2012		1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	1.0 U	0.20 U	0.10 U
ICS-MH1-SW-080312	water	8/3/2012		1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.1	0.10 U	1.0 U	0.20 U	0.10 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank										
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	65	2200	1700	82	240	3400	640	900	1400	500
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	9300	340	350	5600	190 U	26,000	350	190 U	390 U	190 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	640	18 U	18 U	120	18 U	2000	18 U	49	36 U	18 U

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Indeno(1,2,3-cd)pyrene 193-39-5 µg/L	Dibenz(a,h)-anthracene 53-70-3 µg/L	Benzo(g,h,i)-perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank									
ICS-OUTF-SW-080312	water	8/3/2012		0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-MH1-SW-080312	water	8/3/2012		0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank									
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	260	44	210	6780	7194	6.0 U	4.0 U	39 U	1.6 U
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank									
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)	190 U	190 U	190 U	92,760	1040				
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)	18 U	18 U	18 U	160	36 U				

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Heptachlor	Aldrin	Heptachlor	Endosulfan I	Dieldrin	4,4'-DDE	Endrin	Endosulfan II	4,4'-DDD	Endosulfan
				76-44-8	309-00-2	epoxide 1024-57-3	959-98-8	60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8	sulfate 1031-07-8
				<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank										
ICS-OUTF-SW-080312	water	8/3/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-MH1-SW-080312	water	8/3/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank										
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)										
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)										

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	5.0 U	0.050 U	0.050 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank									see VOC's
ICS-OUTF-SW-080312	water	8/3/2012		0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U		0.050 U	0.050 U
ICS-MH1-SW-080312	water	8/3/2012		0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U		0.050 U	0.050 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank									see VOC's
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	6.4 U	16 U	3.2 U	3.2 U	6.7 U	2.8 U		230 J _Q	1.6 U
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank									
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)								190 U	190 U
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)								18	18 U

U = nondetected at the associated lower reporting limit.

J_Q = estimate; due to noncompliant CCV check.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-SEEP1-GW-070512	grd water	7/5/2012		0.010 U	0.010 U	0.025 U	0.075 U	0.010 U	0.010 U	0.010 U	0.075 U
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1	0.010 U	0.010 U	0.025 U	0.075 U	0.010 U	0.010 U	0.010 U	0.075 U
ICS-SEEP2-GW-070512	grd water	7/5/2012		0.010 U	0.010 U	0.032 U	0.14	0.16	0.010 U	0.010 U	0.30
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank								
ICS-OUTF-SW-080312	water	8/3/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.015 U	0.015 U
ICS-MH1-SW-080312	water	8/3/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank								
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	3.7 U	3.7 U	31	36	38	3.7 U	3.7 U	105
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank								
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)								
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)								

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	gravel	very coarse sand	coarse sand	medium sand	fine sand	very fine sand	coarse silt	medium silt	fine silt	very fine silt	total silt
				> 2000 µm %	2000 - 1000 µm %	1000 - 500 µm %	500 - 250 µm %	250 - 125 µm %	125 - 62 µm %	62 - 31 µm %	31 - 15.6 µm %	15.6 - 7.8 µm %	7.8 - 3.9 µm %	3.2 - 0.6 µm %
ICS-SEEP1-GW-070512	grd water	7/5/2012												
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1											
ICS-SEEP2-GW-070512	grd water	7/5/2012												
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank											
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank											
ICS-OUTF-SW-080312	water	8/3/2012												
ICS-MH1-SW-080312	water	8/3/2012												
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank											
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	15.2	23.0	22.5	12.5	6.8	3.7	2.6	6.3	4.6	1.6	15.1
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank											
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)											
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)											

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	clay			total fines < 62 µm	2,3,7,8- TCDF 51207-31-9 ng/kg, dry	total TCDF 55722-27-5 ng/kg, dry	2,3,7,8- TCDD 1746-01-6 ng/kg, dry	total TCDD 41903-57-5 ng/kg, dry	1,2,3,7,8- PeCDF 57117-41-6 ng/kg, dry	2,3,4,7,8- PeCDF 57117-31-4 ng/kg, dry	total PeCDF 30402-15-4 ng/kg, dry	1,2,3,7,8- PeCDD 40321-76-4 ng/kg, dry
				3.9 - 2.0 µm %	2.0 - 1.0 µm %	< 1.0 µm %									
ICS-SEEP1-GW-070512	grd water	7/5/2012													
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1												
ICS-SEEP2-GW-070512	grd water	7/5/2012													
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank												
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank												
ICS-OUTF-SW-080312	water	8/3/2012													
ICS-MH1-SW-080312	water	8/3/2012													
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank												
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	0.2	0.2	0.8	16.3	1.54	25.0	0.772 J	6.10	1.18 J	1.77 J	50.3	3.67 J
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank												
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)												
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)												

J = estimate associated with value less than the verifiable lower quantitation limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	total PeCDD 36088-22-9 <u>ng/kg, dry</u>	1,2,3,4,7,8- HxCDF 70648-26-9 <u>ng/kg, dry</u>	1,2,3,6,7,8- HxCDF 57117-44-9 <u>ng/kg, dry</u>	2,3,4,6,7,8- HxCDF 60851-34-5 <u>ng/kg, dry</u>	1,2,3,7,8,9- HxCDF 72918-21-9 <u>ng/kg, dry</u>	total HxCDF 55684-94-1 <u>ng/kg, dry</u>	1,2,3,4,7,8- HxCDD 39227-28-6 <u>ng/kg, dry</u>	1,2,3,6,7,8- HxCDD 57653-85-7 <u>ng/kg, dry</u>	1,2,3,7,8,9- HxCDD 19408-74-3 <u>ng/kg, dry</u>	total HxCDD 34465-46-8 <u>ng/kg, dry</u>
ICS-SEEP1-GW-070512	grd water	7/5/2012											
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1										
ICS-SEEP2-GW-070512	grd water	7/5/2012											
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank										
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank										
ICS-OUTF-SW-080312	water	8/3/2012											
ICS-MH1-SW-080312	water	8/3/2012											
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank										
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	19.6	4.94 J	3.35 J	4.78 J	1.20 J	89.1	5.41	17.7	12.0	117
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank										
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)										
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)										

J = estimate associated with value less than the verifiable lower quantitation limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Water & Miscellaneous Analyses, July-August 2012

Field I.D.	Matrix	Collection Date	Comments	1,2,3,4,6,7,8- HpCDF	1,2,3,4,7,8,9- HpCDF	total HpCDF	1,2,3,4,6,7,8- HpCDD	total HpCDD	OCDF	OCDD	TEQ	
				67562-39-4 ng/kg, dry	55673-89-7 ng/kg, dry	38998-75-3 ng/kg, dry	35822-46-9 ng/kg, dry	37871-00-4 ng/kg, dry	39001-02-0 ng/kg, dry	3268-87-9 ng/kg, dry	ND=0 ng/kg, dry	ND/2 ng/kg, dry
ICS-SEEP1-GW-070512	grd water	7/5/2012										
ICS-DUP1-GW-070512	grd water	7/5/2012	dup of SEEP1									
ICS-SEEP2-GW-070512	grd water	7/5/2012										
ICS-RIN1-GW-070512	water	7/5/2012	rinsate blank									
ICS-TB-01-GW-070512	water	7/5/2012	VOC's trip blank									
ICS-OUTF-SW-080312	water	8/3/2012										
ICS-MH1-SW-080312	water	8/3/2012										
ICS-TB-SW-080312	water	8/3/2012	VOC's trip blank									
ICS-MH1-SE-080312	sediment	8/3/2012	(organics µg/kg)	59.2	3.30 J	155	364	677	126	2590	15.2	15.2
ICS-TB-SE-080312	water	8/3/2012	VOC's trip blank									
ICS-ASH-081312	ash	8/13/2012	(organics µg/kg)									
ICS-DUST-081312	dust	8/13/2012	(organics µg/kg)									

J = estimate associated with value less than the verifiable lower quantitation limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

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MEMORANDUM**TO:** Matt Dalton (DOF)**FROM:** Raleigh Farlow**DATE:** January 17, 2013**SUBJECT:** Data Evaluation/Assessment for 12 Groundwaters and a NAPL Collected during November 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA

Twelve groundwater samples and a NAPL were collected by Dalton, Olmsted & Fuglevand (DOF) staff during November, 2012 for chemical characterization. All samples were delivered in four delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 31 hours of collection. Samples were received on ice at temperatures between 0.9 and 5.4 degrees C, and maintained at the project laboratory at 4 degrees C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. One blind field duplicate (the pair ICS-DOF-MW6-GW-110912 / ICS-DUP-GW-110912) and a single VOC's trip/transport blank were also submitted and analyzed for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270
chlor. pesticides	SW846-M.8081	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (exc Hg)	SW846-M.6010C	Hg	SW846-M.7470
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. Anthracene reported from the analysis of groundwater from DOF-MW8 by M.8270 (full-scan) did not satisfy all identification criteria at a level of 4.4 µg/L due to possible interference, whereas the analysis of the same extract by M.8270-SIM reported anthracene as not detected at 0.10 µg/L (U). The nondetected value is reported in the attached results table. Selected analytes,

such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method and the volatile organic compound (VOC's) method (M.8260). The attached results table reports only the result from the VOC's analyses due to lower reporting limits. Naphthalene and hexachlorobutadiene (HCBd) results generated by M.8260 (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081) methods, respectively. The lower reporting limit for chlorinated phenols (2,4,6-trichlorophenol and pentachlorophenol) was improved over M.8270 by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Some Aroclors (commercial PCB mixtures) were reported with slightly elevated reporting limits or nondetects due to elevated or busy baselines; specifically for samples DOF-MW6 and its associated blind duplicate. δ -BHC exhibited an elevated reporting limit at 0.22 $\mu\text{g/L}$ (U) in DOF-MW7 due to chemical interference. Lower reporting limits were elevated for some metals in samples from DOF-MW1, HC-B1 and SA-MW3 due to elevated dissolved solids requiring dilutions of digestates. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

Analyte	Analytical group	Conc. ($\mu\text{g/L}$)
Hexachlorobutadiene (VOC's)	VS14 (MB1)	ND
	VS14 (MB2)	0.43
	VS49 (MB1)	0.31
	VS49 (MB2)	0.38
n-Butylbenzene (VOC's)	VS14 (MB1)	ND
	VS14 (MB2)	0.10
	VS49 (MB1)	ND
	VS49 (MB2)	0.14

No hexachlorobutadiene (HCBd) was detected in any of the project samples during analyses of VOC's by M.8260. HCBd however was reported in the attached results table from the analyses of chlorinated pesticides by M.8081 due to lowered reporting limits. n-Butylbenzene was detected at 0.23 $\mu\text{g/L}$ in two project samples; just above the reporting limit of 0.20 $\mu\text{g/L}$. These two results are qualified as estimated with the "J_B" qualifier code to indicate potential positive

bias associated with laboratory background contributions. No other results required qualification due to method blanks performance.

No field equipment **rinstate blanks** were generated nor submitted for determination of potential bias associated with field activities. A single **trip/transport blank** was generated and submitted for analysis and determination of potential contamination during handling of VOC's samples. This sample was analyzed twice with consistent results. Results of these analyses are reported in the attached table. Methylene chloride, acetone and butanone were detected at levels less than the lower verifiable lower quantitation limit (or PQL's). Benzene and alkyl-substituted benzenes were detected and reported in the VOC's field blank at levels greater than the project PQL's. Laboratory method blanks did not show these analytes, indicating possible introduction during field activities and handling. Some positive bias may be associated with these analytes reported in project samples.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. δ -BHC exhibited lower than specified LCS/LCSD recoveries at 35.4% and 34.4% for analytical groups VR88 and VS14. None of the BHC's were detected in any of the project samples. LCS/LCSD recoveries were reported greater than specified for the VOC's 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,2,3-trichlorobenzene and hexachlorobutadiene in the range of 122-152% for analytical group VS49. No associated data required qualification. Chromium (Cr) matrix spike recovery was reported low (70%) in the dissolved phase for DOF-MW6 while the total phase Cr recovery was within specified limits. Nickel (Ni) matrix spike recovery in the total phase for HC-B1 was reported high at 128%, and the MS recovery for sulfate in DOF-MW6 was reported high at 130%. These recoveries are sufficiently close to the specified limits to not require qualification of reported results. No results required qualification of sample results due to unacceptable analyte recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM utilized the surrogate compounds d₁₀-2-methylnaphthalene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries were within specification, with the exception of *o*-terphenyl at 38.7% in DOF-MW4 in an initial analysis; with a subsequent reextraction and reanalysis yielding an acceptable surrogate recovery. The pesticide surrogate, TCMX, reported a lower than specified recovery at 26.5% in DOF-MW6, whereas the surrogate DCBP exhibited an acceptable recovery. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses for pentachlorophenol (PCP by M.8270) in analytical group VS14 and several VOC's analytes in analytical group VS49. PCP was reported from analyses performed by M.8041 that exhibited acceptable QC measurements, and the affected VOC analytes were all reported as nondetected. No results required further qualification due to CCV or CCAL performance.

A single pair of blind **field duplicate** samples were collected and submitted for analysis for the assessment of monitoring variability. A duplicate pair is identified in the attached table of sample results; DOF-MW6 / DUP. Analytes, with the exception of sulfate, exhibited a relative percent difference (RPD) less than or equal to 30. Sulfate exhibited the greatest variability at 0.1 mg/L U (nondetected in the primary sample) and detected at 0.9 mg/L in the blind duplicate. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications).

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in two of the locations sampled – DOF-MW6 and DOF-MW7. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; weathered gasoline.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for NAPL and water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7	
					mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		1222516-VR88A / 1222521-VR88F	2210	323	2 U	2 U	2	2	2 U	2 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		1222517-VR88B / 1222522-VR88G	179	1.0	0.2 U	0.2 U	2.6	4.3	0.3	0.3
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		1222518-VR88C / 1222523-VR88H	217	0.8	0.2 U	0.2 U	2.0	3.1	0.2 U	0.2
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		1222519-VR88D / 1222524-VR88I	103	1.1	0.2 U	0.2 U	2	3.6	1 U	0.3
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		1222520-VR88E / 1222525-VR88J	61.9	1.0	0.2 U	0.2 U	0.5 U	0.7	0.5 U	0.2 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		1222637-VS14A / 1222642-VS14F	356	0.1 U	0.2 U	0.2 U	0.8	1.3	0.2 U	0.2 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	1222641-VS14E / 1222646-VS14J	359	0.9	0.2 U	0.2 U	0.8	1.6	0.2 U	0.2 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		1222638-VS14B / 1222643-VS14G	470	2.5	0.2 U	0.2 U	1.6	1.4	0.5 U	0.2 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		1222639-VS14C / 1222644-VS14H	46.0	1.5	0.2 U	0.5	6	5.6	0.5 U	0.2 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		1222640-VS14D / 1222645-VS14I	2280	36.1	0.2	0.2	0.5	0.5 U	0.2 U	0.2 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		1222838-VS49A / 1222841-VS49D	3730	4.8	1 U	1 U	4	4	1 U	1 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		1222839-VS49B / 1222842-VS49E	4050	576	1 U	1 U	4	3	1 U	1 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012		1222843-VS49F								
Trip Blank	water		VOC's trip/transport blank	1222840-VS49C								
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg	1223949-VU99A								

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Cadmium 7440-43-9		Calcium 7440-70-2		Chromium 7440-47-3		Copper 7440-50-8		Lead 7439-92-1	
				diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		1 U	1 U	-	130,000	5 U	5 U	5 U	4	1 U	2
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.1 U	0.1 U	-	15,300	47.2	68.3	5.2	22.9	0.3	1.1
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.1 U	0.1 U	-	16,700	28.3	37.1	1.7	5.3	0.1 U	0.7
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.1 U	0.1 U	-	16,000	46.0	55.5	7.4	15.1	0.4	0.9
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.1 U	0.1 U	-	7070	10.9	13.6	2.1	7.0	0.1	0.3
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.1 U	0.1 U	-	31,400	7.7	17	1 U	6.6	0.1	1.4
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.1 U	0.1 U	-	33,300	10	12.4	1.0	6.5	0.1	1.8
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.1 U	0.1 U	-	36,500	10	14	1.8	3.6	0.1 U	0.4
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.1 U	0.1 U	-	32,400	2	5	0.6	3.4	0.5	13.5
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.1 U	0.1 U	-	85,700	2.5	5	2 U	1.0	0.1 U	0.6
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.5 U	0.5 U	-	126,000	6	6	2 U	2 U	0.5 U	0.5 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.5 U	0.5 U	-	142,000	4	4	4	4	0.5 U	0.5 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012											
Trip Blank	water		VOC's trip/transport blank										
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg										

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Magnesium 7439-95-4		Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Zinc 7440-66-6		Hardness mg-CaCO ₃ /L
				diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		-	170,000	0.1 U	0.1 U	8	8	2 U	2 U	40 U	40 U	1000
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		-	22,100	0.1 U	0.1 U	1.7	2.1	1 U	1 U	4 U	7	130
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		-	40,500	0.1 U	0.1 U	1.4	1.4	1 U	1 U	4 U	4	210
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		-	24,800	0.1 U	0.1 U	1.5	1.7	1 U	1 U	5	5	140
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		-	10,900	0.1 U	0.1 U	0.8	1.0	0.5 U	1 U	4 U	4 U	63
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		-	37,800	0.1 U	0.1 U	1.7	2.3	0.2 U	0.2 U	4 U	4 U	230
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	-	39,800	0.1 U	0.1 U	1.8	2.3	0.2 U	0.2 U	4 U	4 U	250
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		-	28,200	0.1 U	0.1 U	2	2.4	0.2 U	0.2 U	4 U	4 U	210
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		-	35,100	0.1 U	0.1 U	7	7.6	0.2 U	0.2 U	4 U	11	230
ICS-SA-MW2-GW-110912	grd water	11/9/2012		-	156,000	0.1 U	0.1 U	4.7	4.1	0.2 U	0.2 U	4 U	4 U	860
ICS-HC-B1-GW-111312	grd water	11/13/2012		-	205,000	0.1 U	0.1 U	6	7	1 U	1 U	20 U	20 U	1200
ICS-SA-MW3-GW-111312	grd water	11/13/2012		-	312,000	0.1 U	0.1 U	11	10	1 U	1 U	30	30	1600
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank											
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane
				Gasoline-range	Diesel-range	Lube-range	74-87-3	74-83-9	75-01-4	75-00-3	75-09-2	67-64-1	75-15-0	75-35-4	75-34-3
				mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.10 J
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.19 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.15 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.17 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.22 J	0.10 U	0.20 U	0.50 U	1.0 U	0.33	0.65	1.0 U	5.0 U	1.6	0.20 U	0.14 J
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.25 J	0.10 U	0.20 U	0.50 U	1.0 U	0.37	0.74	1.0 U	5.0 U	1.6	0.20 U	0.14 J
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.50	0.41	0.20 U	0.50 U	1.0 U	2.1	4.8	0.59 J	5.0 U	0.61	0.20 U	1.2
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.89	3.3	1.0 U	5.0 U	0.74	0.20 U	0.45
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	3.7 J	0.20 U	0.20 U	0.20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012													
Trip Blank	water		VOC's trip/transport blank				0.50 U	1.0 U	0.20 U	0.20 U	0.64 J	3.8 J	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg												

** bold-typed values resemble corresponding petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	<i>trans</i> -1,2-Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2-Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloroethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.15 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.34	0.22	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.34	0.24	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.36	25	0.16 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.79
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.40	0.42	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.16 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank	0.20 U	0.20 U	0.20 U	0.20 U	0.98 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Dibromo- chloromethane 124-48-1 <u>µg/L</u>	1,1,2-Trichloro- ethane 79-00-5 <u>µg/L</u>	Benzene 71-43-2 <u>µg/L</u>	<i>trans</i> -1,3- Dichloropropene 10061-02-6 <u>µg/L</u>	Bromo-form 75-25-2 <u>µg/L</u>	4-Methyl-2- pentanone 108-10-1 <u>µg/L</u>	2-Hexanone 591-78-6 <u>µg/L</u>	Tetrachloro- ethene 127-18-4 <u>µg/L</u>	1,1,2,2-Tetra- chloroethane 79-34-5 <u>µg/L</u>	Toluene 108-88-3 <u>µg/L</u>	Chloro- benzene 108-90-7 <u>µg/L</u>
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	3.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.5	13
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.20 U	0.20 U	3.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.5	13
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	1.7	0.20 U	0.20 U	5.0 U	5.0 U	0.43	0.20 U	28	0.14 J
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	61	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	2.6	0.81
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank	0.20 U	0.20 U	0.91	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	5.0	0.20 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		2.7	0.20 U	0.20 U	0.20 U	1.8	1.5	0.67	3.6	22	5.0 U	0.20 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	2.7	0.20 U	0.20 U	0.20 U	1.8	1.5	0.71	3.6	22	5.0 U	0.20 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		21	1.7	0.20 U	0.20 U	51	18	0.36	0.20 U	0.12 J	5.0 U	0.20 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		2.0	0.20 U	0.20 U	0.20 U	7.6	1.3	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20	0.20 U	0.20 U	0.20 U	0.25 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank	0.65	0.20 U	0.20 U	0.20 U	2.9	1.4	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	1,1-Dichloro- propene 563-58-6 <u>µg/L</u>	Dibromo- methane 74-95-3 <u>µg/L</u>	1,1,1,2-Tetra- chloroethane 630-20-6 <u>µg/L</u>	1,2,3-Trichloro- propane 96-18-4 <u>µg/L</u>	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 <u>µg/L</u>	1,3,5-Trimethyl- benzene 108-67-8 <u>µg/L</u>	1,2,4-Trimethyl- benzene 95-63-6 <u>µg/L</u>	1,2-Dibromo- ethane 106-93-4 <u>µg/L</u>	Bromochloro- methane 74-97-5 <u>µg/L</u>	2,2-Dichloro- propane 294-20-7 <u>µg/L</u>	1,3-Dichloro- propane 142-28-9 <u>µg/L</u>
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	1.5	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	1.5	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	1.8	5.2	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.29	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.16 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	1.3	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.33	0.37	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.28	0.23 J_B	0.27 J	0.50 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.33	0.36	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.29 J	0.50 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.50	0.53	0.20 U	0.20 U	0.20 U	0.20 U	0.23	0.35	0.23 J_B	1.3	0.39 J
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.45	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Phenol 108-95-2 <u>µg/L</u>	2-Chloro- phenol 95-57-8 <u>µg/L</u>	Benzyl alcohol 100-51-6 <u>µg/L</u>	2-Methyl- phenol 95-48-7 <u>µg/L</u>	4-Methyl- phenol 106-44-5 <u>µg/L</u>	N-Nitroso-di-n- propylamine 621-64-7 <u>µg/L</u>	Hexachloro- ethane 67-72-1 <u>µg/L</u>	Nitrobenzene 98-95-3 <u>µg/L</u>	Isophorone 78-59-1 <u>µg/L</u>	2,4-Dimethyl- phenol 105-67-9 <u>µg/L</u>	Benzoic acid 65-85-0 <u>µg/L</u>
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		2.1	1.0 U	2.0 U	1.0 U	8.9	1.0 U	2.0 U	1.0 U	1.0 U	8.5	20 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012												
Trip Blank	water		VOC's trip/transport blank											
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg											

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	2,4-Dichloro-phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3-methylphenol 59-50-7 µg/L	2-Methyl-naphthalene 91-57-6 µg/L	2,4,6-Trichloro-phenol 88-06-2 µg/L	2,4,5-Trichloro-phenol 95-95-4 µg/L	2-Chloro-naphthalene 91-58-7 µg/L	Dimethyl-phthalate 131-11-3 µg/L	Acenaphthylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		3.0 U	0.48	3.0 U	1.4	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.11
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	3.0 U	0.40	3.0 U	0.8 J	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.09 J
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		3.0 U	1.7	3.0 U	59	0.25 U	5.0 U	1.0 U	1.0 U	0.10 J	0.48
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		3.0 U	0.10	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.07 J	0.10 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		3.0 U	0.06 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 J
ICS-HC-B1-GW-111312	grd water	11/13/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012											
Trip Blank	water		VOC's trip/transport blank										
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg										

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Dibenzo-furan	2,6-Dinitro- toluene	2,4-Dinitro- toluene	Diethyl- phthalate	4-Chlorophenyl- phenylether	Fluorene	N-Nitrosodi- phenylamine	Pentachloro- phenol	Phenanthrene
				132-64-9 µg/L	606-20-2 µg/L	121-14-2 µg/L	84-66-2 µg/L	7005-72-3 µg/L	86-73-7 µg/L	86-30-6 µg/L	87-86-5 µg/L	85-01-8 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.22	1.0 U	0.25 U	0.12
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.16	1.0 U	0.25 U	0.11
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.06 J	3.0 U	3.0 U	1.0 U	1.0 U	0.40	1.0 U	240	0.48
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.76	0.10 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012										
Trip Blank	water		VOC's trip/transport blank									
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg									

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	1.6 J	0.10 U	1.0 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		1.0 U	0.07 J	1.0 U	0.09 J	0.08 J	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012											
Trip Blank	water		VOC's trip/transport blank										
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg										

J = estimate associated with value less than the verifiable lower quantitation limit.

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	total Benzo- fluoranthenes	Benzo(a)- pyrene	Indeno(1,2,3- cd)pyrene	Dibenz(a,h)- anthracene	Benzo(g,h,i)- perylene	LPAH	HPAH	alpha-BHC 319-84-6	beta-BHC 319-85-7	delta-BHC 319-86-8
				<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.93	0.20 U	0.050 U	0.050 U	0.050 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.76	0.20 U			
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	3.23	0.17	0.050 U	0.050 U	0.22 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.17	0.20 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.16	0.20 U	0.050 U	0.050 U	0.050 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012											
Trip Blank	water		VOC's trip/transport blank										
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg										

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	gamma-BHC	Heptachlor	Aldrin	Heptachlor	Endosulfan I	Dieldrin	4,4'-DDE	Endrin	Endosulfan II	4,4'-DDD
				(Lindane)	76-44-8	309-00-2	1024-57-3	959-98-8	60-57-1	72-55-9	72-20-8	33213-65-9	72-54-8
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6										
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012											
Trip Blank	water		VOC's trip/transport blank										
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg										

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6									
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.10 U	0.10 U	0.50 U	0.10 U	0.10 U	0.050 U	0.050 U	0.050 U	0.050 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012										
Trip Blank	water		VOC's trip/transport blank									
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg									

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater & NAPL Analyses, November 2012

Field I.D.	Matrix	Collection Date	Comments	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-DOF-MW1-GW-110812	grd water	11/8/2012		0.010 U	0.010 U	0.12	0.16	0.14	0.010 U	0.010 U	0.42
ICS-DOF-MW2-GW-110812	grd water	11/8/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOF-MW3-GW-110812	grd water	11/8/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOF-MW4-GW-110812	grd water	11/8/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOF-MW5-GW-110812	grd water	11/8/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOF-MW6-GW-110912	grd water	11/9/2012		0.010 U	0.010 U	0.12 U	0.062 U	0.068	0.010 U	0.010 U	0.12 U
ICS-DUP-GW-110912	grd water	11/9/2012	dup. of DOF-MW6	0.010 U	0.010 U	0.088 U	0.050 U	0.052	0.010 U	0.010 U	0.088 U
ICS-DOF-MW7-GW-110912	grd water	11/9/2012		0.010 U	0.10	0.010 U	0.028	0.012	0.010 U	0.010 U	0.14
ICS-DOF-MW8-GW-110912	grd water	11/9/2012		0.010 U	0.010 U	0.033	0.029	0.017	0.010 U	0.010 U	0.079
ICS-SA-MW2-GW-110912	grd water	11/9/2012		0.010 U	0.063	0.010 U	0.036	0.016	0.010 U	0.010 U	0.12
ICS-HC-B1-GW-111312	grd water	11/13/2012		0.010 U	0.052	0.010 U	0.012 U	0.010 U	0.010 U	0.010 U	0.052
ICS-SA-MW3-GW-111312	grd water	11/13/2012		0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-SA-MW1-GW-111312	NAPL	11/13/2012									
Trip Blank	water		VOC's trip/transport blank								
ICS-SA-MW1-NAPL-112712	NAPL	11/27/2012	results in µg/kg	100,000 U	100,000 U	1,000,000	470,000	200,000	100,000 U	100,000 U	1,670,000 µg/kg

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: January 18, 2013

SUBJECT: Data Evaluation/Assessment for 41 Subsurface Sediment Samples Collected during November-December 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA

Seventy subsurface sediment samples were collected from 13 sediment cores by Dalton, Olmsted & Fuglevand (DOF) staff during November 26-30 and December 10 of 2012 for the evaluation of sediment quality. All sediment samples were delivered in four delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within nine days of collection. Samples held for up to nine days were received at temperatures between 0.6 and 4.0 degrees C, and one sample received within an hour of collection was received at ambient temperature. All samples were maintained at the project laboratory at 4 degrees C prior to analyses. No chemical preservatives were specified nor required.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). All analyses were performed by methods presented in Table SAP-3 of the SAP.

grain size	ASTM D422/D421	Atterberg limits	ASTM D4318
bulk density	ASTM D7263	moisture content	ASTM D2216
TOC	Plumb, 1981 (PSEP)	SVOC's	SW846-M.8270
SVOC's (selected)	M.8270D-SIM	chlor. pesticides	SW846-M.8081
PCB's as Aroclors	SW846-M.8082	metals (exc Hg)	SW846-M.6020A
TBT	Krone/8270-SIM	Hg	SW846-M.7471A
total petroleum HC's	NWTPH-Dx		

Atterberg limits are not reported in the attached data/results table. Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM (selected ion monitoring) mode to improve/lower the reporting limits. These selected analytes include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, butylbenzylphthalate, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-

qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Generally, [lower] **reporting limits** were consistent with specified-limits presented in the SAP (table SAP-3) and achieved the sediment PQL goals when contaminant levels allowed it. Exceptions are noted principally for organic compound analytes due to presence of chemical interferences and elevated levels of other target analytes. Specifically, samples B-SE-3, G-SE-5, I-SE-3, and DSS-01-SE required extract dilutions due to elevated levels of organic contaminants resulting in the elevation of some analyte nondetection reporting limits. Sample G-SE-5, for example, exhibited elevated levels of both target analytes and petroleum hydrocarbons necessitating extract dilutions in order to prevent instrumental overloading. Most of the elevated nondetects for the chlorinated pesticides are due to chemical interferences and elevated PCB's for samples B-SE-3, G-SE-5, H-SE-3, and DSS-01-SE. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of *bis*(2-ethylhexyl)phthalate in three analytical groups at 26, 44, and 15 $\mu\text{g/kg}$, and 1,3-dichlorobenzene in group VV01 by M.8270-SIM at 6.3 $\mu\text{g/kg}$. *bis*(2-Ethylhexyl)phthalate and 1,3-dichlorobenzene results were qualified as estimated with potential positive bias with the "J_B" qualifier code when results have the potential to be significantly impacted by laboratory background levels. *bis*(2-Ethylhexyl)phthalate and 1,3-dichlorobenzene values were qualified as estimated when the results were less than or equal to 2x the associated method blank values. Seventeen sample results were sufficiently low to require "J_B" qualification. No other data required qualification due to method blanks performance.

No field equipment **rinse blanks** were specified in the project SAP nor were any collected.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. Some recoveries were nonevaluable due to high native levels of analyte interfering with [low] spike levels, such as lead (Pb), nickel (Ni), and zinc (Zn) in sample DSS-01-SE. δ -BHC recoveries were typically reported lower than specified for LCS/LCSD's at 52.5%, 52.0%, 38.8% and 39.2%. MS/MSD recoveries for δ -BHC were within acceptable limits with the exception of a single pair in sample M-SE-3 at 39.4% and 42.0%. No δ -BHC or any other BHC's were detected in any project samples; no associated results required qualification. Endrin aldehyde exhibited the lowest MS/MSD recoveries in sample F-SE-8 outside advisory limits at 41.3% and 39.9%. LCS/LCSD recoveries for endrin aldehyde are

within specification. No significant adverse effect on data quality is anticipated as a consequence – no endrin aldehyde was detected in any project samples. The MS recovery for TOC was outside of specification high in H-SE-4 at 133.7% - no significant adverse effect on sample results is expected. MS recoveries for metals in sample DSS-01-SE are highly variable (from nonmeasurable for lead due to high native levels and up to 170% in the case of chromium) and attributed to the high heterogeneity of the sample matrix. Variability associated with duplicate analyses for DSS-01-SE exhibited RPD's up to 120 in the case of silver, and 87.5 for copper. Antimony (Sb) matrix spike recoveries are reported consistently low in samples A-SE-4, H-SE-4, and DSS-01-SE at 2.1%, 4.7% and 20.8%, respectively. Sb LCS recoveries are determined to be acceptable. This behavior for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; however, positive hits for Sb are thus qualified with the "J_R" qualifier code to indicate results are considered estimates (biased low) due to low matrix spike recoveries. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exceptions noted above for antimony, requiring qualification of associated results as estimates with the "J_R" code.

Surrogate compound recoveries (for organic analytes) were evaluated for SVOC's, TPH-Dx, tributyl tin, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), and PCB's. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance. Tributyl tin recovery performance is evaluated by the use of tripropyl and tripentyl tin chlorides. *o*-Terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC (M.8270 full scan) recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds, while the SIM analyses recoveries were evaluated with the surrogates 2-fluorophenol and d₁₄-*p*-terphenyl. All surrogate compound performances were within specification with some minor exceptions. The PCB's surrogate, TCMX, in J-SE-5 reported 116%, which does not adversely affect the nondetected results for the sample. The PCB's surrogate, DCBP, in L-SE-2 reported 136%, which is attributed to small additional contributions from elevated levels of [native] Aroclor 1260 (Aroclor 1260 contains small amounts of DCBP). The TPH-Dx surrogate, *o*-terphenyl, exhibited slightly low recoveries (46.7%) in sample M-SE-2 (acceptance range = 50-150% recovery). The analytical group (VV10) MS/MSD performance for TPH-Dx was evaluated on M-SE-2, which yielded acceptable and within specification recoveries. Consequently, the noncompliant (slightly low) surrogate recovery is considered sufficiently minor to not require qualification of associated TPH-Dx results. No qualification of results was required due to surrogate compounds performance.

SVOC continuing calibration verification (CCV) checks revealed lowered responses for phenol (VV01 & VV10), 2-methylphenol (VV01 & VV10), 4-methylphenol (VV10), N-nitrosodi-n-propylamine (VV01 & VV10), isophorone (VV01), and carbazole (VV01), and elevated responses for 2,4,5-trichlorophenol (VV01 & VV10), benzyl alcohol (VW14), benzoic acid (VW14) and pentachlorophenol (VV01, VV10 & VW14 by M.8270-SIM). Reported data for detected analytes associated with noncompliant CCV's are qualified as estimates with the "J_Q" code, even though the data quality by other measures, such as LCS/LCSD and MS/MSD performance, is within acceptance limits. Affected [detected] results are for phenol, 4-methylphenol and pentachlorophenol in selected samples. The closing DDT breakdown/degradation check for group VV01 was noncompliant, while the closing DDT

CCV/CCAL was within specification. This is expected to have minimal adverse effect on data quality for the DDT class of analytes.

Two pairs of blind **field duplicate** samples were collected and submitted for analyses for the assessment of monitoring variability for TOC, metals and total PCB's. Duplicate pairs are identified in the attached table of sample results. Variability in terms of relative percent difference (RPD) for all parameters generally averaged less than 20% for duplicate pairs. Greatest RPDs (up to 24 & 39) were observed for total PCB's. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications) for all parameters, with the exception of metals in sample DSS-01-SE. DSS-01-SE exhibited high replicate variability for metals (replicate analyses were not performed for other parameters); metals exceeding an RPD of 20 are Cr at 64.6 RPD, 87.5 for Cu, 51.9 for Ni and 120 for silver (0.2 mg/kg U and 0.8 mg/kg for Ag). Sample DSS-01-SE exhibits unusually high heterogeneity. Grain size triplicate analyses yielded acceptable performance.

TPH-Dx analyses indicate the principal recognizable pattern is associated with unresolved complex mixtures (UCM's) typically associated with weathered diesel fuel (or heating oil) and lubricant petroleum hydrocarbons. Bold type values are associated with the patterns that most likely identify the hydrocarbon mixture present, such as [weathered] diesel fuel and/or motor/lubricant oil. No unweathered or moderately weathered diesel fuel patterns were found, only severely weathered diesel range and lubricant-like hydrocarbons were found and highlighted in bold in the attached results table.

Dual-column analyses were performed for chlorinated pesticides (M.8081) and PCB's (M.8082), as specified. Variability in responses between the two columns is specified to be less than 40% RPD for compound identification and assignment. In some cases, however, the analyst has determined that the analyte is likely present, even though the variability in responses exceeds the criterion of < 40%. 4,4'-DDE was determined to be likely present and at estimated concentrations for several project samples, even though the 40%-criterion was not met. In these cases, estimated concentrations (by M.8081) of DDE are reported in the attached results table with the associated "J_P" qualifier code.

Excess variability was exhibited in the total solids determinations for sample G-SE-6. Three separate determinations of total solids reported 57.1% (for SVOC's), 62.8% (for metals) and 80.1% (for conventionals/TOC). The mean for the SVOC's and metals determinations of 60% is reported in the attached results table. A potential inconsistency was observed in the fluoranthene and pyrene relative concentrations for sample G-SE-5. A review of the laboratory instrumental raw data indicates the concentrations are accurately reported based on the instrumental responses.

Sample results reported here are determined to be in general compliance with method and SAP requirements. Most deviations of data quality from SAP and method specifications are associated with generally elevated levels of multiple contaminants in site sediments. All reported data for sediment samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Subsurface Sediment Analyses, November - December 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Wet density	Moisture content	Dry density	TOC	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9	Chromium 7440-47-3
					%	lb/ft ³	%	lb/ft ³	%	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry
ICS-A-SE-1-112612	sediment	11/26/2012	mid = 0.4'	1223977-VV01U										
ICS-A-SE-2-112612	sediment	11/26/2012	mid = 1.3'	1223970-VV01N	76				1.37	0.3 U	11.5	0.3 U	0.3	19.5
ICS-A-SE-3-112612	sediment	11/26/2012	mid = 2.7'	1223978-VV01V										
ICS-A-SE-4-112612	sediment	11/26/2012	mid = 3.9'	1223957-VV01A	61				2.77	0.3 U	9.7	0.4	0.2	21.5
ICS-A-SE-5-112612	sediment	11/26/2012	mid = 5.1'	1223958-VV01B	66				1.61	0.3 U	6.5	0.5	0.1 U	22
ICS-A-SE-6-112612	sediment	11/26/2012	mid = 6.3'	1223979-VV01W										
ICS-A-SE-7-112612	sediment	11/26/2012	mid = 7.2'	1223980-VV01X										
ICS-B-SE-1-112712	sediment	11/27/2012	mid = 1.1'	1223971-VV01O	65				0.775	0.3 U	19.8	0.3 U	0.2 U	22.7
ICS-B-SE-2-112712	sediment	11/27/2012	mid = 2.2'	1223981-VV01Y										
ICS-B-SE-3-112712	sediment	11/27/2012	mid = 3.3'	1223959-VV01C	49				3.96	0.8 J_R	31.1	0.4 U	5.4	153
ICS-B-SE-4-112712	sediment	11/27/2012	mid = 4.4'	1223982-VV01Z										
ICS-B-SE-5-112712	sediment	11/27/2012	mid = 5.5'	1223960-VV01D	61				3.64	0.3 U	7.7	0.5	0.2	24
ICS-B-SE-6-112712	sediment	11/27/2012	mid = 6.6'	1223983-VV01AA		100.6	65.8	60.7						
ICS-C-SE-1-112712	sediment	11/27/2012	mid = 0.5'	1223984-VV01AB										
ICS-C-SE-2-112712	sediment	11/27/2012	mid = 2.3'	1223972-VV01P	73				0.894	0.3 U	5.6	0.3 U	0.1 U	11.0
ICS-C-SE-3-112712	sediment	11/27/2012	mid = 3.3'	1223961-VV01E	62				2.29	0.3 U	7.3	0.4	0.1	18.9
ICS-C-SE-4-112712	sediment	11/27/2012	mid = 4.4'	1223962-VV01F	80				1.57	0.2 U	4.1	0.2 U	0.1 U	10.8
ICS-D-SE-1-112712	sediment	11/27/2012	mid = 0.7'	1223985-VV01AC										
ICS-D-SE-2-112712	sediment	11/27/2012	mid = 2.1'	1223973-VV01Q	66				6.91	1.1 J_R	15.1	0.3 U	8.8	431
ICS-D-SE-3-112712	sediment	11/27/2012	mid = 3.8'	1223963-VV01G	65				2.07	0.3 U	8.7	0.4	0.2	25
ICS-D-SE-4-112712	sediment	11/27/2012	mid = 5.3'	1223964-VV01H	62				2.70	0.3 U	8.8	0.6	0.2	27
ICS-D-SE-5-112712	sediment	11/27/2012	mid = 6.7'	1223986-VV01AD										
ICS-F-SE-1-112712	sediment	11/27/2012	mid = 0.5'	1223987-VV01AE										
ICS-F-SE-2-112712	sediment	11/27/2012	mid = 1.7'	1223988-VV01AF										
ICS-F-SE-3-112712	sediment	11/27/2012	mid = 3.1'	1223989-VV01AG										
ICS-F-SE-3-121012	sediment	12/10/2012	mid = 3.1'	1224451-VV82A		99.5	70.8	58.3						
ICS-F-SE-4-112712	sediment	11/27/2012	mid = 4.5'	1223990-VV01AH										
ICS-F-SE-5-112712	sediment	11/27/2012	mid = 5.8'	1223974-VV01R	60				2.67	0.3 U	11.2	0.5	0.2	24.4
ICS-F-SE-6-112712	sediment	11/27/2012	mid = 7.0'	1223991-VV01AI										
ICS-F-SE-7-112712	sediment	11/27/2012	mid = 8.3'	1223965-VV01I	66				1.26	0.3 U	5.8	0.4	0.1 U	18.4
ICS-F-SE-8-112712	sediment	11/27/2012	mid = 9.7'	1223966-VV01J	76	115.7	28.5	90.1	0.436	0.3 U	2.0	0.3 U	0.1 U	12.2
ICS-F-SE-9-112712	sediment	11/27/2012	mid = 10.9'	1223992-VV01AJ										
ICS-G-SE-1-112812	sediment	11/28/2012	mid = 0.6'	1223993-VV01AK										
ICS-G-SE-2-112812	sediment	11/28/2012	mid = 1.8'	1223994-VV01AL										
ICS-G-SE-3-112812	sediment	11/28/2012	mid = 3.0'	1223975-VV01S	63				1.78	0.3 U	11.9	0.5	0.5	23.7
ICS-DUP1-SE-112812	sediment	11/28/2012	dup. of G-SE-3	1224067-VV10Q	61				1.32	0.3 U	10.1	0.5	0.5	22.5
ICS-G-SE-4-112812	sediment	11/28/2012	mid = 4.1'	1223995-VV01AM										
ICS-G-SE-5-112812	sediment	11/28/2012	mid = 5.1'	1223967-VV01K	58				1.85	0.3 U	24.9	0.4	2.6	112
ICS-G-SE-6-112812	sediment	11/28/2012	mid = 6.8'	1223968-VV01L	60				1.60	0.3 U	11.6	0.5	0.3	23.0
ICS-H-SE-1-112812	sediment	11/28/2012	mid = 0.4'	1223996-VV01AN										
ICS-H-SE-2-112812	sediment	11/28/2012	mid = 1.7'	1223976-VV01T	79				2.00	0.2 U	4.7	0.3	0.5	59.7
ICS-H-SE-3-112812	sediment	11/28/2012	mid = 3.3'	1223969-VV01M	69				3.41	0.2 U	7.2	0.2 U	1.3	96.4

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Subsurface Sediment Analyses, November - December 2012

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Wet density	Moisture content	Dry density	TOC	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9	Chromium 7440-47-3
					%	lb/ft ³	%	lb/ft ³	%	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry
ICS-H-SE-4-112812	sediment	11/28/2012	mid = 4.7'	1224051-VV10A	74				0.856	0.3 U	2.7	0.3 U	0.1 U	14.0
ICS-I-SE-1-112812	sediment	11/28/2012	mid = 0.9'	1224069-VV10S										
ICS-I-SE-2-112812	sediment	11/28/2012	mid = 2.6'	1224062-VV10L	70				3.13	0.3	10.1	0.3	0.4	24.9
ICS-I-SE-3-112812	sediment	11/28/2012	mid = 4.2'	1224052-VV10B	58	96.2	84.7	52.1	2.28	0.3 U	6.6	0.4	0.2	18.4
ICS-I-SE-4-112812	sediment	11/28/2012	mid = 5.9'	1224070-VV10T										
ICS-I-SE-5-112812	sediment	11/28/2012	mid = 7.8'	1224053-VV10C	67	114	35.6	84.1	1.02	0.3 U	5.1	0.3 U	0.1 U	14.4
ICS-I-SE-6-112812	sediment	11/28/2012	mid = 9.5'	1224071-VV10U										
ICS-J-SE-1-112812	sediment	11/28/2012	mid = 0.8'	1224072-VV10V										
ICS-J-SE-2-112812	sediment	11/28/2012	mid = 2.6'	1224073-VV10W										
ICS-J-SE-3-112812	sediment	11/28/2012	mid = 4.9'	1224063-VV10M	56				2.31	0.4 U	26.0	0.5	2.2	64.4
ICS-J-SE-4-112812	sediment	11/28/2012	mid = 6.8'	1224074-VV10X										
ICS-J-SE-5-112812	sediment	11/28/2012	mid = 8.5'	1224054-VV10D	67				1.33	0.3 U	5.6	0.3	0.1 U	15.3
ICS-J-SE-6-112812	sediment	11/28/2012	mid = 10.4'	1224055-VV10E	63				1.55	0.3 U	7.2	0.4	0.1 U	17.8
ICS-K-SE-1-113012	sediment	11/30/2012	mid = 0.7'	1224075-VV10Y										
ICS-K-SE-2-113012	sediment	11/30/2012	mid = 2.2'	1224064-VV10N	57				2.37	0.3 U	11.3	0.3 U	2.5	52.4
ICS-DUP2-SE-113012	sediment	11/30/2012	dup. of K-SE-2	1224068-VV10R	57				2.03	0.3 U	12.6	0.3 U	1.5	59.3
ICS-K-SE-3-113012	sediment	11/30/2012	mid = 3.8'	1224076-VV10Z										
ICS-K-SE-4-113012	sediment	11/30/2012	mid = 5.5'	1224056-VV10F	60				2.31	0.3 U	21.0	0.4	1.6	45.2
ICS-K-SE-5-113012	sediment	11/30/2012	mid = 7.0'	1224057-VV10G	73				1.83	0.3 U	6.9	0.3	0.1 U	14.9
ICS-L-SE-1-113012	sediment	11/30/2012	mid = 0.7'	1224077-VV10AA										
ICS-L-SE-2-113012	sediment	11/30/2012	mid = 1.9'	1224065-VV10O	74				1.66	0.3 U	6.3	0.3 U	0.4	23.6
ICS-L-SE-3-113012	sediment	11/30/2012	mid = 3.5'	1224058-VV10H	62				1.55	0.3 U	7.1	0.3	0.3	17.9
ICS-L-SE-4-113012	sediment	11/30/2012	mid = 5.0'	1224059-VV10I	70				1.44	0.3 U	6.2	0.3	0.1 U	18.4
ICS-L-SE-5-113012	sediment	11/30/2012	mid = 6.7'	1224078-VV10AB										
ICS-M-SE-1-113012	sediment	11/30/2012	mid = 0.6'	1224066-VV10P	66				2.55	0.3 U	7.7	0.3	0.4	21.7
ICS-M-SE-2-113012	sediment	11/30/2012	mid = 1.6'	1224060-VV10J	84				2.95	0.2 U	2.9	0.2 U	0.1 U	13.0
ICS-M-SE-3-113012	sediment	11/30/2012	mid = 2.7'	1224061-VV10K	80				0.283	0.2 U	1.1	0.2 U	0.1 U	8.9
ICS-DSS-01-SE-121012	sediment	12/10/2012	surface	1224655-VV10A	77				2.65	0.5 J _R	61.1	0.2 U	0.3	35.2

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Copper 7440-50-8	Lead 7439-92-1	Mercury 7439-97-6	Nickel 7440-02-0	Silver 7440-22-4	Zinc 7440-66-6	Total Petroleum Hydrocarbons **		Phenol 108-95-2	2-Chloro- phenol 95-57-8	1,3-Dichloro- benzene 541-73-1
	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-A-SE-1-112612											
ICS-A-SE-2-112612	427	86.7	0.24	15.8	0.3 U	111	180	450			
ICS-A-SE-3-112612											
ICS-A-SE-4-112612	42.8	10.3	0.17	20.5	0.3 U	61	32	52	72 J _Q	20 U	4.9 J _B
ICS-A-SE-5-112612	33.7	10.6	0.12	17.9	0.3 U	52	29	43	34 J _Q	19 U	4.8 U
ICS-A-SE-6-112612											
ICS-A-SE-7-112612											
ICS-B-SE-1-112712	34.8	14.9	0.04	26.6	0.3 U	80	29	56			
ICS-B-SE-2-112712											
ICS-B-SE-3-112712	169	796	13.1	29	0.5	670	6700	7600	60 J _Q	57 U	94
ICS-B-SE-4-112712											
ICS-B-SE-5-112712	43.1	12.4	0.13	21.3	0.3 U	65	39	75	37 J _Q	20 U	20
ICS-B-SE-6-112712											
ICS-C-SE-1-112712											
ICS-C-SE-2-112712	36.0	13.1	0.04	8.3	0.3 U	31	34	57			
ICS-C-SE-3-112712	34.0	7.9	0.12	18.1	0.3 U	53	27	39	17 J	18 U	3.0 J
ICS-C-SE-4-112712	11.0	8.0	0.03	7.3	0.2 U	26	20	41	20 U	20 U	47
ICS-D-SE-1-112712											
ICS-D-SE-2-112712	254	4430	38.8	43.9	0.4	3240	12,000	9900			
ICS-D-SE-3-112712	41.3	28.3	2.05	21.1	0.3 U	79	39	64	24 J _Q	19 U	3.0 J
ICS-D-SE-4-112712	47.7	10.6	0.14	24.3	0.3 U	68	27	44	21 J _Q	20 U	5.0 U
ICS-D-SE-5-112712											
ICS-F-SE-1-112712											
ICS-F-SE-2-112712											
ICS-F-SE-3-112712											
ICS-F-SE-3-121012											
ICS-F-SE-4-112712											
ICS-F-SE-5-112712	50.9	17.4	0.17	22.7	0.3 U	66	40	49			
ICS-F-SE-6-112712											
ICS-F-SE-7-112712	33.7	11.5	0.09	17.9	0.3 U	54	17	26	13 J	20 U	4.9 U
ICS-F-SE-8-112712	14.2	2.1	0.02	10.8	0.3 U	28	6.5 U	13 U	18 U	18 U	4.6 U
ICS-F-SE-9-112712											
ICS-G-SE-1-112812											
ICS-G-SE-2-112812											
ICS-G-SE-3-112812	41.7	22.5	0.20	22.0	0.4	91	85	140			
ICS-DUP1-SE-112812	39.3	20.4	0.21	21.2	0.4	84	82	130			
ICS-G-SE-4-112812											
ICS-G-SE-5-112812	141	1340	0.49	49.0	0.6	840	6700	9600	110 U	110 U	38 J _B
ICS-G-SE-6-112812	65.3	33.9	0.20	24.2	0.3 U	81	73	120	18 J	19 U	4.8 U
ICS-H-SE-1-112812											
ICS-H-SE-2-112812	46.9	168	0.39	32.8	0.2 U	149	300	580			
ICS-H-SE-3-112812	61.3	936	4.85	19.8	0.2 U	377	1400	2000	20 J	26 U	210

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Copper	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons **		Phenol	2-Chloro-phenol	1,3-Dichloro-benzene
	7440-50-8	7439-92-1	7439-97-6	7440-02-0	7440-22-4	7440-66-6	Diesel-range	Lube-range	108-95-2	95-57-8	541-73-1
	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-H-SE-4-112812	18.1	6.5	0.04	10.5	0.3 U	37	28	50	19 U	19 U	10
ICS-I-SE-1-112812											
ICS-I-SE-2-112812	37.3	123	1.77	17.3	0.2 U	109	290	560			
ICS-I-SE-3-112812	41.4	25.4	0.30	16.6	0.3 U	60	76	130	57 U	57 U	14 U
ICS-I-SE-4-112812											
ICS-I-SE-5-112812	34.7	18.8	0.14	12.5	0.3 U	40	250	460	18 U	18 U	4.6 U
ICS-I-SE-6-112812											
ICS-J-SE-1-112812											
ICS-J-SE-2-112812											
ICS-J-SE-3-112812	61.1	224	0.29	20.2	0.9	201	1600	1400			
ICS-J-SE-4-112812											
ICS-J-SE-5-112812	25.3	13.7	0.11	13.1	0.3 U	44	33	62	13 J	19 U	4.7 U
ICS-J-SE-6-112812	43.6	22.4	0.11	16.3	0.3 U	56	41	58	10 J	19 U	4.8 U
ICS-K-SE-1-113012											
ICS-K-SE-2-113012	129	310	1.95	19.2	0.5	213	560	1200			
ICS-DUP2-SE-113012	115	364	2.32	21.6	0.6	261	530	1200			
ICS-K-SE-3-113012											
ICS-K-SE-4-113012	46.3	241	0.21	18.0	0.5	143	620	440	26 J _Q	20 U	5.0 U
ICS-K-SE-5-113012	25.1	17.7	0.12	13.2	0.3 U	46	28	55	20 U	20 U	4.9 U
ICS-L-SE-1-113012											
ICS-L-SE-2-113012	21.9	87.2	0.34	10.5	0.3 U	82	1200	1400			
ICS-L-SE-3-113012	44.3	62.0	0.63	14.0	0.3 U	89	77	120	17 J	20 U	4.9 U
ICS-L-SE-4-113012	29.5	11.9	0.31	17.0	0.3 U	52	24	42	11 J	19 U	4.8 U
ICS-L-SE-5-113012											
ICS-M-SE-1-113012	52.9	57.9	0.21	17.8	0.3 U	116	55	160			
ICS-M-SE-2-113012	16.8	23.7	0.04	10.1	0.2 U	48	16	29	20 U	20 U	4.9 U
ICS-M-SE-3-113012	8.0	1.9	0.3 U	7.4	0.2 U	21	6.1 U	12 U	19 U	19 U	4.7 U
ICS-DSS-01-SE-121012	96.3	69.8	0.17	35.8	0.2 U	125	84	550	35 J	58 U	14 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

*** bold-typed values resemble corresponding petroleum hydrocarbon mixture*

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry	N-Nitroso-di-n- propylamine 621-64-7 µg/kg, dry	Hexachloro- ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl- phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro- phenol 120-83-2 µg/kg, dry
ICS-A-SE-1-112612												
ICS-A-SE-2-112612												
ICS-A-SE-3-112612												
ICS-A-SE-4-112612	3.0 J	130	6.5	5.5	57	20 U	20 U	20 U	20 U	15 J	620	200 U
ICS-A-SE-5-112612	2.9 J	130	10	3.8 J	25 J	19 U	19 U	19 U	19 U	4.6 J	400	190 U
ICS-A-SE-6-112612												
ICS-A-SE-7-112612												
ICS-B-SE-1-112712												
ICS-B-SE-2-112712												
ICS-B-SE-3-112712	300	57 U	97	14 J	110 U	57 U	57 U	57 U	57 U	58	1100 U	570 U
ICS-B-SE-4-112712												
ICS-B-SE-5-112712	22	150	22	4.1 J	28 J	20 U	20 U	20 U	20 U	5.4 J	440	200 U
ICS-B-SE-6-112712												
ICS-C-SE-1-112712												
ICS-C-SE-2-112712												
ICS-C-SE-3-112712	4.6 U	54	4.6 U	3.2 J	18 J	18 U	18 U	18 U	18 U	92	210 J	180 U
ICS-C-SE-4-112712	33	20 U	2.8 J	4.9 U	39 U	20 U	20 U	20 U	20 U	22	390 U	200 U
ICS-D-SE-1-112712												
ICS-D-SE-2-112712												
ICS-D-SE-3-112712	15	41	76	9.2	25 J	19 U	19 U	19 U	19 U	82	230 J	190 U
ICS-D-SE-4-112712	5.0 U	100	5.0 U	3.1 J	23 J	20 U	20 U	20 U	20 U	4.3 J	320 J	200 U
ICS-D-SE-5-112712												
ICS-F-SE-1-112712												
ICS-F-SE-2-112712												
ICS-F-SE-3-112712												
ICS-F-SE-3-121012												
ICS-F-SE-4-112712												
ICS-F-SE-5-112712												
ICS-F-SE-6-112712												
ICS-F-SE-7-112712	4.9 U	42	4.9 U	4.9 U	13 J	20 U	20 U	20 U	20 U	20 U	120 J	200 U
ICS-F-SE-8-112712	4.6 U	18 U	4.6 U	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U	180 U
ICS-F-SE-9-112712												
ICS-G-SE-1-112812												
ICS-G-SE-2-112812												
ICS-G-SE-3-112812												
ICS-DUP1-SE-112812												
ICS-G-SE-4-112812												
ICS-G-SE-5-112812	140	110 U	29 U	29 U	230 U	110 U	110 U	110 U	110 U	58 J	2300 U	1100 U
ICS-G-SE-6-112812	4.8 U	61	3.2 J	2.6 J	25 J	19 U	19 U	19 U	19 U	4.9 J	170 J	190 U
ICS-H-SE-1-112812												
ICS-H-SE-2-112812												
ICS-H-SE-3-112812	1000	26 U	100	4.2 J	51 U	26 U	26 U	26 U	26 U	15 J	510 U	260 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry	N-Nitroso-di-n- propylamine 621-64-7 µg/kg, dry	Hexachloro- ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl- phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro- phenol 120-83-2 µg/kg, dry
ICS-H-SE-4-112812	24	19 U	7.4	4.9 U	39 U	19 U	19 U	19 U	19 U	6.4 J	390 U	190 U
ICS-I-SE-1-112812												
ICS-I-SE-2-112812												
ICS-I-SE-3-112812	14 U	36 J	14 U	14 U	110 U	57 U	57 U	57 U	57 U	57 U	1100 U	570 U
ICS-I-SE-4-112812												
ICS-I-SE-5-112812	4.6 U	18 U	4.6 U	4.6 U	37 U	18 U	18 U	18 U	18 U	18 U	370 U	180 U
ICS-I-SE-6-112812												
ICS-J-SE-1-112812												
ICS-J-SE-2-112812												
ICS-J-SE-3-112812												
ICS-J-SE-4-112812												
ICS-J-SE-5-112812	4.7 U	27	4.7 U	2.4 J	42 J_Q	19 U	19 U	19 U	19 U	3.0 J	110 J	190 U
ICS-J-SE-6-112812	4.8 U	44	4.8 U	4.8 U	14 J	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-K-SE-1-113012												
ICS-K-SE-2-113012												
ICS-DUP2-SE-113012												
ICS-K-SE-3-113012												
ICS-K-SE-4-113012	2.7 J	57	5.0 U	3.7 J	34 J	20 U	20 U	20 U	20 U	11 J	170 J	200 U
ICS-K-SE-5-113012	4.9 U	20 U	4.9 U	4.9 U	39 U	20 U	20 U	20 U	20 U	20 U	390 U	200 U
ICS-L-SE-1-113012												
ICS-L-SE-2-113012												
ICS-L-SE-3-113012	4.9 U	25	4.9 U	3.7 J	28 J	20 U	20 U	20 U	20 U	6.4 J	390 U	200 U
ICS-L-SE-4-113012	4.8 U	27	4.8 U	7.1	38 J	19 U	19 U	19 U	19 U	3.5 J	390 U	190 U
ICS-L-SE-5-113012												
ICS-M-SE-1-113012												
ICS-M-SE-2-113012	4.9 U	20 U	4.9 U	4.9 U	39 U	20 U	20 U	20 U	20 U	20 U	390 U	200 U
ICS-M-SE-3-113012	4.7 U	19 U	4.7 U	4.7 U	38 U	19 U	19 U	19 U	19 U	19 U	380 U	190 U
ICS-DSS-01-SE-121012	14 U	58 U	14 U	14 U	70 J	58 U	58 U	58 U	58 U	29 J	1200 U	580 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	1,2,4-Trichloro- benzene 120-82-1 <u>µg/kg, dry</u>	Naphthalene 91-20-3 <u>µg/kg, dry</u>	4-Chloro-3- methylphenol 59-50-7 <u>µg/kg, dry</u>	2-Methyl- naphthalene 91-57-6 <u>µg/kg, dry</u>	2,4,6-Trichloro- phenol 88-06-2 <u>µg/kg, dry</u>	2,4,5-Trichloro- phenol 95-95-4 <u>µg/kg, dry</u>	2-Chloro- naphthalene 91-58-7 <u>µg/kg, dry</u>	Dimethyl- phthalate 131-11-3 <u>µg/kg, dry</u>	Acenaph- thylene 208-96-8 <u>µg/kg, dry</u>	Acenaphthene 83-32-9 <u>µg/kg, dry</u>	Dibenzo-furan 132-64-9 <u>µg/kg, dry</u>
ICS-A-SE-1-112612											
ICS-A-SE-2-112612											
ICS-A-SE-3-112612											
ICS-A-SE-4-112612	6.9	66	98 U	41	98 U	98 U	20 U	20 U	20 U	46	43
ICS-A-SE-5-112612	4.8 U	50	95 U	34	95 U	95 U	19 U	19 U	19 U	21	30
ICS-A-SE-6-112612											
ICS-A-SE-7-112612											
ICS-B-SE-1-112712											
ICS-B-SE-2-112712											
ICS-B-SE-3-112712	66	360	280 U	260	280 U	280 U	57 U	57 U	57 U	910	57 U
ICS-B-SE-4-112712											
ICS-B-SE-5-112712	4.9 U	57	97 U	44	97 U	97 U	20 U	20 U	20 U	29	39
ICS-B-SE-6-112712											
ICS-C-SE-1-112712											
ICS-C-SE-2-112712											
ICS-C-SE-3-112712	4.6 U	24	92 U	13 J	92 U	92 U	18 U	18 U	18 U	21	20
ICS-C-SE-4-112712	4.9 U	18 J	98 U	20 U	98 U	98 U	20 U	20 U	20 U	23	20 U
ICS-D-SE-1-112712											
ICS-D-SE-2-112712											
ICS-D-SE-3-112712	4.8 U	620	96 U	520	96 U	96 U	19 U	19 U	19	34	33
ICS-D-SE-4-112712	5.0 U	69	100 U	45	100 U	100 U	20 U	20 U	12 J	31	42
ICS-D-SE-5-112712											
ICS-F-SE-1-112712											
ICS-F-SE-2-112712											
ICS-F-SE-3-112712											
ICS-F-SE-3-121012											
ICS-F-SE-4-112712											
ICS-F-SE-5-112712											
ICS-F-SE-6-112712											
ICS-F-SE-7-112712	4.9 U	22	97 U	20	97 U	97 U	20 U	20 U	20 U	20 U	14 J
ICS-F-SE-8-112712	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U	18 U	18 U	18 U	18 U
ICS-F-SE-9-112712											
ICS-G-SE-1-112812											
ICS-G-SE-2-112812											
ICS-G-SE-3-112812											
ICS-DUP1-SE-112812											
ICS-G-SE-4-112812											
ICS-G-SE-5-112812	29 U	380	570 U	220	570 U	570 U	110 U	110 U	110 U	330	91 J
ICS-G-SE-6-112812	4.8 U	84	96 U	40	96 U	96 U	19 U	19 U	34	34	35
ICS-H-SE-1-112812											
ICS-H-SE-2-112812											
ICS-H-SE-3-112812	36	190	130 U	91	130 U	130 U	26 U	26 U	26 U	240	86

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	1,2,4-Trichloro- benzene 120-82-1 <u>µg/kg, dry</u>	Naphthalene 91-20-3 <u>µg/kg, dry</u>	4-Chloro-3- methylphenol 59-50-7 <u>µg/kg, dry</u>	2-Methyl- naphthalene 91-57-6 <u>µg/kg, dry</u>	2,4,6-Trichloro- phenol 88-06-2 <u>µg/kg, dry</u>	2,4,5-Trichloro- phenol 95-95-4 <u>µg/kg, dry</u>	2-Chloro- naphthalene 91-58-7 <u>µg/kg, dry</u>	Dimethyl- phthalate 131-11-3 <u>µg/kg, dry</u>	Acenaph- thylene 208-96-8 <u>µg/kg, dry</u>	Acenaphthene 83-32-9 <u>µg/kg, dry</u>	Dibenzo-furan 132-64-9 <u>µg/kg, dry</u>
ICS-H-SE-4-112812	6.1	20	97 U	19 U	97 U	97 U	19 U	19 U	19 U	19 U	19 U
ICS-I-SE-1-112812											
ICS-I-SE-2-112812											
ICS-I-SE-3-112812	14 U	86	290 U	29 J	290 U	290 U	57 U	57 U	37 J	77	29 J
ICS-I-SE-4-112812											
ICS-I-SE-5-112812	4.6 U	23	92 U	11 J	92 U	92 U	18 U	18 U	18 U	520	23
ICS-I-SE-6-112812											
ICS-J-SE-1-112812											
ICS-J-SE-2-112812											
ICS-J-SE-3-112812											
ICS-J-SE-4-112812											
ICS-J-SE-5-112812	4.7 U	64	94 U	17 J	94 U	94 U	19 U	19 U	22	44	25
ICS-J-SE-6-112812	4.8 U	23	96 U	36	96 U	96 U	19 U	19 U	19 U	23	15 J
ICS-K-SE-1-113012											
ICS-K-SE-2-113012											
ICS-DUP2-SE-113012											
ICS-K-SE-3-113012											
ICS-K-SE-4-113012	5.0 U	100	100 U	140	100 U	100 U	20 U	20 U	20 U	62	34
ICS-K-SE-5-113012	4.9 U	83	98 U	21	98 U	98 U	20 U	20 U	28	80	28
ICS-L-SE-1-113012											
ICS-L-SE-2-113012											
ICS-L-SE-3-113012	4.9 U	160	98 U	39	98 U	98 U	20 U	20 U	51	66	48
ICS-L-SE-4-113012	4.8 U	71	97 U	38	97 U	97 U	19 U	19 U	22	23	32
ICS-L-SE-5-113012											
ICS-M-SE-1-113012											
ICS-M-SE-2-113012	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U	20 U	20 U	20 U	20 U
ICS-M-SE-3-113012	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-01-SE-121012	14 U	52 J	290 U	38 J	290 U	290 U	58 U	58 U	58 U	260	67

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	2,6-Dinitro- toluene 606-20-2 <u>µg/kg, dry</u>	2,4-Dinitro- toluene 121-14-2 <u>µg/kg, dry</u>	Diethyl- phthalate 84-66-2 <u>µg/kg, dry</u>	4-Chlorophenyl- phenylether 7005-72-3 <u>µg/kg, dry</u>	Fluorene 86-73-7 <u>µg/kg, dry</u>	N-Nitrosodi- phenylamine 86-30-6 <u>µg/kg, dry</u>	Pentachloro- phenol 87-86-5 <u>µg/kg, dry</u>	Phenanthrene 85-01-8 <u>µg/kg, dry</u>	Carbazole 86-74-8 <u>µg/kg, dry</u>	Anthracene 120-12-7 <u>µg/kg, dry</u>	Di-n-butyl- phthalate 84-74-2 <u>µg/kg, dry</u>	Fluoranthene 206-44-0 <u>µg/kg, dry</u>
ICS-A-SE-1-112612												
ICS-A-SE-2-112612												
ICS-A-SE-3-112612												
ICS-A-SE-4-112612	98 U	98 U	49 U	20 U	51	20 U	18 J	180	13 J	45	20 U	200
ICS-A-SE-5-112612	95 U	95 U	37 J	19 U	33	11 J	48 U	110	19 U	22	19 U	92
ICS-A-SE-6-112612												
ICS-A-SE-7-112612												
ICS-B-SE-1-112712												
ICS-B-SE-2-112712												
ICS-B-SE-3-112712	280 U	280 U	140 U	57 U	450	57 U	800	400	57 U	600	57 U	2200
ICS-B-SE-4-112712												
ICS-B-SE-5-112712	97 U	97 U	60	20 U	45	6.6 J	49 U	140	20 U	26	20 U	120
ICS-B-SE-6-112712												
ICS-C-SE-1-112712												
ICS-C-SE-2-112712												
ICS-C-SE-3-112712	92 U	92 U	46 U	18 U	22	2.4 J	46 U	53	18 U	15 J	18 U	71
ICS-C-SE-4-112712	98 U	98 U	51	20 U	13 J	20 U	49 U	49	20 U	14 J	20 U	83
ICS-D-SE-1-112712												
ICS-D-SE-2-112712												
ICS-D-SE-3-112712	96 U	96 U	48 U	19 U	51	6.1 J	48 U	130	17 J	39	19 U	240
ICS-D-SE-4-112712	100 U	100 U	50 U	20 U	51	3.5 J	50 U	160	20 U	30	20 U	140
ICS-D-SE-5-112712												
ICS-F-SE-1-112712												
ICS-F-SE-2-112712												
ICS-F-SE-3-112712												
ICS-F-SE-3-121012												
ICS-F-SE-4-112712												
ICS-F-SE-5-112712												
ICS-F-SE-6-112712												
ICS-F-SE-7-112712	97 U	97 U	49 U	20 U	20	20 U	49 U	54	20 U	16 J	20 U	74
ICS-F-SE-8-112712	92 U	92 U	220	18 U	18 U	18 U	46 U	12 J	18 U	18 U	18 U	12 J
ICS-F-SE-9-112712												
ICS-G-SE-1-112812												
ICS-G-SE-2-112812												
ICS-G-SE-3-112812												
ICS-DUP1-SE-112812												
ICS-G-SE-4-112812												
ICS-G-SE-5-112812	570 U	570 U	290 U	110 U	1200	1800	880 J _Q	940	110 U	730	110 U	1600
ICS-G-SE-6-112812	96 U	96 U	48 U	19 U	52	9.6 J	48 U	170	13 J	59	19 U	250
ICS-H-SE-1-112812												
ICS-H-SE-2-112812												
ICS-H-SE-3-112812	130 U	130 U	64 U	26 U	490	260	190 J _Q	800	26 U	300	120	910

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	2,6-Dinitro- toluene 606-20-2 µg/kg, dry	2,4-Dinitro- toluene 121-14-2 µg/kg, dry	Diethyl- phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl- phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi- phenylamine 86-30-6 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry
ICS-H-SE-4-112812	97 U	97 U	49	19 U	16 J	3.3 J	49 U	35	19 U	19 U	19 U	41
ICS-I-SE-1-112812												
ICS-I-SE-2-112812												
ICS-I-SE-3-112812	290 U	290 U	140 U	57 U	52 J	8.9 J	140 U	150	29 J	97	57 U	460
ICS-I-SE-4-112812												
ICS-I-SE-5-112812	92 U	92 U	46 U	18 U	41	2.8 J	46 U	500	87	150	18 U	770
ICS-I-SE-6-112812												
ICS-J-SE-1-112812												
ICS-J-SE-2-112812												
ICS-J-SE-3-112812												
ICS-J-SE-4-112812												
ICS-J-SE-5-112812	94 U	94 U	47 U	19 U	35	19 U	47 U	120	12 J	57	19 U	380
ICS-J-SE-6-112812	96 U	96 U	48 U	19 U	21	19 U	48 U	84	10 J	33	19 U	260
ICS-K-SE-1-113012												
ICS-K-SE-2-113012												
ICS-DUP2-SE-113012												
ICS-K-SE-3-113012												
ICS-K-SE-4-113012	100 U	100 U	50 U	20 U	49	20 U	59 J	100	20 U	44	20 U	180
ICS-K-SE-5-113012	98 U	98 U	49 U	20 U	39	20 U	49 U	110	20 U	71	16 J	280
ICS-L-SE-1-113012												
ICS-L-SE-2-113012												
ICS-L-SE-3-113012	98 U	98 U	49 U	20 U	59	4.0 J	49 U	200	17 J	65	20 U	400
ICS-L-SE-4-113012	97 U	97 U	48 U	19 U	45	2.6 J	48 U	130	11 J	37	19 U	180
ICS-L-SE-5-113012												
ICS-M-SE-1-113012												
ICS-M-SE-2-113012	98 U	98 U	40 J	20 U	20 U	20 U	49 U	20 U	20 U	20 U	20 U	26
ICS-M-SE-3-113012	94 U	94 U	47 U	19 U	19 U	19 U	47 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-01-SE-121012	290 U	290 U	140 U	58 U	220	58 U	150 J _Q	3700	470	720	58 U	5100

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Pyrene 129-00-0 µg/kg, dry	Butylbenzyl- phthalate 85-68-7 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry	Di-n-octyl- phthalate 117-84-0 µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene 50-32-8 µg/kg, dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg, dry	Dibenz(a,h)- anthracene 53-70-3 µg/kg, dry	Benzo(g,h,i)- perylene 191-24-2 µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry
ICS-A-SE-1-112612													
ICS-A-SE-2-112612													
ICS-A-SE-3-112612													
ICS-A-SE-4-112612	160	4.9 U	53	40 J_B	65	20 U	78	53	23	20 U	30	388	662
ICS-A-SE-5-112612	78	4.8 U	26	40 J_B	38	19 U	43	19 U	12 J	19 U	19	236	308
ICS-A-SE-6-112612													
ICS-A-SE-7-112612													
ICS-B-SE-1-112712													
ICS-B-SE-2-112712													
ICS-B-SE-3-112712	2000	47	640	5600	1100	57 U	930	480	120	57	140	2720	7667
ICS-B-SE-4-112712													
ICS-B-SE-5-112712	95	4.9 U	29	66	43	20 U	48	20 U	20 U	20 U	20	297	355
ICS-B-SE-6-112712													
ICS-C-SE-1-112712													
ICS-C-SE-2-112712													
ICS-C-SE-3-112712	58	3.2 J	19	92	22	18 U	30 J	18 U	18 U	18 U	12 J	135	212
ICS-C-SE-4-112712	86	4.9 U	35	28 J_B	36	20 U	48	31	14 J	20 U	18 J	117	351
ICS-D-SE-1-112712													
ICS-D-SE-2-112712													
ICS-D-SE-3-112712	200	4.8 U	59	37 J_B	75	19 U	100	48	27	10 J	34	893	793
ICS-D-SE-4-112712	100	5.0 U	34	32 J_B	44	20 U	48	20 U	13 J	20 U	18 J	322	397
ICS-D-SE-5-112712													
ICS-F-SE-1-112712													
ICS-F-SE-2-112712													
ICS-F-SE-3-112712													
ICS-F-SE-3-121012													
ICS-F-SE-4-112712													
ICS-F-SE-5-112712													
ICS-F-SE-6-112712													
ICS-F-SE-7-112712	62	4.9 U	18 J	32 J_B	26	20 U	16 J	20 U	14 J	20 U	16 J	112	226
ICS-F-SE-8-112712	11 J	4.6 U	18 U	29 J_B	18 U	18 U	37 U	18 U	18 U	18 U	18 U	18 U	23
ICS-F-SE-9-112712													
ICS-G-SE-1-112812													
ICS-G-SE-2-112812													
ICS-G-SE-3-112812													
ICS-DUP1-SE-112812													
ICS-G-SE-4-112812													
ICS-G-SE-5-112812	4200	170	740	2800	1800	110 U	890	110 U	140	110 U	180	3580	9550
ICS-G-SE-6-112812	330	4.8 U	110	37 J_B	130	19 U	180	110	45	16 J	56	433	1227
ICS-H-SE-1-112812													
ICS-H-SE-2-112812													
ICS-H-SE-3-112812	920	51	350	1400	490	26 U	490	260	68	26	67	2020	3581

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Pyrene 129-00-0 µg/kg, dry	Butylbenzyl- phthalate 85-68-7 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry	Di-n-octyl- phthalate 117-84-0 µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene 50-32-8 µg/kg, dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg, dry	Dibenz(a,h)- anthracene 53-70-3 µg/kg, dry	Benzo(g,h,i)- perylene 191-24-2 µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry
ICS-H-SE-4-112812	41	4.9 U	14 J	32 J_B	15 J	19 U	20 J	19 U	19 U	19 U	19 U	71	131
ICS-I-SE-1-112812													
ICS-I-SE-2-112812													
ICS-I-SE-3-112812	360	14 U	300	72 U	540	57 U	780	360	180	63	210	499	3253
ICS-I-SE-4-112812													
ICS-I-SE-5-112812	840	4.6 U	310	37 J_B	350	18 U	470	360	170	73	220	1234	3563
ICS-I-SE-6-112812													
ICS-J-SE-1-112812													
ICS-J-SE-2-112812													
ICS-J-SE-3-112812													
ICS-J-SE-4-112812													
ICS-J-SE-5-112812	270	4.7 U	94	25 J_B	160	19 U	140	72	36	11 J	34	342	1197
ICS-J-SE-6-112812	220	4.8 U	80	24 U	78	19 U	120	64	34	16 J	42	184	914
ICS-K-SE-1-113012													
ICS-K-SE-2-113012													
ICS-DUP2-SE-113012													
ICS-K-SE-3-113012													
ICS-K-SE-4-113012	200	5.0 U	54	46 J_B	79	20 U	90	38	28	20 U	32	355	701
ICS-K-SE-5-113012	230	4.9 U	120	24 J_B	170	20 U	210	110	49	17 J	65	411	1251
ICS-L-SE-1-113012													
ICS-L-SE-2-113012													
ICS-L-SE-3-113012	320	4.9 U	91	25 U	120	20 U	160	93	50	21	56	601	1311
ICS-L-SE-4-113012	150	4.8 U	40	24 U	50	19 U	67	19 U	21	19 U	32	328	540
ICS-L-SE-5-113012													
ICS-M-SE-1-113012													
ICS-M-SE-2-113012	26	4.9 U	20 U	41 J_B	14 J	20 U	25 J	9.8 J	20 U	20 U	20 U	20 U	101
ICS-M-SE-3-113012	19 U	4.7 U	19 U	24 J_B	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-DSS-01-SE-121012	5400	13 J	3500	520	3800	58 U	5000	3000	1200	510	1200	4952	28,710

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = associated value may be biased high due to contribution from laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Tributyltin ion 36643-28-4 µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry
ICS-A-SE-1-112612											
ICS-A-SE-2-112612											
ICS-A-SE-3-112612											
ICS-A-SE-4-112612		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	4.7 U	4.7 U
ICS-A-SE-5-112612		0.48 U	1.2 U	1.4 U	0.48 U	0.48 U	0.62 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-A-SE-6-112612											
ICS-A-SE-7-112612											
ICS-B-SE-1-112712											
ICS-B-SE-2-112712											
ICS-B-SE-3-112712		25 U	120 U	25 U	25 U	100 U	190 U	340 U	25 U	430 U	870 J_p
ICS-B-SE-4-112712											
ICS-B-SE-5-112712		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	4.9 U	2.5 U	4.9 U	4.9 U
ICS-B-SE-6-112712											
ICS-C-SE-1-112712											
ICS-C-SE-2-112712											
ICS-C-SE-3-112712		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	4.7 U	4.7 U
ICS-C-SE-4-112712		0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U
ICS-D-SE-1-112712											
ICS-D-SE-2-112712											
ICS-D-SE-3-112712		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U	4.9 U	4.9 U
ICS-D-SE-4-112712		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U	4.8 U	4.8 U
ICS-D-SE-5-112712											
ICS-F-SE-1-112712											
ICS-F-SE-2-112712											
ICS-F-SE-3-112712											
ICS-F-SE-3-121012											
ICS-F-SE-4-112712											
ICS-F-SE-5-112712											
ICS-F-SE-6-112712											
ICS-F-SE-7-112712		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	4.7 U	4.7 U
ICS-F-SE-8-112712		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	0.92 U	0.92 U
ICS-F-SE-9-112712											
ICS-G-SE-1-112812											
ICS-G-SE-2-112812											
ICS-G-SE-3-112812											
ICS-DUP1-SE-112812											
ICS-G-SE-4-112812											
ICS-G-SE-5-112812		24 U	24 U	24 U	24 U	36 U	24 U	120 U	24 U	48 U	480
ICS-G-SE-6-112812		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U	4.9 U	4.9 U
ICS-H-SE-1-112812											
ICS-H-SE-2-112812											
ICS-H-SE-3-112812		36 U	36 U	36 U	36 U	100 U	340 U	390 U	36 U	410 U	650 J_p

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Tributyltin ion 36643-28-4 µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry
ICS-H-SE-4-112812		0.47 U	0.47 U	0.47 U	1.5 U	4.2 U	8.9 U	4.8 U	0.47 U	2.2 U	24
ICS-I-SE-1-112812											
ICS-I-SE-2-112812											
ICS-I-SE-3-112812		2.4 U	3.7 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U	4.9 U	29
ICS-I-SE-4-112812											
ICS-I-SE-5-112812		0.48 U	1.0 U	0.48 U	0.48 U	0.98 U	1.1 U	2.2 U	0.48 U	0.96 U	31 J_p
ICS-I-SE-6-112812											
ICS-J-SE-1-112812											
ICS-J-SE-2-112812											
ICS-J-SE-3-112812											
ICS-J-SE-4-112812											
ICS-J-SE-5-112812		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	5.0 U
ICS-J-SE-6-112812		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.9 U	2.4 U	4.9 U	4.9 U
ICS-K-SE-1-113012											
ICS-K-SE-2-113012	59										
ICS-DUP2-SE-113012											
ICS-K-SE-3-113012											
ICS-K-SE-4-113012		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U	4.8 U	41
ICS-K-SE-5-113012		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	4.7 U	4.7 U
ICS-L-SE-1-113012											
ICS-L-SE-2-113012	3.7 U										
ICS-L-SE-3-113012		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	5.0 U
ICS-L-SE-4-113012		2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	2.4 U	4.8 U	4.8 U
ICS-L-SE-5-113012											
ICS-M-SE-1-113012											
ICS-M-SE-2-113012		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	7.9 U	2.5 U	4.9 U	11 J_p
ICS-M-SE-3-113012		0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U
ICS-DSS-01-SE-121012		4.9 U	4.9 U	6.9 U	4.9 U	4.9 U	4.9 U	9.9 U	4.9 U	9.9 U	51 J_p

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	<i>trans</i> - Chlordane 5103-74-2 µg/kg, dry	<i>cis</i> - Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry
ICS-A-SE-1-112612											
ICS-A-SE-2-112612											
ICS-A-SE-3-112612											
ICS-A-SE-4-112612	4.7 U	4.7 U	4.7 U	4.7 U	5.8 U	24 U	4.7 U	4.7 U	2.4 U	2.4 U	470 U
ICS-A-SE-5-112612	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U
ICS-A-SE-6-112612											
ICS-A-SE-7-112612											
ICS-B-SE-1-112712											
ICS-B-SE-2-112712											
ICS-B-SE-3-112712	120 U	210 U	640 U	140 U	990 U	250 U	50 U	50 U	300 U	25 U	5000 U
ICS-B-SE-4-112712											
ICS-B-SE-5-112712	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	25 U	4.9 U	4.9 U	2.5 U	2.5 U	490 U
ICS-B-SE-6-112712											
ICS-C-SE-1-112712											
ICS-C-SE-2-112712											
ICS-C-SE-3-112712	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U	4.7 U	2.4 U	2.4 U	470 U
ICS-C-SE-4-112712	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	0.47 U	0.47 U	94 U
ICS-D-SE-1-112712											
ICS-D-SE-2-112712											
ICS-D-SE-3-112712	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U	4.9 U	2.4 U	2.4 U	490 U
ICS-D-SE-4-112712	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	24 U	4.8 U	4.8 U	2.4 U	2.4 U	480 U
ICS-D-SE-5-112712											
ICS-F-SE-1-112712											
ICS-F-SE-2-112712											
ICS-F-SE-3-112712											
ICS-F-SE-3-121012											
ICS-F-SE-4-112712											
ICS-F-SE-5-112712											
ICS-F-SE-6-112712											
ICS-F-SE-7-112712	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U	4.7 U	2.4 U	2.4 U	470 U
ICS-F-SE-8-112712	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U	4.6 U	0.92 U	0.92 U	0.46 U	0.46 U	92 U
ICS-F-SE-9-112712											
ICS-G-SE-1-112812											
ICS-G-SE-2-112812											
ICS-G-SE-3-112812											
ICS-DUP1-SE-112812											
ICS-G-SE-4-112812											
ICS-G-SE-5-112812	48 U	48 U	870	48 U	290 U	240 U	79 U	48 U	92 U	24 U	4800 U
ICS-G-SE-6-112812	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U	4.9 U	2.4 U	2.4 U	490 U
ICS-H-SE-1-112812											
ICS-H-SE-2-112812											
ICS-H-SE-3-112812	210 U	71 U	640 U	71 U	1100 U	360 U	220 U	71 U	36 U	36 U	7100 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	<i>trans</i> - Chlordane 5103-74-2 µg/kg, dry	<i>cis</i> - Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry
ICS-H-SE-4-112812	0.94 U	1.3 U	16	0.94 U	3.6 U	4.7 U	0.94 U	0.94 U	2.5 U	0.47 U	94 U
ICS-I-SE-1-112812											
ICS-I-SE-2-112812											
ICS-I-SE-3-112812	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U	4.9 U	2.4 U	2.4 U	490 U
ICS-I-SE-4-112812											
ICS-I-SE-5-112812	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	96 U
ICS-I-SE-6-112812											
ICS-J-SE-1-112812											
ICS-J-SE-2-112812											
ICS-J-SE-3-112812											
ICS-J-SE-4-112812											
ICS-J-SE-5-112812	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	2.5 U	2.5 U	500 U
ICS-J-SE-6-112812	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	24 U	4.9 U	4.9 U	2.4 U	2.4 U	490 U
ICS-K-SE-1-113012											
ICS-K-SE-2-113012											
ICS-DUP2-SE-113012											
ICS-K-SE-3-113012											
ICS-K-SE-4-113012	4.8 U	4.8 U	27	4.8 U	4.8 U	24 U	4.8 U	4.8 U	2.4 U	2.4 U	480 U
ICS-K-SE-5-113012	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	24 U	4.7 U	4.7 U	2.4 U	2.4 U	470 U
ICS-L-SE-1-113012											
ICS-L-SE-2-113012											
ICS-L-SE-3-113012	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	2.5 U	2.5 U	500 U
ICS-L-SE-4-113012	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	24 U	4.8 U	4.8 U	2.4 U	2.4 U	480 U
ICS-L-SE-5-113012											
ICS-M-SE-1-113012											
ICS-M-SE-2-113012	4.9 U	4.9 U	4.9 U	4.9 U	16 U	25 U	4.9 U	4.9 U	2.5 U	2.5 U	490 U
ICS-M-SE-3-113012	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	0.48 U	0.48 U	95 U
ICS-DSS-01-SE-121012	9.9 U	9.9 U	9.9 U	9.9 U	12 U	49 U	9.9 U	9.9 U	4.9 U	4.9 U	990 U

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachloro- butadiene 87-68-3 µg/kg, dry	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-A-SE-1-112612										
ICS-A-SE-2-112612			75 U	75 U	810	870	690	75 U	75 U	2370
ICS-A-SE-3-112612										
ICS-A-SE-4-112612	4.7 U	4.7 U	3.8 U	3.8 U	42	31	26	3.8 U	3.8 U	99
ICS-A-SE-5-112612	0.96 U	0.96 U	3.8 U	3.8 U	12	7.8	7.3	3.8 U	3.8 U	27.1
ICS-A-SE-6-112612										
ICS-A-SE-7-112612										
ICS-B-SE-1-112712			37 U	37 U	170	140	120	37 U	37 U	430
ICS-B-SE-2-112712										
ICS-B-SE-3-112712	57 U	50 U	400 U	400 U	9600	11,000	8600	400 U	400 U	29,200
ICS-B-SE-4-112712										
ICS-B-SE-5-112712	4.9 U	4.9 U	3.9 U	50	3.9 U	24	23	3.9 U	3.9 U	97
ICS-B-SE-6-112712										
ICS-C-SE-1-112712										
ICS-C-SE-2-112712			3.6 U	3.6 U	18	21	16	3.6 U	3.6 U	55
ICS-C-SE-3-112712	4.7 U	4.7 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-C-SE-4-112712	0.94 U	0.94 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
ICS-D-SE-1-112712										
ICS-D-SE-2-112712			200 U	200 U	6200	7700	3100	200 U	200 U	17,000
ICS-D-SE-3-112712	4.9 U	4.9 U	3.9 U	3.9 U	27	30	10	3.9 U	3.9 U	67
ICS-D-SE-4-112712	4.8 U	4.8 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-D-SE-5-112712										
ICS-F-SE-1-112712										
ICS-F-SE-2-112712										
ICS-F-SE-3-112712										
ICS-F-SE-3-121012										
ICS-F-SE-4-112712										
ICS-F-SE-5-112712			4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-F-SE-6-112712										
ICS-F-SE-7-112712	4.7 U	4.7 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-F-SE-8-112712	0.92 U	0.92 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-F-SE-9-112712										
ICS-G-SE-1-112812										
ICS-G-SE-2-112812										
ICS-G-SE-3-112812			39 U	39 U	610	670	270	39 U	39 U	1550
ICS-DUP1-SE-112812			38 U	38 U	390	440	210	38 U	38 U	1040
ICS-G-SE-4-112812										
ICS-G-SE-5-112812	48 U	48 U	78 U	78 U	3600	3600	2800	78 U	78 U	10,000
ICS-G-SE-6-112812	4.9 U	4.9 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-H-SE-1-112812										
ICS-H-SE-2-112812			170 U	170 U	7400	4900	5800	170 U	170 U	18,100
ICS-H-SE-3-112812	71 U	71 U	580 U	580 U	13,000	16,000	9100	580 U	580 U	38,100

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	Hexachloro- benzene 118-74-1	Hexachloro- butadiene 87-68-3	Aroclor 1016 12674-11-2	Aroclor 1242 53469-21-9	Aroclor 1248 12672-29-6	Aroclor 1254 11097-69-1	Aroclor 1260 11096-82-5	Aroclor 1221 11104-28-2	Aroclor 1232 11141-16-5	total PCBs
	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>
ICS-H-SE-4-112812	0.94 U	0.94 U	18 U	260	18 U	93 U	18 U	18 U	18 U	260
ICS-I-SE-1-112812										
ICS-I-SE-2-112812			140 U	140 U	5100	6000	1900	140 U	140 U	13,000
ICS-I-SE-3-112812	4.9 U	4.9 U	3.9 U	3.9 U	170	160	65	3.9 U	3.9 U	395
ICS-I-SE-4-112812										
ICS-I-SE-5-112812	0.96 U	0.96 U	3.8 U	36	3.8 U	19 U	5.6	3.8 U	3.8 U	42
ICS-I-SE-6-112812										
ICS-J-SE-1-112812										
ICS-J-SE-2-112812										
ICS-J-SE-3-112812			3.8 U	3.8 U	47	110	180	3.8 U	3.8 U	337
ICS-J-SE-4-112812										
ICS-J-SE-5-112812	5.0 U	5.0 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-J-SE-6-112812	4.9 U	4.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-K-SE-1-113012										
ICS-K-SE-2-113012			170 U	170 U	5000	5100	2900	170 U	170 U	13,000
ICS-DUP2-SE-113012			220 U	220 U	6700	6500	3400	220 U	220 U	16,600
ICS-K-SE-3-113012										
ICS-K-SE-4-113012	4.8 U	4.8 U	3.8 U	3.8 U	22	76 U	81	3.8 U	3.8 U	103
ICS-K-SE-5-113012	4.7 U	4.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-L-SE-1-113012										
ICS-L-SE-2-113012			38 U	38 U	910	880	520	38 U	38 U	2310
ICS-L-SE-3-113012	5.0 U	5.0 U	4.0 U	4.0 U	8.0	9.2	6.0	4.0 U	4.0 U	23
ICS-L-SE-4-113012	4.8 U	4.8 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-L-SE-5-113012										
ICS-M-SE-1-113012			37 U	37 U	370	360	380	37 U	37 U	1110
ICS-M-SE-2-113012	4.9 U	4.9 U	3.8 U	3.8 U	98	120	94	3.8 U	3.8 U	312
ICS-M-SE-3-113012	0.95 U	0.95 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-DSS-01-SE-121012	9.9 U	9.9 U	20 U	20 U	420	420	350	20 U	20 U	1190

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	gravel > 4750 µm	coarse sand 4750 - 2000 µm	medium sand 2000 - 425 µm	fine sand 425 - 75 µm	v. coarse silt 75 - 32 µm	coarse silt 32 - 22 µm	medium silt 22 - 13 µm	fine silt 13 - 7 µm	v. fine silt 7 - 3.2 µm	total silt 32 - 3.2 µm	clay		total fines < 32 µm
	%	%	%	%	%	%	%	%	%	%	3.2 - 1.3 µm	< 1.3 µm	%
ICS-A-SE-1-112612													
ICS-A-SE-2-112612													
ICS-A-SE-3-112612													
ICS-A-SE-4-112612													
ICS-A-SE-5-112612													
ICS-A-SE-6-112612													
ICS-A-SE-7-112612													
ICS-B-SE-1-112712													
ICS-B-SE-2-112712													
ICS-B-SE-3-112712													
ICS-B-SE-4-112712													
ICS-B-SE-5-112712													
ICS-B-SE-6-112712	0.0	0.0	3.9	7.1	14.0	14.1	14.1	17.0	11.9	71.2	8.2	9.4	88.8
ICS-C-SE-1-112712													
ICS-C-SE-2-112712													
ICS-C-SE-3-112712													
ICS-C-SE-4-112712													
ICS-D-SE-1-112712													
ICS-D-SE-2-112712													
ICS-D-SE-3-112712													
ICS-D-SE-4-112712													
ICS-D-SE-5-112712													
ICS-F-SE-1-112712													
ICS-F-SE-2-112712													
ICS-F-SE-3-112712													
ICS-F-SE-3-121012	0.0	0.5	1.9	8.9	16.9	13.2	13.2	18.9	11.3	73.5	7.6	7.6	88.7
ICS-F-SE-4-112712													
ICS-F-SE-5-112712													
ICS-F-SE-6-112712													
ICS-F-SE-7-112712													
ICS-F-SE-8-112712	0.0	0.0	0.5	72.2	12.4	3.5	2.2	3.5	2.2	23.8	0.9	2.6	27.3
ICS-F-SE-9-112712													
ICS-G-SE-1-112812													
ICS-G-SE-2-112812													
ICS-G-SE-3-112812													
ICS-DUP1-SE-112812													
ICS-G-SE-4-112812													
ICS-G-SE-5-112812													
ICS-G-SE-6-112812													
ICS-H-SE-1-112812													
ICS-H-SE-2-112812													
ICS-H-SE-3-112812													

grain size analyses: % retained in each size fraction

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Subsurface Sediment Analyses, November - December 2012

Field I.D.	gravel > 4750 µm	coarse sand 4750 - 2000 µm	medium sand 2000 - 425 µm	fine sand 425 - 75 µm	v. coarse silt 75 - 32 µm	coarse silt 32 - 22 µm	medium silt 22 - 13 µm	fine silt 13 - 7 µm	v. fine silt 7 - 3.2 µm	total silt 32 - 3.2 µm	clay		total fines < 32 µm
	%	%	%	%	%	%	%	%	%	%	3.2 - 1.3 µm	< 1.3 µm	%
ICS-H-SE-4-112812													
ICS-I-SE-1-112812													
ICS-I-SE-2-112812													
ICS-I-SE-3-112812	8.7	1.7	1.5	3.3	10.0	10.1	13.4	19.3	14.3	67.1	9.2	8.4	84.7
ICS-I-SE-4-112812													
ICS-I-SE-5-112812	0.3	1.1	3.7	62.3	12.8	6.1	2.6	4.3	3.0	28.8	1.3	2.6	32.7
ICS-I-SE-6-112812													
ICS-J-SE-1-112812													
ICS-J-SE-2-112812													
ICS-J-SE-3-112812													
ICS-J-SE-4-112812													
ICS-J-SE-5-112812													
ICS-J-SE-6-112812													
ICS-K-SE-1-113012													
ICS-K-SE-2-113012													
ICS-DUP2-SE-113012													
ICS-K-SE-3-113012													
ICS-K-SE-4-113012													
ICS-K-SE-5-113012													
ICS-L-SE-1-113012													
ICS-L-SE-2-113012													
ICS-L-SE-3-113012													
ICS-L-SE-4-113012													
ICS-L-SE-5-113012													
ICS-M-SE-1-113012													
ICS-M-SE-2-113012													
ICS-M-SE-3-113012													
ICS-DSS-01-SE-121012													

grain size analyses: % retained in each size fraction



D.M.D., Inc.

Environmental & Toxicological Services

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: October 11, 2013

SUBJECT: Data Evaluation/Assessment for one Soil and 10 Subsurface Sediment Samples Collected during October - November 2012 from the ICS / [former] NW Cooperage Site, Seattle, WA – Supplemental Analyses

One soil and ten sediment samples collected by Dalton, Olmsted & Fuglevand (DOF) staff during October and November of 2012 were removed from frozen archival storage and thawed for preparation of analyses of selected parameters. These samples were delivered to Analytical Resources Inc. (ARI) of Tukwila, Washington within one week of collection. Samples were received on ice at temperatures between 0.9 and 4.0 degrees C, and maintained at the project laboratory at -20 degrees C prior to analyses. No chemical preservatives were specified nor required.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012). The extended holding time at -20 degrees C is consistent with EPA Region 10 guidance for sample handling and storage. The sample holding time for mercury analyses is outside the recommended limits of 28 days, however, this deviation is unlikely to adversely affect the data quality for mercury results. All analyses were performed by methods presented in Table SAP-3 of the SAP.

SVOC's	SW846-M.8270	TOC	Plumb, 1981 (PSEP)
selected SVOC's	M.8270 - SIM	chlor. pesticides	SW846-M.8081
PCB's as Aroclors	SW846-M.8082	metals (exc Hg)	SW846-M.6020A
Hg	SW846-M.7471A	total petroleum HC's	NWTPH-Dx

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 with GPC cleanup of extracts in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. These selected analytes include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses.

PCB's extracts were subjected to silica gel and strong-acid cleanups, as well as elemental [polymeric] sulfur (S_x) removal, prior to instrumental analyses. Chlorinated pesticides extracts were subjected to GPC, silica gel and S_x removal cleanup steps. TPH-Dx analyses were performed with silica gel and acid cleanup procedures on sample extracts.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Mercury results are not expected to be adversely affected by the extended holding time, however, the results are qualified as estimated with the "J_{HT}" qualifier code due to exceedance of the recommended holding time. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications, with the exception of mercury results as noted above.

Generally, [lower] **reporting limits** were consistent with specified-limits presented in the SAP (table SAP-3) and achieved the sediment PQL goals when contaminant levels allowed it. Exceptions are noted principally for organic compound analytes due to presence of chemical interferents and elevated levels of other target analytes. Specifically, sample F-SE-2 required extract dilutions due to elevated levels of organic contaminants, principally diesel-range petroleum hydrocarbons resulting in the elevation of most analyte nondetection reporting limits. Samples LP3-SO-D, B-SE-4, F-SE-2 I-SE-4 and K-SE-3 exhibited elevated levels of PCBs resulting in subsequent elevation of lower reporting limits for many of the chlorinated pesticide target analytes due to extract dilutions and associated instrumental interferences. Some Aroclors (commercial PCB mixtures) were reported with elevated reporting limits or nondetects due to elevated levels of other detected Aroclors that have the potential to contribute overlapping signals. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of diethylphthalate at 30 $\mu\text{g/kg}$. Diethylphthalate results were qualified with the "J_B" qualifier code when results have the potential to be significantly impacted by laboratory background levels, up to 1.5x the level reported in the method blank (with consideration of extracted sample sizes and extract dilutions/volumes). Six sample results required "J_B" qualification. No other data required qualification due to method blanks performance.

No field equipment **rinsate blanks** were specified in the project SAP nor were any collected.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. Hexachloroethane MS and MSD recoveries in sample F-SE-4 were reported at 2.2% and 7.6%, while the LCS recovery was 71.2%. No hexachloroethane was detected in site samples and no results were qualified. N-Nitrosodiphenylamine MS/MSD recoveries during M.8270-SIM analyses were reported at 18.5 and 26.7%, while the LCS recovery was 86.2%. No N-nitrosodiphenylamine was detected in site

samples and no results were qualified. MS/MSD recoveries for chlorinated pesticides in sample K-SE-3 were generally high and associated with elevated background interferences. LCS recoveries for α -BHC and hexachlorobenzene (HCB) were slightly low at 63.5 and 56.5%, respectively. MS/MSD recoveries for PCBs in J-SE-4 were slightly low and ranged from 59.4 to 63.1% (for Aroclors 1016 and 1260), while LCS recoveries were within specified ranges. No significant adverse effects on data quality are anticipated as a consequence. Antimony (Sb) matrix spike recovery in LP3-SO-D is reported low at 7.0%. Sb LCS and SRM recoveries are determined to be acceptable. This behavior for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; however, no positive hits for Sb are reported and the lower reporting limits should be considered biased low. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exceptions noted above. No sample results are qualified due to spike recoveries

Surrogate compound recoveries (for organic analytes) were evaluated for SVOC's, TPH-Dx, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), and PCB's. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance. *o*-Terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. The SVOC surrogate, d₅-nitrobenzene, exhibited high recoveries (161%) for the initial and confirmatory analyses performed for F-SE-4, while all other surrogate recoveries were within specified ranges. All other surrogate compound performances were within specified acceptance ranges. No qualification of results was required due to surrogate compounds performance.

SVOC continuing calibration verification (CCV) checks revealed lower-than-specified responses for benzoic acid and pentachlorophenol (PCP). Positive (detectable) sample results for benzoic acid and PCP are consequently considered estimates and qualified with the "J_Q" qualifier code.

TPH-Dx analytical results are highlighted with **bold-type** values when the associated profiles resemble the respective calibrant/reference mixtures, such as diesel fuel (for DRO) and/or motor/lubricant oil (for RRO). All other non-bolded TPH-Dx values are associated with presence of discrete organic compounds and not petroleum hydrocarbon mixtures.

Examination of the raw GC/MS (M.8270) data files was performed for confirmation of selected pesticides results reported from M.8081 analyses, when appropriate. Nontarget chemical interferences elevated the reporting limits and interfered with accurate reporting of Heptachlor, Heptachlor epoxide, and the DDT analogs in the B-SE-4 extract. Lower reporting limits for these selected analytes in B-SE-4 were taken from M.8270 analyses and provided in the attached results table. It is also noted that the single soil sample (LP3-SO-D) contains multiple silane compounds, possibly associated with silicon oil, and *bis*Phenol A.

Sample results reported here are determined to be in general compliance with method and SAP requirements. Most deviations of data quality from SAP and method specifications are associated with generally elevated levels of multiple contaminants in site samples. All reported data for site samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	<u>Lab I.D.</u>	% solids	TOC	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9	Chromium 7440-47-3	Copper 7440-50-8
					%	%	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry
ICS-LP3-SO-D-101512	soil	10/15/2012	15 - 16'	1318483-XD56A	80		0.2 U	1.5	0.2 U	0.2	18.0	11.7
ICS-A-SE-6-112612	sediment	11/26/2012	mid = 6.3'	1318484-XD56B	59	3.22	0.3 U	9.5	0.6	0.2	25.7	49.3
ICS-A-SE-7-112612	sediment	11/26/2012	mid = 7.2'	1318485-XD56C	62	4.22	0.3 U	9.2	0.6	0.2	23.3	43.5
ICS-B-SE-4-112712	sediment	11/27/2012	mid = 4.4'	1318486-XD56D	64	3.37	0.3 U	9.4	0.3 U	1.1	45.8	133
ICS-B-SE-6-112712	sediment	11/27/2012	mid = 6.6'	1318487-XD56E	60	2.66	0.3 U	10.1	0.6	0.3	25.4	50.6
ICS-D-SE-5-112712	sediment	11/27/2012	mid = 6.7"	1318488-XD56F	61	2.26	0.3 U	9.4	0.5	0.2	25.1	46.6
ICS-F-SE-2-112712	sediment	11/27/2012	mid = 1.7"	1318489-XD56G	56	3.15	0.3 U	12.7	0.3 U	3.4	114	56.6
ICS-F-SE-4-112712	sediment	11/27/2012	mid = 4.5'	1318490-XD56H	60	2.22	0.3 U	8.7	0.6	0.2	24.7	46.1
ICS-I-SE-4-112812	sediment	11/28/2012	mid = 5.9'	1318491-XD56I	61	2.84	0.3 U	11.1	0.5	0.2	26.3	58.5
ICS-J-SE-4-112812	sediment	11/28/2012	mid = 6.8'	1318492-XD56J	66	0.961	0.3 U	6.1	0.3 U	0.1 U	16.0	22.3
ICS-K-SE-3-113012	sediment	11/30/2012	mid = 3.8'	1318493-XD56K	88	0.879	0.2 U	4.1	0.2 U	0.2	26.4	25.1

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	Lead	Mercury	Nickel	Silver	Zinc	Total Petroleum Hydrocarbons **		Phenol	2-Chloro-phenol	1,3-Dichloro-benzene
	7439-92-1 mg/kg, dry	7439-97-6 mg/kg, dry	7440-02-0 mg/kg, dry	7440-22-4 mg/kg, dry	7440-66-6 mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	108-95-2 µg/kg, dry	95-57-8 µg/kg, dry	541-73-1 µg/kg, dry
ICS-LP3-SO-D-101512	23.3	0.08 J _{HT}	11.7	0.2 U	35	92	170	36	19 U	4.8 U
ICS-A-SE-6-112612	12.4	0.15 J _{HT}	24.0	0.3 U	72	29	58	61	20 U	5.0 U
ICS-A-SE-7-112612	10.4	0.14 J _{HT}	20.3	0.3 U	63	44	77	66	19 U	4.8 U
ICS-B-SE-4-112712	218	1.84 J _{HT}	17.8	0.3 U	286	4200	10,000	96	52 U	160
ICS-B-SE-6-112712	13.3	0.19 J _{HT}	24.6	0.3 U	74	47	100	42	20 U	4.9 U
ICS-D-SE-5-112712	11.6	0.15 J _{HT}	21.9	0.3 U	67	43	76	76	19 U	4.8 U
ICS-F-SE-2-112712	4380	0.29 J _{HT}	23.2	0.3 U	1420	12,000	2100	300 U	300 U	13 J
ICS-F-SE-4-112712	11.5	0.16 J _{HT}	23.0	0.3 U	70	43	72	38	20 U	4.9 U
ICS-I-SE-4-112812	38.5	0.24 J _{HT}	22.0	0.3 U	91	61	120	30	19 U	4.8 U
ICS-J-SE-4-112812	11.4	0.08 J _{HT}	11.7	0.3 U	51	40	72	20	19 U	4.7 U
ICS-K-SE-3-113012	79.3	0.38 J _{HT}	21.2	0.2 U	70	70	180	19 U	19 U	3.0 J

** bold-typed values resemble corresponding petroleum hydrocarbon mixture

DRO = $C_{12} - C_{24}$; RRO = $C_{24} - C_{38}$

J = estimate associated with value less than the verifiable lower quantitation limit.

J_{HT} = estimate; due to exceedance of recommended holding time.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry	N-Nitroso-di-n- propylamine 621-64-7 µg/kg, dry	Hexachloro- ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl- phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro- phenol 120-83-2 µg/kg, dry
ICS-LP3-SO-D-101512	4.5 J	19 U	14	21	40	19 U	19 U	19 U	19 U	34	190 U	96 U
ICS-A-SE-6-112612	5.0 U	190	5.0 U	6.8	50	20 U	20 U	20 U	20 U	25 U	470 J_Q	99 U
ICS-A-SE-7-112612	4.8 U	140	4.8 U	6.5	41	19 U	19 U	19 U	19 U	24 U	380 J_Q	95 U
ICS-B-SE-4-112712	370	52 U	150	42	55	52 U	52 U	52 U	52 U	120	520 U	260 U
ICS-B-SE-6-112712	4.9 U	160	4.9 U	5.1	32	20 U	20 U	20 U	20 U	25 U	310 J_Q	98 U
ICS-D-SE-5-112712	4.8 U	170	4.8 U	8.0	44	19 U	19 U	19 U	19 U	24 U	540 J_Q	96 U
ICS-F-SE-2-112712	11 J	59 U	9.5 J	15 U	300 U	300 U	300 U	300 U	300 U	890	3000 U	1500 U
ICS-F-SE-4-112712	4.9 U	120	4.9 U	4.5 J	24	20 U	20 U	20 U	20 U	24 U	230 J_Q	98 U
ICS-I-SE-4-112812	4.8 U	72	3.0 J	3.9 J	21	19 U	19 U	19 U	19 U	24 U	190 U	97 U
ICS-J-SE-4-112812	4.7 U	37	4.7 U	2.9 J	49	19 U	19 U	19 U	19 U	24 U	190 U	95 U
ICS-K-SE-3-113012	5.0	19 U	3.1 J	4.7 U	19 U	19 U	19 U	19 U	19 U	24 U	190 U	94 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	1,2,4-Trichloro- benzene 120-82-1 <u>µg/kg, dry</u>	Naphthalene 91-20-3 <u>µg/kg, dry</u>	4-Chloro-3- methylphenol 59-50-7 <u>µg/kg, dry</u>	2-Methyl- naphthalene 91-57-6 <u>µg/kg, dry</u>	2,4,5-Trichloro- phenol 95-95-4 <u>µg/kg, dry</u>	2-Chloro- naphthalene 91-58-7 <u>µg/kg, dry</u>	Dimethyl- phthalate 131-11-3 <u>µg/kg, dry</u>	Acenaph- thylene 208-96-8 <u>µg/kg, dry</u>	Acenaphthene 83-32-9 <u>µg/kg, dry</u>	Dibenzo-furan 132-64-9 <u>µg/kg, dry</u>
ICS-LP3-SO-D-101512	7.0	180	96 U	180	96 U	19 U	19 U	19 U	42	32
ICS-A-SE-6-112612	5.0 U	71	99 U	44	99 U	20 U	20 U	19 J	27	39
ICS-A-SE-7-112612	4.8 U	52	95 U	39	95 U	19 U	19 U	19 U	25	37
ICS-B-SE-4-112712	52	120	260 U	180	260 U	52 U	52 U	99	220	100
ICS-B-SE-6-112712	4.9 U	73	98 U	48	98 U	20 U	20 U	20 U	32	45
ICS-D-SE-5-112712	4.8 U	77	96 U	63	96 U	19 U	19 U	19 U	23	47
ICS-F-SE-2-112712	15 U	17,000	1500 U	62,000	1500 U	300 U	300 U	900	980	1600
ICS-F-SE-4-112712	4.9 U	72	98 U	120	98 U	20 U	20 U	20 U	22	38
ICS-I-SE-4-112812	4.8 U	56	97 U	19	97 U	19 U	19 U	19 U	290	40
ICS-J-SE-4-112812	4.7 U	53	95 U	43	95 U	19 U	19 U	24	19	24
ICS-K-SE-3-113012	3.8 J	19 U	94 U	13 J	94 U	19 U	19 U	19 U	18 J	17 J

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	2,6-Dinitro- toluene 606-20-2 µg/kg, dry	2,4-Dinitro- toluene 121-14-2 µg/kg, dry	Diethyl- phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl- phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi- phenylamine 86-30-6 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry	Pyrene 129-00-0 µg/kg, dry
ICS-LP3-SO-D-101512	96 U	96 U	39 J _B	19 U	53	4.8 U	72 J _Q	210	30	35	59	110	100
ICS-A-SE-6-112612	99 U	99 U	27 J _B	20 U	44	5.0 U	20 U	150	20 U	29	20 U	110	100
ICS-A-SE-7-112612	95 U	95 U	24 J _B	19 U	39	4.8 U	19 U	130	19 U	33	19 U	130	110
ICS-B-SE-4-112712	260 U	260 U	220	52 U	260	13 U	52 U	630	52 U	160	52 U	1700	980
ICS-B-SE-6-112712	98 U	98 U	20 J _B	20 U	54	4.9 U	20 U	170	20 U	28	20 U	130	110
ICS-D-SE-5-112712	96 U	96 U	19 U	19 U	40	4.8 U	19 U	140	19 U	34	19 U	140	120
ICS-F-SE-2-112712	1500 U	1500 U	300 U	300 U	5000	15 U	59 U	6800	300 U	440	300 U	860	740
ICS-F-SE-4-112712	98 U	98 U	35 J _B	20 U	42	4.9 U	20 U	130	20 U	24	20 U	100	93
ICS-I-SE-4-112812	97 U	97 U	80	19 U	59	4.8 U	19 U	67	19 U	25	19 U	130	130
ICS-J-SE-4-112812	95 U	95 U	42 J _B	19 U	21	4.7 U	19 U	90	19 U	20	19 U	87	89
ICS-K-SE-3-113012	94 U	94 U	86	19 U	12 J	4.7 U	19 U	34	19 U	15 J	19 U	36	76

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = associated value may be biased high due to contribution from laboratory background or method blank.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	Butylbenzyl- phthalate 85-68-7 <u>µg/kg, dry</u>	Benzo(a)- anthracene 56-55-3 <u>µg/kg, dry</u>	bis (2-Ethylhexyl)- phthalate 117-81-7 <u>µg/kg, dry</u>	Chrysene 218-01-9 <u>µg/kg, dry</u>	Di-n-octyl- phthalate 117-84-0 <u>µg/kg, dry</u>	total Benzo- fluoranthenes <u>µg/kg, dry</u>	Benzo(a)- pyrene 50-32-8 <u>µg/kg, dry</u>	Indeno(1,2,3- cd)pyrene 193-39-5 <u>µg/kg, dry</u>	Dibenz(a,h)- anthracene 53-70-3 <u>µg/kg, dry</u>	Benzo(g,h,i)- perylene 191-24-2 <u>µg/kg, dry</u>	LPAH <u>µg/kg, dry</u>	HPAH <u>µg/kg, dry</u>
ICS-LP3-SO-D-101512	43	46	270	54	19 U	78	40	22	19 U	26	520	476
ICS-A-SE-6-112612	8.2	30	50 U	47	20 U	56	20 U	20	20 U	31	340	394
ICS-A-SE-7-112612	6.6	35	48 U	47	19 U	59	19 U	18 J	19 U	24	279	423
ICS-B-SE-4-112712	13 U	280	2900	480	52 U	460	200	83	52 U	83	1489	4266
ICS-B-SE-6-112712	5.2	33	37 J	45	20 U	56	20 U	17 J	20 U	25	357	416
ICS-D-SE-5-112712	5.0	39	48 U	50	19 U	66	19 U	18 J	19 U	23	314	456
ICS-F-SE-2-112712	15 U	280 J	740 U	410	300 U	410 J	220 J	300 U	300 U	300 U	31,020	2920
ICS-F-SE-4-112712	4.9 U	29	49 U	37	20 U	51	20 U	15 J	20 U	20	290	345
ICS-I-SE-4-112812	9.5	42	48 U	45	19 U	80	19 U	18 J	19 U	22	497	467
ICS-J-SE-4-112812	48	19	47 U	23	19 U	34 J	19 U	19 U	19 U	10 J	227	262
ICS-K-SE-3-113012	5.1	31	120	67	19 U	56	22	19 U	19 U	19 U	79	288

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC (Lindane)	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	4,4'-DDE
	319-84-6 µg/kg, dry	319-85-7 µg/kg, dry	319-86-8 µg/kg, dry	58-89-9 µg/kg, dry	76-44-8 µg/kg, dry	309-00-2 µg/kg, dry	1024-57-3 µg/kg, dry	959-98-8 µg/kg, dry	60-57-1 µg/kg, dry	72-55-9 µg/kg, dry
ICS-LP3-SO-D-101512	2.4 U	2.4 U	2.4 U	2.4 U	6.5 U	2.4 U	28 U	2.4 U	17 U	50 J_p
ICS-A-SE-6-112612	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-A-SE-7-112612	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.77 U	0.96 U	0.48 U	0.96 U	0.96 U
ICS-B-SE-4-112712	39 U	250 U	39 U	110 U	110 U	39 U	110 U	39 U	78 U	52 U
ICS-B-SE-6-112712	0.50 U	1.1 U	1.3 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U
ICS-D-SE-5-112712	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U
ICS-F-SE-2-112712	5.1 U	14 U	7.4 U	5.9 U	7.2 U	4.1 U	12 U	6.6 U	6.7 U	13 U
ICS-F-SE-4-112712	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U
ICS-I-SE-4-112812	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	6.3 U	11 U	2.4 U	4.9 U	53 J_p
ICS-J-SE-4-112812	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.3 U	1.0 U	0.50 U	1.0 U	1.0 U
ICS-K-SE-3-113012	2.4 U	4.4 U	2.4 U	2.4 U	4.1 U	2.4 U	25 U	2.4 U	4.7 U	56 J_p

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	<i>trans</i> - Chlordane 5103-74-2 µg/kg, dry	<i>cis</i> - Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry
ICS-LP3-SO-D-101512	4.9 U	4.9 U	24 J_p	4.9 U	35 U	24 U	20 U	4.9 U	2.4 U	2.4 U	120 U
ICS-A-SE-6-112612	0.96 U	0.96 U	0.96 U	0.96 U	1.3 U	4.8 U	0.96 U	0.96 U	0.94 U	0.48 U	24 U
ICS-A-SE-7-112612	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U
ICS-B-SE-4-112712	550 U	78 U	52 U	78 U	52 U	390 U	510 U	78 U	39 U	39 U	2700 U
ICS-B-SE-6-112712	1.0 U	1.0 U	1.0 U	1.0 U	1.6 U	5.0 U	1.0 U	1.0 U	2.1 U	0.50 U	25 U
ICS-D-SE-5-112712	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	0.88 U	0.49 U	24 U
ICS-F-SE-2-112712	4.8 U	4.8 U	4.8 U	4.8 U	6.4 U	24 U	4.8 U	7.3 U	3.2 U	2.4 U	120 U
ICS-F-SE-4-112712	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U
ICS-I-SE-4-112812	4.9 U	4.9 U	6.8	4.9 U	9.7 U	24 U	4.9 U	4.9 U	10 U	2.4 U	120 U
ICS-J-SE-4-112812	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	4.1 U	1.0 U	1.5 U	0.50 U	25 U
ICS-K-SE-3-113012	4.7 U	4.7 U	29 J_p	4.7 U	33 U	24 U	25 U	4.7 U	14 U	2.4 U	120 U

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081).

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Supplemental Soil & Subsurface Sediment Analyses, October - November 2012

Field I.D.	Hexachloro- benzene 118-74-1 <u>µg/kg, dry</u>	Hexachloro- butadiene 87-68-3 <u>µg/kg, dry</u>	Aroclor 1016 12674-11-2 <u>µg/kg, dry</u>	Aroclor 1242 53469-21-9 <u>µg/kg, dry</u>	Aroclor 1248 12672-29-6 <u>µg/kg, dry</u>	Aroclor 1254 11097-69-1 <u>µg/kg, dry</u>	Aroclor 1260 11096-82-5 <u>µg/kg, dry</u>	Aroclor 1221 11104-28-2 <u>µg/kg, dry</u>	Aroclor 1232 11141-16-5 <u>µg/kg, dry</u>	total PCBs <u>µg/kg, dry</u>
ICS-LP3-SO-D-101512	4.9 U	4.9 U	39 U	39 U	460	380	210	39 U	39 U	1050
ICS-A-SE-6-112612	0.96 U	0.96 U	3.8 U	3.8 U	4.8 U	3.8 U	3.8 U	3.8 U	3.8 U	4.8 U
ICS-A-SE-7-112612	0.96 U	0.96 U	3.8 U	3.8 U	6.3 U	3.8 U	3.8 U	3.8 U	3.8 U	6.3 U
ICS-B-SE-4-112712	130 U	78 U	1500 U	1500 U	23,000	12,000	9100	1500 U	1500 U	44,100
ICS-B-SE-6-112712	1.0 U	1.0 U	4.0 U	4.0 U	5.6 U	4.0 U	4.0 U	4.0 U	4.0 U	5.6 U
ICS-D-SE-5-112712	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-F-SE-2-112712	4.8 U	4.8 U	3.8 U	3.8 U	130 U	160	170	3.8 U	3.8 U	330
ICS-F-SE-4-112712	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-I-SE-4-112812	4.9 U	4.9 U	3.9 U	3.9 U	70	46	27	3.9 U	3.9 U	143
ICS-J-SE-4-112812	1.0 U	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-K-SE-3-113012	4.7 U	4.7 U	38 U	38 U	760	590	260	38 U	38 U	1610

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: October 14, 2014

SUBJECT: Data Evaluation/Assessment for Six Surface Sediment Samples Collected during September 2014 from the ICS / [former] NW Cooperage Site, Seattle, WA

Six surface (0-10 cm depth) sediment samples were collected by Dalton, Olmsted & Fuglevand (DOF) staff on September 19, 2014 for the evaluation of sediment quality. Sediment samples were delivered in a single delivery group to Analytical Resources Inc. (ARI) of Tukwila, Washington within approximately 2 hours of collection. Samples were received on ice at 14.2 degrees C. All samples were maintained at the project laboratory at 4 degrees C prior to analyses. No chemical preservatives were specified nor required.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and [Draft Tech Memo] *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, prepared by DOF, October 3, 2014 to Washington State Department of Ecology. All analyses were performed by methods (or their equivalent) presented in Attachment D of the Tech Memo.

PCB's as Aroclors	SW846-M.8082	metals (exc Hg)	SW846-M.6010C
		Hg	SW846-M.7470A & M.7471A

Toxicity characteristic leaching procedure (TCLP by SW846-M.1311) metals and total (bulk) metals determinations were performed on all six sediments. TCLP metals were [anaerobically] extracted from sediments with 20x by weight of acetate-buffered extraction fluid at pH 4.93. The filtered extraction fluid was subsequently analyzed for the target metals in each leachate/extract. Method options employed for the analyses of PCB's included extraction by M.3580A, elemental sulfur (Sx) removal, strong acid cleanup, and silica gel cleanup steps.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Samples were received above the specified holding temperature of 4 degrees C, however, this is consequent to the short holding

time (2 hr) during transport where the samples did not have sufficient contact time with the ice to cool to the specified temperature. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Achievement of [lower] **reporting limits** consistent with specified-limits presented in the SAP (table SAP-3) and the sediment PQL goals are generally irrelevant for this data set, since these samples were selected to confirm elevated concentrations of contaminants reported in previous monitoring efforts. The reporting limits achieved for sediment concentrations are sufficient to meet the objectives of this monitoring effort. TCLP extract reporting limits for metals are sufficiently low for comparison to the applicable thresholds of concern.

Method blanks were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, and no data required qualification due to method blanks performance.

No field equipment **rinse blanks** were specified in the project SAP nor were any collected.

Recovery evaluation for PCB's were determined by the employment of surrogate compounds and laboratory control samples (**LCS/LCSD**). Two LCS/LCSD pairs were analyzed and reported recoveries of Aroclors 1016 and 1260 in the range of 73.2 – 97.2%. No matrix spike analyses were performed for PCB's analyses. Metals recovery performance in bulk sediments were assessed with a matrix spike (**MS**) and an LCS. The MS was performed on sediment sample SED1 and revealed a near 0% recovery for barium (Ba), and nonevaluable recoveries for chromium (Cr) and mercury (Hg) due to elevated native levels interfering with low spike concentrations. Metals (solid) LCS recoveries reported acceptable performance and Ba at 106%. Due to the apparent low recovery of the MS for Ba in SED1 (the sample reports a Ba concentration of 361 mg/kg), the associated result is qualified with the "J_R" code to indicate the matrix spike recovery is low and reported result is potentially biased low. TCLP extract recoveries for metals were evaluated with a single MS in sample extract SED1 and revealed acceptable performance for all analytes in the range of 102 – 110%. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exception noted above for barium in a single sample, requiring qualification of associated result as an estimate with the "J_R" code.

Surrogate compound recoveries (for organic analytes) were evaluated for PCB's. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of PCB's analytical performance. All surrogate compound performances were within specification (laboratory acceptance range = 30-160%), where measurable. The PCB's surrogate, DCBP, in SED2 and LDWSS84 showed immeasurable performance due to interference from small additional contributions from elevated levels of [native] Aroclor 1260 (Aroclor 1260 contains small amounts of DCBP). No qualification of results was required due to surrogate compounds performance.

No blind **field duplicate** samples were collected for the assessment of monitoring variability for this event.

Dual-column analyses were performed for PCB's (M.8082), as specified. Variability in responses between the two columns is specified to be less than 40% RPD for compound identification and assignment. No deviations from the specification were reported.

Sample results reported here are determined to be in general compliance with method, Tech Memo, and SAP requirements. All reported data for sediment samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Data Gap Analyses, September 2014

<u>Field I.D.</u>	<u>Matrix</u>	<u>Collection Date</u>	<u>Comments</u>	<u>Lab I.D.</u>	% solids	Arsenic 7440-38-2	Barium 7440-39-3	Cadmium 7440-43-9	Chromium 7440-47-3	Lead 7439-92-1
					<u>%</u>	<u>mg/kg, dry</u>	<u>mg/kg, dry</u>	<u>mg/kg, dry</u>	<u>mg/kg, dry</u>	<u>mg/kg, dry</u>
ICS-SED1-SE-091914	sediment	9/19/2014	0 - 10 cm	1419341-ZA94A	48	30 U	361 J_R	47	2940	6330
ICS-SED2-SE-091914	sediment	9/19/2014	0 - 10 cm	1419342-ZA94B	53	30	221	3.7	465	4080
ICS-LDWSS84-SE-091914	sediment	9/19/2014	0 - 10 cm	1419343-ZA94C	54	9 U	77.8	1.0	60.7	226
ICS-SED4-SE-091914	sediment	9/19/2014	0 - 10 cm	1419344-ZA94D	73	6 U	18.5	0.3 U	17.7	30
ICS-B5a2-SE-091914	sediment	9/19/2014	0 - 10 cm	1419345-ZA94E	62	8 U	49.7	0.6	55.5	136
ICS-DDS26-SE-091914	sediment	9/19/2014	0 - 10 cm	1419346-ZA94F	68	20 U	107	0.9	151	665

U = nondetected at the associated lower reporting limit.

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Data Gap Analyses, September 2014

Field I.D.	Mercury 7439-97-6 <u>mg/kg, dry</u>	Selenium 7782-49-2 <u>mg/kg, dry</u>	Silver 7440-22-4 <u>mg/kg, dry</u>	TCLP Arsenic 7440-38-2 <u>mg/L</u>	TCLP Barium 7440-39-3 <u>mg/L</u>	TCLP Cadmium 7440-43-9 <u>mg/L</u>	TCLP Chromium 7440-47-3 <u>mg/L</u>	TCLP Lead 7439-92-1 <u>mg/L</u>	TCLP Mercury 7439-97-6 <u>mg/L</u>	TCLP Selenium 7782-49-2 <u>mg/L</u>	TCLP Silver 7440-22-4 <u>mg/L</u>
ICS-SED1-SE-091914	61	30 U	5	0.2 U	1.39	0.01 U	0.03	0.1 U	0.0001 U	0.2 U	0.02 U
ICS-SED2-SE-091914	9.0	20 U	1 U	0.2 U	0.64	0.01 U	0.02 U	0.1 U	0.0001 U	0.2 U	0.02 U
ICS-LDWSS84-SE-091914	0.78	9 U	0.5 U	0.2 U	0.06	0.01 U	0.02 U	0.2	0.0001 U	0.2 U	0.02 U
ICS-SED4-SE-091914	0.06	6 U	0.4 U	0.2 U	0.02	0.01 U	0.02 U	0.1 U	0.0001 U	0.2 U	0.02 U
ICS-B5a2-SE-091914	0.18	8 U	0.5 U	0.2 U	0.18	0.01 U	0.02 U	0.6	0.0001 U	0.2 U	0.02 U
ICS-DDS26-SE-091914	0.47	20 U	1 U	0.2 U	0.22	0.01 U	0.02 U	0.2	0.0001 U	0.2 U	0.02 U

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Data Gap Analyses, September 2014

<u>Field I.D.</u>	Aroclor 1016 12674-11-2 <u>µg/kg, dry</u>	Aroclor 1242 53469-21-9 <u>µg/kg, dry</u>	Aroclor 1248 12672-29-6 <u>µg/kg, dry</u>	Aroclor 1254 11097-69-1 <u>µg/kg, dry</u>	Aroclor 1260 11096-82-5 <u>µg/kg, dry</u>	Aroclor 1221 11104-28-2 <u>µg/kg, dry</u>	Aroclor 1232 11141-16-5 <u>µg/kg, dry</u>	total PCBs <u>µg/kg, dry</u>
ICS-SED1-SE-091914	82,000 U	82,000 U	630,000	770,000	200,000	82,000 U	82,000 U	1,600,000
ICS-SED2-SE-091914	470 U	470 U	12,000	18,000	5500	470 U	470 U	35,500
ICS-LDWSS84-SE-091914	180 U	180 U	2000	2600	1800	180 U	180 U	6400
ICS-SED4-SE-091914								
ICS-B5a2-SE-091914								
ICS-DDS26-SE-091914								

U = nondetected at the associated lower reporting limit.



D.M.D., Inc.

Environmental & Toxicological Services

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: December 19, 2014

SUBJECT: Data Evaluation/Assessment for 10 Groundwaters Collected from Soil Push-Probes during November 2014 from the ICS / [former] NW Cooperage Site, Seattle, WA

Ten water samples developed from soil push-probes were collected by Dalton, Olmsted & Fuglevand (DOF) staff during November, 2014 for chemical characterization. All samples were delivered in five delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 21.5 hours of collection. Samples were received on ice at temperatures between 0.2 and 3.2 degrees C, and maintained at the project laboratory at 4 degrees C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Four trip/transport blanks were also submitted and analyzed for TPH-G and VOC's for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081B	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (excl Hg)	SW846-M.6010C	Hg (low-level)	SW846-M.7470A
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0
hexavalent chromium	SW846-M.7196A		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same extract) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. Anthracene reported from the analysis of groundwater from ICS-P12-W by

M.8270D (full-scan) did not satisfy all identification criteria at a level of 1.3 µg/L due to possible interference, whereas the analysis of the same extract by M.8270-SIM reported anthracene as not detected at 0.10 µg/L (U). The nondetected value is reported in the attached results table. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). A comparison of results from the two methods shows a detection of 1,4-dichlorobenzene at 1.4 µg/L by M.8260C and 0.9 J µg/L by M.8270D for ICS-P23-W; thus reporting results are generally comparable and consistent. The attached results table reports only the result from the VOC's analyses due to lower reporting limits. Naphthalene and hexachlorobutadiene (HCBD) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. A comparison of results from the two methods shows naphthalene at 0.50 U µg/L (nondetected) by M.8260C and 0.14 µg/L by M.8270D for ICS-P14-W, 3.3 B µg/L (potentially affected by blank contributions) by M.8260C and 1.4 µg/L by M.8270D (no data quality limitations) for ICS-P15-W, 2.5 U µg/L (nondetected) by M.8260C and 0.14 µg/L by M.8270D (no data quality limitations) for ICS-P12-W; thus reporting results for naphthalene (when detected) are generally comparable and consistent. The lower reporting limit for chlorinated phenols (2,4,6-trichlorophenol and pentachlorophenol) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA, with the exception of hexavalent chromium (Cr(VI)) in ICS-P27A-W and ICS-P27B-W. The recommended maximum holding time for Cr(VI) is 24 hours and the reported holding time for these analyses was 48 hours. Dissolved chromium (by Method 200.8) in the two samples was either nondetected or detected at the lower reporting limit (at 1 µg/L), indicating the reported nondetects (at 10 µg/L U) for Cr(VI) to be acceptable. A mislabel was noted on the C-O-C/Analytical Request form for ICS-P12-W while the sample vials were correctly labeled. Subsequent documentation was correctly labeled. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Some Aroclors (commercial PCB mixtures) were reported with slightly elevated reporting limits or nondetects due to elevated or busy baselines; specifically for sample ICS-P27B-W. Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

Analyte	Analysis date	Conc. (µg/L)
Hexachlorobutadiene (VOC's)	11-18-14	0.41
	11-20-14	0.37
	11-24-14	ND
Methylene chloride (VOC's)	11-18-14	ND
	11-20-14	0.89
	11-24-14	ND
n-Butylbenzene (VOC's)	11-18-14	0.11
	11-20-14	ND
	11-24-14	ND
Naphthalene (VOC's)	11-18-14	0.19
	11-20-14	ND
	11-24-14	ND
1,2,3-Trichlorobenzene (VOC's)	11-18-14	0.12
	11-20-14	0.19
	11-24-14	ND

No hexachlorobutadiene (HCBd) was detected in any of the project samples during analyses of VOC's by M.8260C. HCBd however was reported in the attached results table from the analyses of chlorinated pesticides by M.8081B due to lowered reporting limits. No n-butylbenzene or 1,2,3-trichlorobenzene was detected in any project samples. Naphthalene was not reported from the analyses performed by M.8260C (VOC's), therefore results did not require qualification. Methylene chloride was reported at 0.89 µg/L in one of the three method blanks analyzed. Methylene chloride was also reported as detected in project samples including the four trip/transport blanks. Further evaluation of methylene chloride in project samples is found in the following paragraph. A chloride continuing calibration blank (CCB) reported a detectable value on 11-12-14, however all associated sample results were greater than 10x the CCB value. With the exception of methylene chloride, no results required qualification due to method blanks performance.

No field equipment **rinsate blanks** were generated nor submitted for determination of potential bias associated with field activities. Four **trip/transport blanks** were generated and submitted for analysis and determination of potential contamination during handling of VOC's and TPH-G samples. Results of these analyses are reported in the attached table. Methylene chloride was reported up to 1.5 µg/L in trip/transport blanks; the greatest level reported for any project samples. Based on the levels of methylene chloride reported in laboratory method blanks and in the trip/transport blanks, all reported methylene chloride results are qualified with the "J_B" code as likely associated with sampling/analytical background.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. LCSD recoveries were reported greater than specified for dibromochloromethane and benzo(g,h,i)perylene (by M.8270-SIM) both at 124%, however, no dibromochloromethane or benzo(g,h,i)perylene was reported in any project samples. No associated data required qualification. MS recoveries for Aroclors 1016 and 1260 in ICS-P26-W were reported elevated at 152% and 140%, respectively. These elevated recoveries are believed to be associated with inadvertent double-spiking of the sample since the associated MSD recoveries are reported at one-half of these values. MS recoveries for total antimony (Sb) in

ICS-27A-W and ICS-P20-W are reported low at 71.6% and 69.6%, whereas the dissolved Sb matrix spike recoveries in samples from the same sample locations are within acceptable range (75-125%). MS recoveries for both total and dissolved silver (Ag) in ICS-P13-W were reported low at 48.4% and 49.6%, while associated LCS/LCSD recoveries were within acceptable range. Hexavalent chromium (Cr(VI)) matrix spike recoveries were consistently reported low (0-63%) in the dissolved phase for ICS-P11-W, ICS-P13-W, ICS-P14-W and ICS-P20-W. Post-digestion spikes confirmed presence of matrix interferences most likely chemical reductants preventing stability of oxidized chromium. Duplicate analyses of Cr(VI) in ICS-P13-W reported 15 µg/L and nondetect at 10 U µg/L; the associated total and dissolved chromium for the same sample reported 8 µg/L, which is less than the tentative value of 15 µg/L for Cr(VI). The nondetected result is reported in the attached results table. It is determined that sufficient matrix interferences and chemical reduction potential exists to prevent stability of any hexavalent chromium in project samples. No results required qualification of sample results due to noncompliant analyte recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBD] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM utilized the surrogate compounds d₁₀-2-methylnaphthalene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries were within specification, with the following exceptions: d₁₄-terphenyl at 25.2% in ICS-P12-W by M.8270D (acceptance range = 28-130%); and d₁₀-2-methylnaphthalene at 2.7% in ICS-P13-W by M.8270-SIM. Further check of surrogate recoveries in ICS-P13-W by M.8270D using the same extract analyzed by M.8270-SIM reveals acceptable recoveries for all surrogate compounds (47.6-75.7%). Noncompliant or out-of-range recoveries for single surrogate compounds within a chemical compound class do not require qualification of results. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses for 1,1,1,2-dichloroethane and hexachlorobutadiene (HCBD) by M.8260C and pentachlorophenol (PCP) by M.8270D. PCP was reported from analyses performed by M.8041 that exhibited acceptable QC measurements, and the affected VOC analytes were all reported as nondetected. No results required further qualification due to CCV or CCAL performance.

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in a sample from ICS-P15-W. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; weathered gasoline.

U.S. Environmental Protection Agency (EPA) Solid Waste Methods, SW846 Section 4.1.2 identifies acid preservation for aqueous samples containing highly reactive compounds, e.g., styrene and vinyl chloride, as inappropriate due to possible loss by polymerization or other rapid chemical reaction. Due to the broad spectrum analysis requirements for this project, acid preservation to pH < 2 of aqueous samples was implemented. Quality control measurements for this project, such as MS/MSD recoveries for all analytes including styrene and vinyl chloride, revealed acceptable recoveries. Also, vinyl chloride was generally detected and reported for samples containing known reaction precursors. While quality control measures indicate that vinyl chloride and styrene results are valid, it is recommended that additional effort be directed to assessing the validity of application of acid preservation for project samples. This effort would include the analyses of site groundwater samples known or suspect to contain vinyl chloride (and possibly styrene) by collection and analysis of both acid-preserved and nonpreserved samples after 3-4 day and 1-week holding times. This activity could be performed along with the scheduled monitoring of site monitoring wells.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for ground water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7		Cadmium 7440-43-9		Calcium 7440-70-2
					mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424581-ZJ93A	3790	489		0.5 U		3		0.5 U		0.2 U	69,600
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424583-ZJ93C			0.5 U		3		0.5 U		0.2 U		
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424582-ZJ93B	5170	3.5		3.5		11		0.6		1.2	553,000
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424584-ZJ93D			0.5 U		2		0.5 U		0.2 U		
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424585-ZJ94A											
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424587-ZJ94C											
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424586-ZJ94B											
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424588-ZJ94D											
ICS-P20-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424610-ZK08A	16	143		0.2 U		3.6		0.2 U		0.1 U	201,000
ICS-P20-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424613-ZK08D			0.2 U		1.6		0.2 U		0.1 U		
ICS-P23-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424611-ZK08B	34.6	47.2		0.5		4.1		0.2 U		0.1 U	67,400
ICS-P23-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424614-ZK08E			0.5		3.3		0.2 U		0.1 U		
Trip Blank	water	11/12/2014	trip/transport blank	1424612-ZK08C											
ICS-P20-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424615-ZK09A											
ICS-P20-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424617-ZK09C											
ICS-P23-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424616-ZK09B											
ICS-P23-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424618-ZK09D											
ICS-P13-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424765-ZK31A	58.3	0.7		0.5 U		11.4		0.2 U		0.2 U	16,000
ICS-P13-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424768-ZK31D			0.5 U		11.1		0.2 U		0.2 U		
ICS-P26-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424766-ZK31B	5620	589		1 U		14		1 U		0.5 U	184,000
ICS-P26-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424769-ZK31E			1 U		15		1 U		0.5 U		
Trip Blank	water	11/13/2014	trip/transport blank	1424767-ZK31C											
ICS-P13-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424770-ZK32A											
ICS-P13-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424772-ZK32C											
ICS-P26-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424771-ZK32B											
ICS-P26-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424773-ZK32D											
ICS-P14-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424921-ZK48A	514	1.2		0.2 U		0.8		0.5		0.1 U	48,000
ICS-P14-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424924-ZK48D			0.2 U		0.4		0.5		0.1 U		
ICS-P15-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424922-ZK48B	251	11.4		1.0		12.6		0.5 U		0.1 U	13,300
ICS-P15-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424925-ZK48E			0.8		12.3		0.5 U		0.1 U		
Trip Blank	water	11/14/2014	trip/transport blank	1424923-ZK48C											
ICS-P14-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424926-ZK49A											
ICS-P14-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424928-ZK49C											
ICS-P15-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424927-ZK49B											
ICS-P15-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424929-ZK49D											
ICS-P11-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424978-ZK73A	12.1	2.9		0.5 U		28.0		0.5 U		0.2 U	15,400
ICS-P11-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424981-ZK73D			0.5 U		28.6		0.5 U		0.2 U		
ICS-P12-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424979-ZK73B	73.9	1.0 U		1 U		27		1 U		0.5 U	27,800
ICS-P12-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424982-ZK73E			1 U		28		1 U		0.5 U		
Trip Blank	water	11/17/2014	trip/transport blank	1424980-ZK73C											
ICS-P11-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424983-ZK74A											
ICS-P11-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424985-ZK74C											
ICS-P12-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424984-ZK74B											
ICS-P12-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424986-ZK74D											

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Chromium 7440-47-3		Hexavalent Chromium	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness mg-CaCO ₃ /L
	diss. µg/L	total µg/L		diss. µg/L	total µg/L	diss. µg/L	total µg/L		diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L		diss. µg/L	total µg/L	
ICS-P27A-W-111114		8			12		1.8	173,000				7		0.5 U	2,460,000		20	890
ICS-P27A-W-111114	1		10 U	2		0.2 U					2		0.5 U			10 U		
ICS-P27B-W-111114		57			116		197	639,000				46		0.7	2,000,000		320	4000
ICS-P27B-W-111114	1 U		10 U	2		0.2 U					14		0.5 U			30		
ICS-P27A-W-111114									20.0 U									
ICS-P27A-W-111114									20.0 U	182								
ICS-P27B-W-111114									20.0 U									
ICS-P20-W-111214		6			14		1.6	46,800				14		0.2 U	34,800		20	690
ICS-P20-W-111214	0.5 U		10 U	1.0		0.1 U					2.0		0.2 U			4 U		
ICS-P23-W-111214		2.1			4		0.6	44,900				5		0.2 U	22,200		10	350
ICS-P23-W-111214	0.5 U		10 U	0.5 U		0.1 U					1.4		0.2 U			5		
Trip Blank																		
ICS-P20-W-111214									20.0 U									
ICS-P20-W-111214									20.0 U									
ICS-P23-W-111214									20.0 U									
ICS-P23-W-111214									20.0 U									
ICS-P13-W-111314		8			4.3		0.7	13,600				3.5		0.5 U	186,000		10	96
ICS-P13-W-111314	8		10 U	0.8		0.1					3.5		0.5 U			9		
ICS-P26-W-111314		3			4		0.6	415,000				6		1 U	3,200,000		20 U	2200
ICS-P26-W-111314	2 U		10 U	3		0.5 U					6		1 U			20 U		
Trip Blank																		
ICS-P13-W-111314									20.0 U									
ICS-P13-W-111314									20.0 U									
ICS-P26-W-111314									20.0 U									
ICS-P26-W-111314									20.0 U									
ICS-P14-W-111414		5			2.0		7.0	18,100				1.8		0.2 U	124,000		12	190
ICS-P14-W-111414	2 U		10 U	0.5 U		0.3					1.5		0.2 U			6		
ICS-P15-W-111414		10			2.2		3.3	2470				5.1		0.2 U	431,000		7	43
ICS-P15-W-111414	10		12 U	0.5 U		0.1					4.8		0.2 U			4 U		
Trip Blank																		
ICS-P14-W-111414									20.0 U									
ICS-P14-W-111414									20.0 U									
ICS-P15-W-111414									20.0 U									
ICS-P15-W-111414									20.0 U									
ICS-P11-W-111714		3			1.7		1.5	20,000				1.7		0.5 U	70,200		5	120
ICS-P11-W-111714	3		10 U	0.6		0.1 U					1.6		0.5 U			4		
ICS-P12-W-111714		20			5		1.1	18,800				6		1 U	314,000		10 U	150
ICS-P12-W-111714	22		10 U	3		0.4					5		1 U			10 U		
Trip Blank																		
ICS-P11-W-111714									20.0 U									
ICS-P11-W-111714									20.0 U									
ICS-P12-W-111714									20.0 U									
ICS-P12-W-111714									20.0 U									

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-P27A-W-111114	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.53 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.66 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27B-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.85 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41	0.20 U
ICS-P20-W-111214															
ICS-P23-W-111214	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.94 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U
ICS-P23-W-111214															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.5 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P13-W-111314	0.25 U	0.12	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P13-W-111314															
ICS-P26-W-111314	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.78 J_B	5.0 U	0.10 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P26-W-111314															
Trip Blank	0.25 U			0.10 J	1.0 U	0.20 U	0.20 U	1.4 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P14-W-111414	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	2.1	0.20 U	1.2 J_B	15	0.20 U	0.20 U	1.5	1.1	23	0.20 U
ICS-P14-W-111414															
ICS-P15-W-111414	1.8	0.17	0.20 U	2.5 U	5.0 U	8.8	15	5.0 U	25 U	1.0 U	1.0 U	69	6.0	11	1.0 U
ICS-P15-W-111414															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.5 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P11-W-111714	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65 J	1.0 U
ICS-P11-W-111714															
ICS-P12-W-111714	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	0.60 J	0.90 J	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P12-W-111714															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.3 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															

** bold-typed values resemble corresponding petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-P27A-W-111114	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P27B-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P20-W-111214															
ICS-P23-W-111214	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P23-W-111214															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P13-W-111314	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	25 U
ICS-P13-W-111314															
ICS-P26-W-111314	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P26-W-111314															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P14-W-111414	0.14 J	3.9 J	0.20 U	0.20 U	0.20 U	0.19 J	0.20 U	0.60	0.20 U	0.20 U	3.1	0.20 U	0.20 U	6.2	5.0 U
ICS-P14-W-111414															
ICS-P15-W-111414	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	8.2	1.0 U	1.0 U	25 U	25 U
ICS-P15-W-111414															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P11-W-111714	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 U	25 U	25 U
ICS-P11-W-111714															
ICS-P12-W-111714	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	48	1.0 U	1.0 U	25 U	25 U
ICS-P12-W-111714															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field ID.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/L	<i>o</i> -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P27A-W-111114																
ICS-P27B-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P27B-W-111114																
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P20-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P20-W-111214																
ICS-P23-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	1.4	5.0 U	0.20 U	0.20 U
ICS-P23-W-111214																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P20-W-111214																
ICS-P20-W-111214																
ICS-P23-W-111214																
ICS-P23-W-111214																
ICS-P13-W-111314	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P13-W-111314																
ICS-P26-W-111314	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P26-W-111314																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P26-W-111314																
ICS-P26-W-111314																
ICS-P14-W-111414	0.20 U	0.20 U	7.8	0.20 U	0.72	0.20 U	0.20 U	0.20 U	2.0	1.0	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P14-W-111414																
ICS-P15-W-111414	1.0 U	1.0 U	22	1.0 U	87	1.0 U	1.0 U	1.0 U	150	39	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P15-W-111414																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P15-W-111414																
ICS-P15-W-111414																
ICS-P11-W-111714	1.0 U	1.0 U	1.8	1.0 U	15	1.0 U	1.0 U	1.0 U	4.2	1.2	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P11-W-111714																
ICS-P12-W-111714	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.4 J	1.0 U	0.50 J	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P12-W-111714																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P12-W-111714																
ICS-P12-W-111714																

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27B-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P20-W-111214															
ICS-P23-W-111214	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P23-W-111214															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P13-W-111314	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P26-W-111314															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P14-W-111414	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414															
ICS-P15-W-111414	1.0 U	1.0 U	2.5 U	5.0 U	12	36	1.0 U	1.0 U	1.0 U	1.0 U	2.4	2.8	1.0 U	1.0 U	1.0 U
ICS-P15-W-111414															
ICS-P15-W-111414															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P11-W-111714	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P11-W-111714															
ICS-P12-W-111714	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	0.55 J	1.0 U	1.0 U	1.0 U
ICS-P12-W-111714															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P27A-W-111114													
ICS-P27B-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P27B-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P20-W-111214													
ICS-P23-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P23-W-111214													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214													
ICS-P23-W-111214													
ICS-P13-W-111314	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	8.3	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P13-W-111314													
ICS-P26-W-111314	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P26-W-111314													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P14-W-111414	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	20	1.0 U	2.0 U	4.1	150	1.0 U	2.0 U
ICS-P14-W-111414													
ICS-P15-W-111414	1.0 U	1.0 U	5.2	1.0 U	2.5 U	2.5 U	2.5	1.0 U	2.0 U	36	32	1.0 U	2.0 U
ICS-P15-W-111414													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P11-W-111714	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P11-W-111714													
ICS-P12-W-111714	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P12-W-111714													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714													
ICS-P12-W-111714													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L
ICS-P27A-W-111114	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P27A-W-111114													
ICS-P27B-W-111114	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P27B-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P20-W-111214													
ICS-P23-W-111214	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P23-W-111214													
Trip Blank													
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214													
ICS-P23-W-111214													
ICS-P13-W-111314	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P13-W-111314													
ICS-P26-W-111314	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P26-W-111314													
Trip Blank													
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P14-W-111414	1.0 U	1.0 U	4.2	18 J	3.0 U	0.14	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.12
ICS-P14-W-111414													
ICS-P15-W-111414	1.0 U	1.0 U	65	7.3 J	3.0 U	1.4	3.0 U	1.7	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P15-W-111414													
Trip Blank													
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P11-W-111714	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.57	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P11-W-111714													
ICS-P12-W-111714	1.0 U	1.0 U	3.0 U	5.3 J	3.0 U	0.14	3.0 U	3.1	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P12-W-111714													
Trip Blank													
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714													
ICS-P12-W-111714													

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Hexachloro- benzene 118-74-1 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L
ICS-P27A-W-111114	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.42	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P27B-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P20-W-111214															
ICS-P23-W-111214	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P23-W-111214															
Trip Blank															
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P13-W-111314	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P13-W-111314															
ICS-P26-W-111314	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P26-W-111314															
Trip Blank															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P14-W-111414	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P14-W-111414															
ICS-P15-W-111414	0.46	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.11	1.0 U	1.0 U	0.78	0.10 J	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P15-W-111414															
Trip Blank															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P11-W-111714	0.15	0.09 J	3.0 U	3.0 U	1.0 U	1.0 U	0.18	1.0 U	1.0 U	0.36	0.29	1.0 U	0.10 U	1.0 U	0.06 J
ICS-P11-W-111714															
ICS-P12-W-111714	0.07 J	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P12-W-111714															
Trip Blank															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-P27A-W-111114	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P27A-W-111114													
ICS-P27B-W-111114	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P27B-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P20-W-111214													
ICS-P23-W-111214	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P23-W-111214													
Trip Blank													
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214													
ICS-P23-W-111214													
ICS-P13-W-111314	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P13-W-111314													
ICS-P26-W-111314	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P26-W-111314													
Trip Blank													
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P14-W-111414	0.10 U	1.0 U	0.10 U	10	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.26	0.10 U
ICS-P14-W-111414													
ICS-P15-W-111414	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.07	0.10 U
ICS-P15-W-111414													
Trip Blank													
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P11-W-111714	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.19	0.10 U
ICS-P11-W-111714													
ICS-P12-W-111714	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21	0.10 U
ICS-P12-W-111714													
Trip Blank													
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714													
ICS-P12-W-111714													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field ID	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-P27A-W-111114	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P27A-W-111114																
ICS-P27B-W-111114	0.0025 U	0.0029 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.036	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P27B-W-111114																
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P20-W-111214	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P20-W-111214																
ICS-P23-W-111214	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0026 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P23-W-111214																
Trip Blank																
ICS-P20-W-111214																
ICS-P20-W-111214																
ICS-P23-W-111214																
ICS-P23-W-111214																
ICS-P13-W-111314	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P13-W-111314																
ICS-P26-W-111314	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P26-W-111314																
Trip Blank																
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P26-W-111314																
ICS-P26-W-111314																
ICS-P14-W-111414	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P14-W-111414																
ICS-P15-W-111414	0.0042 U	0.0083 U	0.0025 U	0.0025 U	0.011 U	0.0037 U	0.0058 U	0.0068 U	0.0050 U	0.011 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P15-W-111414																
Trip Blank																
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P15-W-111414																
ICS-P15-W-111414																
ICS-P11-W-111714	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P11-W-111714																
ICS-P12-W-111714	0.0025 U	0.0040 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.016 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P12-W-111714																
Trip Blank																
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P12-W-111714																
ICS-P12-W-111714																

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November 2014

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-P27A-W-111114	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.0050 U	0.0050 U	0.0087	0.010	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.015 U	0.025 U	0.016	0.010 U	0.010 U	0.025 U
ICS-P27B-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P20-W-111214															
ICS-P23-W-111214	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P23-W-111214															
Trip Blank															
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P13-W-111314	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.016	0.017	0.010 U	0.010 U	0.033
ICS-P13-W-111314															
ICS-P26-W-111314	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.012 U	0.020	0.010 U	0.010 U	0.020
ICS-P26-W-111314															
Trip Blank															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P14-W-111414	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P14-W-111414															
ICS-P15-W-111414	0.0050 U	0.0050 U	0.0098 U	0.0054 U	0.25 U	0.0058 U	0.0070 U	0.010 U	0.010 U	0.012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.012 U
ICS-P15-W-111414															
Trip Blank															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P11-W-111714	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P11-W-111714															
ICS-P12-W-111714	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.0060 J	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P12-W-111714															
Trip Blank															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: February 4, 2015

SUBJECT: Data Evaluation/Assessment for 23 Groundwaters Collected from Soil Push-Probes during November-December 2014 from the ICS / [former] NW Cooperage Site, Seattle, WA

Twenty-three water samples developed from soil push-probes were collected by Dalton, Olmsted & Fuglevand (DOF) staff during November and December, 2014 for chemical characterization. All samples were delivered in ten delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 22.5 hours of collection. Samples were received on ice at temperatures between 0.2 and 5.9 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Nine trip/transport blanks were also submitted and analyzed for TPH-G and VOC's for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081B	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (excl Hg)	SW846-M.6010C	Hg (low-level)	SW846-M.7470A
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0
hexavalent chromium	SW846-M.7196A		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same extract) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. Anthracene reported from the analysis of groundwater from

ICS-P12-W-111714 by M.8270D (full-scan) did not satisfy all identification criteria at a level of 1.3 µg/L due to possible interference, whereas the analysis of the same extract by M.8270-SIM reported anthracene as not detected at 0.10 µg/L (U). The nondetected value is reported in the attached results table. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). A comparison of results from the two methods shows a detection of 1,4-dichlorobenzene at 1.4 µg/L by M.8260C and 0.9 J µg/L by M.8270D for ICS-P23-W-111214; thus reporting results are generally comparable and consistent. The attached results table reports only the results for the dichloro- and trichloro-benzenes from the VOC's analyses due to lower reporting limits. Naphthalene and hexachlorobutadiene (HCB) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. A comparison of results from the two methods shows naphthalene at 0.50 U µg/L (nondetected) by M.8260C and 0.14 µg/L by M.8270D for ICS-P14-W-111414, 3.3 B µg/L (potentially affected by blank contributions) by M.8260C and 1.4 µg/L by M.8270D (no data quality limitations) for ICS-P15-W-111414, 2.5 U µg/L (nondetected) by M.8260C and 0.14 µg/L by M.8270D (no data quality limitations) for ICS-P12-W-111714; thus reporting results for naphthalene (when detected) are generally comparable and consistent. Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081B, while only the results generated by M.8081B are retained here due to significantly reduced reporting limits. The lower reporting limit for chlorinated phenols (2,4,6-trichlorophenol and pentachlorophenol) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA, with the exception of hexavalent chromium (Cr(VI)) in ICS-P27A-W-111114 and ICS-P27B-W-111114. The recommended maximum holding time for Cr(VI) is 24 hours and the reported holding time for these analyses was 48 hours. Dissolved chromium (by Method 200.8) in the two samples was either nondetected or detected at the lower reporting limit (at 1 µg/L), indicating the reported nondetects (at 10 µg/L U) for Cr(VI) to be acceptable. A mislabel was noted on the C-O-C/Analytical Request form for ICS-P12-W-111714 while the sample vials were correctly labeled. Subsequent documentation was correctly labeled. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Some Aroclors (commercial PCB mixtures) were reported with slightly elevated reporting limits or nondetects due to elevated or busy baselines; specifically for sample ICS-P27B-W-111114. Several samples, such as ICS-P29-W-121014 and ICS-P32-W-A-121514, exhibited elevated pesticide reporting limits due to interferences associated with the presence of PCB's. Other samples, such as ICS-P18-W-A-121614, ICS-P21-W-A-120814, ICS-P29-W-121014 and ICS-P31-W-120914,

exhibited background interferences and elevated chromatographic baselines during the analyses of the chlorinated pesticides resulting in elevated reporting limits. This also resulted in the qualification of selected results with the “J_p” qualifier code due to variability in the dual column confirmation analyses (> 40RPD [relative percent difference] in dual-column quantitative confirmation for pesticide analytes). Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the “J” qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

Analyte	Analysis date	Conc. (µg/L)
Hexachlorobutadiene (VOC's)	11-18-14	0.41
	11-20-14	0.37
	11-24-14	ND
	12-15-14	ND
	12-17-14	ND
	12-23-14	0.40
Methylene chloride (VOC's)	11-18-14	ND
	11-20-14	0.89
	11-24-14	ND
	12-15-14	0.65
	12-17-14	ND
	12-23-14	0.66
n-Butylbenzene (VOC's)	11-18-14	0.11
	11-20-14	ND
	11-24-14	ND
	12-15-14	ND
	12-17-14	ND
	12-23-14	ND
Naphthalene (VOC's)	11-18-14	0.19
	11-20-14	ND
	11-24-14	ND
	12-15-14	ND
	12-17-14	ND
	12-23-14	0.26
1,2,3-Trichlorobenzene (VOC's)	11-18-14	0.12
	11-20-14	0.19
	11-24-14	ND
	12-15-14	ND
	12-17-14	ND
	12-23-14	ND

No hexachlorobutadiene (HCBd) was detected in any of the project samples during analyses of VOC's by M.8260C. HCBd however was reported in the attached results table from the analyses of chlorinated pesticides by M.8081B due to lowered reporting limits. No n-butylbenzene or 1,2,3-trichlorobenzene was detected in any project samples. Naphthalene was not reported from the analyses performed by M.8260C (VOC's), therefore results did not require qualification. Methylene chloride was reported at up to 0.89 µg/L in the six method blanks analyzed. Methylene chloride was also reported as detected in project samples including the

nine trip/transport blanks. Further evaluation of methylene chloride in project samples is found in the following paragraph. A chloride continuing calibration blank (CCB) reported a detectable value on 11-12-14, however all associated sample results were greater than 10x the CCB value. A method blank for sample delivery group ZO26 reported presence of silver at 0.6 µg/L for total metals, however no silver is reported as detected in associated samples. With the exception of methylene chloride, no results required qualification due to method blanks performance.

No field equipment **rinsate blanks** were generated nor submitted for determination of potential bias associated with field activities. Nine **trip/transport blanks** were generated and submitted for analysis and determination of potential contamination during handling of VOC's and TPH-G samples. Results of these analyses are reported in the attached table. Methylene chloride was reported up to 1.9 µg/L in trip/transport blanks; the greatest level reported for any project samples. Based on the levels of methylene chloride reported in laboratory method blanks and trip/transport blanks, all reported methylene chloride results are qualified with the "J_B" code as likely associated with sampling/analytical background.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. LCSD recoveries were reported greater than specified for dibromochloromethane and benzo(g,h,i)perylene (by M.8270-SIM) both at 124%, however, no dibromochloromethane or benzo(g,h,i)perylene was reported in associated samples. MS recoveries for N-nitrosodiphenylamine, 2,4-dimethylphenol and fluorene by M.8270D (fullscan) were reported in the range of 26-44%, however these analytes were reported by M.8270D-SIM where the recoveries were within acceptable range. No associated data required qualification. MS recoveries for Aroclors 1016 and 1260 in ICS-P26-W-111314 were reported elevated at 152% and 140%, respectively. These elevated recoveries are believed to be associated with inadvertent double-spiking of the sample since the associated MSD recoveries are reported at one-half of these values. MS/MSD recoveries for Aroclor 1016 in ICS-P32-W-A-121514 are reported at greater than 600%, whereas the recoveries for Aroclor 1260 in the same analysis were reported at 74% and 128%. The elevated recoveries for Aroclor 1016 are due to overlapping and interfering peaks from the relatively high levels of native Aroclor 1248 present. Aroclors 1016 and 1260 MS/MSD recoveries in ICS-P21-W-A-120814 were immeasurable due to the high native levels of PCB's overwhelming the low spike levels. No organic analyte results required qualification due to noncompliant LCS/LCSD and MS/MSD recoveries.

MS recoveries for total antimony (Sb) in ICS-P16-W-121014, ICS-P18-W-A-121614, ICS-27A-W-111114, ICS-P20-W-111214 and ICS-P28-W-A-121514 are reported low in the range of 34 - 72%, whereas the dissolved Sb matrix spike recoveries in samples from the same sample locations are within acceptable range (75-125%). MS recoveries for both total and dissolved silver (Ag) in ICS-P13-W-111314 were reported low at 48.4% and 49.6%, while associated LCS/LCSD recoveries were within acceptable range. Similarly, MS recoveries for both total and dissolved silver (Ag) in ICS-P21-W-A-120814 were reported low at 35% and 59%, while associated LCS/LCSD recoveries were within acceptable range. Silver was only reported as detected in two samples (as total, not dissolved). Hexavalent chromium (Cr(VI)) matrix spike recoveries were consistently reported low (0-63%) in the dissolved phase for ICS-P11-W-111714, ICS-P13-W-111314, ICS-P14-W-111414, ICS-P16-W-121014, ICS-P18-W-A-121614,

ICS-P20-W-111214, ICS-P21-W-A-120814 and ICS-P28-W-121514. Post-digestion spikes confirmed presence of matrix interferences most likely chemical reductants preventing stability of oxidized chromium [Cr(VI)]. Duplicate analyses of Cr(VI) in ICS-P13-W-111314 reported 15 µg/L and nondetect at 10 U µg/L; the associated total and dissolved chromium for the same sample reported 8 µg/L, which is less than the tentative value of 15 µg/L for Cr(VI). The nondetected result for ICS-P13-W-111314 is reported in the attached results table. Sufficient interferences exist in Cr(VI) determinations to report “apparent detected” values greater than the result for dissolved chromium, which is impossible because Cr(VI) is measured in filtered samples. It is also determined that sufficient matrix interferences and chemical reduction potential exists to prevent stability of any hexavalent chromium in project samples. While the normal reporting limit for Cr(VI) analyses is 10 µg/L, all reported detects of Cr(VI) are qualified as nondetects at the associated reported values with the “U” qualifier code. With the exception of hexavalent chromium[Cr(VI)], no other results required qualification of sample results due to noncompliant analyte recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC’s, SVOC’s, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBD] and hexachlorobenzene [HCB]), PCB’s, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC’s recovery performance (d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB’s analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH’s by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries were within specification, with the following exceptions: d₁₄-terphenyl at 25.2% in ICS-P12-W-111714 by M.8270D (acceptance range = 28-130%); and d₁₀-2-methylnaphthalene at 2.7% in ICS-P13-W-111314 by M.8270-SIM. Further check of surrogate recoveries in ICS-P13-W-111314 by M.8270D using the same extract analyzed by M.8270D-SIM reveals acceptable recoveries for all surrogate compounds (47.6-75.7%). Noncompliant or out-of-range recoveries for single surrogate compounds within a chemical compound class do not require qualification of results. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses (CCV RPD compared to initial calibration responses > 20) for 1,1,1,2-dichloroethane, chloromethane, bromomethane, vinyl chloride, 1,1-dichloroethene, carbon disulfide, 2-butanone, trichlorofluoromethane and hexachlorobutadiene (HCBD) by M.8260C, and indeno(1,2,3-cd)pyrene, benzo(g,h,i)perylene and pentachlorophenol (PCP) by M.8270D. PCP was reported from analyses performed by M.8041 that exhibited acceptable QC measurements, the potentially affected PAH’s were reported from the M.8270D-SIM method where QC performance was acceptable, and the affected VOC analytes were all reported as nondetected, with the exception of vinyl chloride in ICS-P21-W-A-120814. The affected vinyl

chloride result is qualified as an estimate with the “J_Q” qualifier code. No other results required qualification due to CCV or CCAL performance.

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in a sample from ICS-P15-W-111414, diesel fuel in ICS-P21-W-A-120814 and ICS-P30-W-120914, and motor oil lube in ICS-P29-W-121014. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; as summarized above.

U.S. Environmental Protection Agency (EPA) Solid Waste Methods, SW846 Section 4.1.2 identifies acid preservation for aqueous samples containing highly reactive compounds, e.g., styrene and vinyl chloride, as inappropriate due to possible loss by polymerization or other rapid chemical reaction. Due to the broad spectrum analysis requirements for this project, acid preservation to pH < 2 of aqueous samples was implemented. Quality control measurements for this project, such as MS/MSD recoveries for all analytes including styrene and vinyl chloride, revealed acceptable recoveries. Also, vinyl chloride was generally detected and reported for samples containing known reaction precursors. While quality control measures indicate that vinyl chloride and styrene results are valid, it is recommended that additional effort be directed to assessing the validity of application of acid preservation for project samples. This effort would include the analyses of site groundwater samples known or suspect to contain vinyl chloride (and possibly styrene) by collection and analysis of both acid-preserved and nonpreserved samples after 3-4 day and 1-week holding times. This activity could be performed along with the scheduled monitoring of site monitoring wells.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for ground water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7		Cadmium 7440-43-9		Calcium 7440-70-2	
					mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424581-ZJ93A	3790	489		0.5 U		3		0.5 U		0.2 U		69,600
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424585-ZJ94A												
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424583-ZJ93C			0.5 U		3		0.5 U		0.2 U			
ICS-P27A-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424587-ZJ94C												
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424582-ZJ93B	5170	3.5		3.5		11		0.6		1.2		553,000
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	nonfiltered	1424586-ZJ94B												
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424584-ZJ93D			0.5 U		2		0.5 U		0.2 U			
ICS-P27B-W-111114	GW-pushprobe	11/11/2014	field-filtered, 0.45 µm	1424588-ZJ94D												
ICS-P20-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424610-ZK08A	16	143		0.2 U		3.6		0.2 U		0.1 U		201,000
ICS-P20-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424615-ZK09A												
ICS-P20-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424613-ZK08D			0.2 U		1.6		0.2 U		0.1 U			
ICS-P20-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424617-ZK09C												
ICS-P23-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424611-ZK08B	34.6	47.2		0.5		4.1		0.2 U		0.1 U		67,400
ICS-P23-W-111214	GW-pushprobe	11/12/2014	nonfiltered	1424616-ZK09B												
ICS-P23-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424614-ZK08E			0.5		3.3		0.2 U		0.1 U			
ICS-P23-W-111214	GW-pushprobe	11/12/2014	field-filtered, 0.45 µm	1424618-ZK09D												
Trip Blank	water	11/12/2014	trip/transport blank	1424612-ZK08C												
ICS-P13-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424765-ZK31A	58.3	0.7		0.5 U		11.4		0.2 U		0.2 U		16,000
ICS-P13-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424770-ZK32A												
ICS-P13-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424768-ZK31D			0.5 U		11.1		0.2 U		0.2 U			
ICS-P13-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424772-ZK32C												
ICS-P26-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424766-ZK31B	5620	589		1 U		14		1 U		0.5 U		184,000
ICS-P26-W-111314	GW-pushprobe	11/13/2014	nonfiltered	1424771-ZK32B												
ICS-P26-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424769-ZK31E			1 U		15		1 U		0.5 U			
ICS-P26-W-111314	GW-pushprobe	11/13/2014	field-filtered, 0.45 µm	1424773-ZK32D												
Trip Blank	water	11/13/2014	trip/transport blank	1424767-ZK31C												
ICS-P14-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424921-ZK48A	514	1.2		0.2 U		0.8		0.5		0.1 U		48,000
ICS-P14-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424926-ZK49A												
ICS-P14-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424924-ZK48D			0.2 U		0.4		0.5		0.1 U			
ICS-P14-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424928-ZK49C												
ICS-P15-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424922-ZK48B	251	11.4		1.0		12.6		0.5 U		0.1 U		13,300
ICS-P15-W-111414	GW-pushprobe	11/14/2014	nonfiltered	1424927-ZK49B												
ICS-P15-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424925-ZK48E			0.8		12.3		0.5 U		0.1 U			
ICS-P15-W-111414	GW-pushprobe	11/14/2014	field-filtered, 0.45 µm	1424929-ZK49D												
Trip Blank	water	11/14/2014	trip/transport blank	1424923-ZK48C												
ICS-P11-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424978-ZK73A	12.1	2.9		0.5 U		28.0		0.5 U		0.2 U		15,400
ICS-P11-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424983-ZK74A												
ICS-P11-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424981-ZK73D			0.5 U		28.6		0.5 U		0.2 U			
ICS-P11-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424985-ZK74C												
ICS-P12-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424979-ZK73B	73.9	1.0 U		1 U		27		1 U		0.5 U		27,800
ICS-P12-W-111714	GW-pushprobe	11/17/2014	nonfiltered	1424984-ZK74B												
ICS-P12-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424982-ZK73E			1 U		28		1 U		0.5 U			
ICS-P12-W-111714	GW-pushprobe	11/17/2014	field-filtered, 0.45 µm	1424986-ZK74D												
Trip Blank	water	11/17/2014	trip/transport blank	1424980-ZK73C												
ICS-P21-W-A-120814	GW-pushprobe	12/8/2014	nonfiltered	1426661-ZN87A	71.5	0.6		0.2 U		1.2		0.2 U		0.1 U		30,400
ICS-P21-W-A-120814	GW-pushprobe	12/8/2014	nonfiltered	1426669-ZN98A												
ICS-P21-W-A-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426666-ZN87F			0.2 U		1.0		0.2 U		0.1 U			
ICS-P21-W-A-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426672-ZN98D												
ICS-P21-W-B-120814	GW-pushprobe	12/8/2014	nonfiltered	1426662-ZN87B	6490	184		2 U		3		2 U		1 U		643,000
ICS-P21-W-B-120814	GW-pushprobe	12/8/2014	nonfiltered	1426670-ZN98B												
ICS-P21-W-B-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426667-ZN87G			2 U		2 U		2 U		1 U			
ICS-P21-W-B-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426673-ZN98E												
ICS-P33-W-A-120814	GW-pushprobe	12/8/2014	nonfiltered	1426663-ZN87C	25.0	0.6		0.2 U		0.8		0.2 U		0.1 U		29,600
ICS-P33-W-A-120814	GW-pushprobe	12/8/2014	nonfiltered	1426671-ZN98C												
ICS-P33-W-A-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426668-ZN87H			0.2 U		0.3		0.2 U		0.1 U			

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7		Cadmium 7440-43-9		Calcium 7440-70-2
					mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L
ICS-P33-W-A-120814	GW-pushprobe	12/8/2014	field-filtered, 0.45 µm	1426674-ZN98F											
ICS-P33-W-B-120814	GW-pushprobe	12/8/2014	nonfiltered	1426664-ZN87D	280	2.4									53,900
Trip Blank	water	12/8/2014	trip/transport blank	1426665-ZN87E											
ICS-P30-W-120914	GW-pushprobe	12/9/2014	nonfiltered	1426675-ZN99A	2930	201		1 U		8		1 U		0.5 U	111,000
ICS-P30-W-120914	GW-pushprobe	12/9/2014	nonfiltered	1426696-ZO00A											
ICS-P30-W-120914	GW-pushprobe	12/9/2014	field-filtered, 0.45 µm	1426678-ZN99D			1 U		5		1 U		0.5 U		
ICS-P30-W-120914	GW-pushprobe	12/9/2014	field-filtered, 0.45 µm	1426698-ZO00C											
ICS-P31-W-120914	GW-pushprobe	12/9/2014	nonfiltered	1426676-ZN99B	1460	0.5		2 U		1 U		0.5 U		1 U	62,800
ICS-P31-W-120914	GW-pushprobe	12/9/2014	nonfiltered	1426697-ZO00B											
ICS-P31-W-120914	GW-pushprobe	12/9/2014	field-filtered, 0.45 µm	1426679-ZN99E			0.5 U		1 U		0.5 U		0.2 U		
ICS-P31-W-120914	GW-pushprobe	12/9/2014	field-filtered, 0.45 µm	1426699-ZO00D											
Trip Blank	water	12/9/2014	trip/transport blank	1426677-ZN99C											
ICS-P16-W-121014	GW-pushprobe	12/10/2014	nonfiltered	1426874-ZO26A	643	2.5			0.4	5.4		0.3		0.1 U	56,400
ICS-P16-W-121014	GW-pushprobe	12/10/2014	nonfiltered	1426884-ZO27A											
ICS-P16-W-121014	GW-pushprobe	12/10/2014	field-filtered, 0.45 µm	1426877-ZO26D			0.8		2.4		0.2 U		0.1 U		
ICS-P16-W-121014	GW-pushprobe	12/10/2014	field-filtered, 0.45 µm	1426886-ZO27C											
ICS-P29-W-121014	GW-pushprobe	12/10/2014	nonfiltered	1426875-ZO26B	1470	136		0.5 U		12		0.8		0.3	123,000
ICS-P29-W-121014	GW-pushprobe	12/10/2014	nonfiltered	1426885-ZO27B											
ICS-P29-W-121014	GW-pushprobe	12/10/2014	field-filtered, 0.45 µm	1426878-ZO26E			0.5 U		2		0.5 U		0.2 U		
ICS-P29-W-121014	GW-pushprobe	12/10/2014	field-filtered, 0.45 µm	1426887-ZO27D											
Trip Blank	water	12/10/2014	trip/transport blank	1426876-ZO26C											
ICS-P28-W-121514	GW-pushprobe	12/15/2014	nonfiltered	1427467-ZP26A	2850	205		0.5 U		3		0.8		0.2 U	135,000
ICS-P28-W-121514	GW-pushprobe	12/15/2014	nonfiltered	1427474-ZP27A											
ICS-P28-W-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427471-ZP26E			0.5 U		1 U		0.5 U		0.2 U		
ICS-P28-W-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427477-ZP27D											
ICS-P32-W-A-121514	GW-pushprobe	12/15/2014	nonfiltered	1427468-ZP26B	1950	83.8		0.2 U		5.1		0.7		0.1	66,700
ICS-P32-W-A-121514	GW-pushprobe	12/15/2014	nonfiltered	1427475-ZP27B											
ICS-P32-W-A-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427472-ZP26F			0.2 U		0.5 U		0.3		0.1 U		
ICS-P32-W-A-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427478-ZP27E											
ICS-P32-W-B-121514	GW-pushprobe	12/15/2014	nonfiltered	1427469-ZP26C	891	0.7		0.5 U		2		0.6		0.2 U	65,500
ICS-P32-W-B-121514	GW-pushprobe	12/15/2014	nonfiltered	1427476-ZP27C											
ICS-P32-W-B-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427473-ZP26G			0.5 U		2		0.8		0.2 U		
ICS-P32-W-B-121514	GW-pushprobe	12/15/2014	field-filtered, 0.45 µm	1427479-ZP27F											
Trip Blank	water	12/15/2014	trip/transport blank	1427470-ZP26D											
ICS-P18-W-A-121614	GW-pushprobe	12/16/2014	nonfiltered	1427683-ZP49A	840	0.5		0.4		5		0.5		0.2	71,500
ICS-P18-W-A-121614	GW-pushprobe	12/16/2014	nonfiltered	1427688-ZP50A											
ICS-P18-W-A-121614	GW-pushprobe	12/16/2014	field-filtered, 0.45 µm	1427686-ZP49D			0.2 U		2		0.2 U		0.1 U		
ICS-P18-W-A-121614	GW-pushprobe	12/16/2014	field-filtered, 0.45 µm	1427690-ZP50C											
ICS-P18-W-B-121614	GW-pushprobe	12/16/2014	nonfiltered	1427684-ZP49B	8220	4.2		1 U		3		1 U		0.5 U	587,000
ICS-P18-W-B-121614	GW-pushprobe	12/16/2014	nonfiltered	1427689-ZP50B											
ICS-P18-W-B-121614	GW-pushprobe	12/16/2014	field-filtered, 0.45 µm	1427687-ZP49E			1 U		2 U		1 U		0.5 U		
ICS-P18-W-B-121614	GW-pushprobe	12/16/2014	field-filtered, 0.45 µm	1427691-ZP50D											
Trip Blank	water	12/16/2014	trip/transport blank	1427685-ZP49C											

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Chromium 7440-47-3		Hexavalent Chromium	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5		Zinc 7440-66-6		Hardness mg-CaCO ₃ /L
	diss. ug/L	total ug/L		diss. ug/L	total ug/L	diss. ug/L	total ug/L		diss. ng/L	total ng/L	diss. ug/L	total ug/L	diss. ug/L	total ug/L	diss. ug/L	total ug/L	diss. ug/L	total ug/L	
ICS-P27A-W-111114		8			12			1.8				7		0.5 U		2,460,000		20	890
ICS-P27A-W-111114										20.0 U									
ICS-P27A-W-111114	1		10 U	2		0.2 U					2		0.5 U				10 U		
ICS-P27A-W-111114									20.0 U										
ICS-P27B-W-111114		57			116		197	639,000				46		0.7	2,000,000		320		4000
ICS-P27B-W-111114										182									
ICS-P27B-W-111114	1 U		10 U	2		0.2 U					14		0.5 U				30		
ICS-P27B-W-111114									20.0 U										
ICS-P20-W-111214		6			14		1.6	46,800				14		0.2 U	34,800		20		690
ICS-P20-W-111214										20.0 U									
ICS-P20-W-111214	0.5 U		10 U	1.0		0.1 U					2.0		0.2 U				4 U		
ICS-P20-W-111214									20.0 U										
ICS-P23-W-111214		2.1			4		0.6	44,900				5		0.2 U	22,200		10		350
ICS-P23-W-111214									20.0 U										
ICS-P23-W-111214	0.5 U		10 U	0.5 U		0.1 U					1.4		0.2 U				5		
ICS-P23-W-111214									20.0 U										
Trip Blank																			
ICS-P13-W-111314		8			4.3		0.7	13,600				3.5		0.5 U	186,000		10		96
ICS-P13-W-111314										20.0 U									
ICS-P13-W-111314	8		10 U	0.8		0.1					3.5		0.5 U				9		
ICS-P13-W-111314									20.0 U										
ICS-P26-W-111314		3			4		0.6	415,000				6		1 U	3,200,000		20 U		2200
ICS-P26-W-111314										20.0 U									
ICS-P26-W-111314	2 U		10 U	3		0.5 U					6		1 U				20 U		
ICS-P26-W-111314									20.0 U										
Trip Blank																			
ICS-P14-W-111414		5			2.0		7.0	18,100				1.8		0.2 U	124,000		12		190
ICS-P14-W-111414										20.0 U									
ICS-P14-W-111414	2 U		10 U	0.5 U		0.3					1.5		0.2 U				6		
ICS-P14-W-111414									20.0 U										
ICS-P15-W-111414		10			2.2		3.3	2470				5.1		0.2 U	431,000		7		43
ICS-P15-W-111414									20.0 U										
ICS-P15-W-111414	10		12 U	0.5 U		0.1					4.8		0.2 U				4 U		
ICS-P15-W-111414									20.0 U										
Trip Blank																			
ICS-P11-W-111714		3			1.7		1.5	20,000				1.7		0.5 U	70,200		5		120
ICS-P11-W-111714										20.0 U									
ICS-P11-W-111714	3		10 U	0.6		0.1 U					1.6		0.5 U				4		
ICS-P11-W-111714									20.0 U										
ICS-P12-W-111714		20			5		1.1	18,800				6		1 U	314,000		10 U		150
ICS-P12-W-111714									20.0 U										
ICS-P12-W-111714	22		10 U	3		0.4					5		1 U				10 U		
ICS-P12-W-111714									20.0 U										
Trip Blank																			
ICS-P21-W-A-120814		11			9.4		5	44,700				8.3		0.2 U	195,000		18		260
ICS-P21-W-A-120814										33.0									
ICS-P21-W-A-120814	3		11 U	0.5 U		0.5 U					4.1		0.2 U				6		
ICS-P21-W-A-120814									20.0 U										
ICS-P21-W-B-120814		30			18		9	561,000				18		2 U	2,730,000		40		3900
ICS-P21-W-B-120814										75.7									
ICS-P21-W-B-120814	5 U		34 U	5 U		1 U					9		2 U				40 U		
ICS-P21-W-B-120814									20.0 U										
ICS-P33-W-A-120814		10			7.2		5.1	43,700				7.8		0.2 U	54,000		29		250
ICS-P33-W-A-120814										22.4									
ICS-P33-W-A-120814	2 U		10 U	0.6		0.5 U					3.8		0.2 U				8		

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Chromium 7440-47-3		Hexavalent Chromium	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness	
	diss. ug/L	total ug/L	diss. ug/L	diss. ug/L	total ug/L	diss. ug/L	total ug/L	total ug/L	diss. ng/L	total ng/L	diss. ug/L	total ug/L	diss. ug/L	total ug/L	total ug/L	diss. ug/L	total ug/L	mg-CaCO ₃ /L	
ICS-P33-W-A-120814									20.0	U									
ICS-P33-W-B-120814								41,400							561,000			310	
Trip Blank																			
ICS-P30-W-120914		38			30		5.7	193,000			19		1	U	1,840,000		40	1100	
ICS-P30-W-120914									47.7										
ICS-P30-W-120914	36		10	U	27		5.0				18		1	U		40			
ICS-P30-W-120914									26.3										
ICS-P31-W-120914		6			1		1	U			3		2	U	983,000		90	570	
ICS-P31-W-120914									20.0	U									
ICS-P31-W-120914	5	U	23	U	1	U	0.2	U			2		0.5	U		10	U		
ICS-P31-W-120914									20.0	U									
Trip Blank																			
ICS-P16-W-121014		17			23.6		12.7	102,000			14.2		0.2	U	419,000		37	560	
ICS-P16-W-121014									52.0										
ICS-P16-W-121014	1	U	10	U	0.5	U	0.1	U			3.9		0.2	U		4	U		
ICS-P16-W-121014									20.0	U									
ICS-P29-W-121014		81			66		61.7	111,000			39		0.5	U	750,000		130	760	
ICS-P29-W-121014									218										
ICS-P29-W-121014	3		22	U	1		0.4				3		0.5	U		10	U		
ICS-P29-W-121014									20.0	U									
Trip Blank																			
ICS-P28-W-121514		32			14		1.6	191,000			8		0.5	U	1,700,000		20	1100	
ICS-P28-W-121514									22.5										
ICS-P28-W-121514	2		11	U	1		0.2	U			3		0.5	U		10	U		
ICS-P28-W-121514									20.0	U									
ICS-P32-W-A-121514		121			52.4		8.6	131,000			23.2		0.2	U	510,000		59	710	
ICS-P32-W-A-121514									35.3										
ICS-P32-W-A-121514	7.3		10	U	0.6		0.1	U			2.0		0.2	U		6			
ICS-P32-W-A-121514									20.0	U									
ICS-P32-W-B-121514		22			21		2.8	97,400			8		0.5	U	1,360,000		40	560	
ICS-P32-W-B-121514									20.0	U									
ICS-P32-W-B-121514	2		20	U	1	U	0.2	U			2		0.5	U		10	U		
ICS-P32-W-B-121514									20.0	U									
Trip Blank																			
ICS-P18-W-A-121614		45			31.2		38.8	73,000			18.3		0.3		730,000		80	480	
ICS-P18-W-A-121614									211										
ICS-P18-W-A-121614	5		10	U	0.5		0.1	U			4.4		0.2	U		4	U		
ICS-P18-W-A-121614									20.0	U									
ICS-P18-W-B-121614		11			7		7.9	755,000			14		1	U	4,080,000		20	U	4600
ICS-P18-W-B-121614									20.0	U									
ICS-P18-W-B-121614	2	U	14	U	2	U	0.5	U			12		1	U		20	U		
ICS-P18-W-B-121614									20.0	U									
Trip Blank																			

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3	Bromo- methane 74-83-9	Vinyl chloride 75-01-4	Chloro- ethane 75-00-3	Methylene chloride 75-09-2	Acetone 67-64-1	Carbon disulfide 75-15-0	1,1-Dichloro- ethene 75-35-4	1,1-Dichloro- ethane 75-34-3	trans-1,2- Dichloroethene 156-60-5	cis-1,2- Dichloroethene 156-59-2	Chloroform 67-66-3
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-P27A-W-111114	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.53 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.66 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.85 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.41	0.20 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.94 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U
ICS-P23-W-111214															
ICS-P23-W-111214															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.5 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P13-W-111314	0.25 U	0.12	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.78 J_B	5.0 U	0.10 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P26-W-111314															
ICS-P26-W-111314															
Trip Blank	0.25 U			0.10 J	1.0 U	0.20 U	0.20 U	1.4 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	2.1	0.20 U	1.2 J_B	15	0.20 U	0.20 U	1.5	1.1	23	0.20 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414	1.8	0.17	0.20 U	2.5 U	5.0 U	8.8	15	5.0 U	25 U	1.0 U	1.0 U	69	6.0	11	1.0 U
ICS-P15-W-111414															
ICS-P15-W-111414															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.5 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P11-W-111714	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	1.0 U	1.0 U	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65 J	1.0 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714	0.25 U	0.10 U	0.20 U	2.5 U	5.0 U	0.60 J	0.90 J	5.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P12-W-111714															
ICS-P12-W-111714															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.3 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P21-W-A-120814	0.25 U	2.2	0.84	0.50 U	1.0 U	0.72 J_Q	4.7	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.42	0.20 U
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-B-120814	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P33-W-A-120814	0.25 U	0.36	0.20 U	0.50 U	1.0 U	0.20 U	3.6	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P33-W-A-120814															
ICS-P33-W-A-120814															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3	Bromo- methane 74-83-9	Vinyl chloride 75-01-4	Chloro- ethane 75-00-3	Methylene chloride 75-09-2	Acetone 67-64-1	Carbon disulfide 75-15-0	1,1-Dichloro- ethene 75-35-4	1,1-Dichloro- ethane 75-34-3	trans -1,2- Dichloroethene 156-60-5	cis -1,2- Dichloroethene 156-59-2	Chloroform 67-66-3
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-P33-W-A-120814															
ICS-P33-W-B-120814															
Trip Blank				0.50 U	1.0 U	0.20 U	0.20 U	1.9 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P30-W-120914	0.25 U	2.0	1.0	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.90	0.25	0.20 U	0.20 U
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P31-W-120914	0.25 U	0.51	0.32	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.30	0.20 U	0.20 U	0.20 U
ICS-P31-W-120914															
ICS-P31-W-120914															
ICS-P31-W-120914															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.9 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P16-W-121014	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.44	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P29-W-121014	0.25 U	0.26	0.70	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U
ICS-P29-W-121014															
ICS-P29-W-121014															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.6 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P28-W-121514	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	4.0 J	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P32-W-A-121514	0.25 U	0.12	0.20 U	0.50 U	1.0 U	0.42	0.12 J	1.0 U	6.2	0.30	0.20 U	0.31	0.15 J	0.52	0.20 U
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-B-121514	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.9 J	0.20 U	0.20 U	0.20 U	0.20 U	0.38	0.20 U
ICS-P32-W-B-121514															
ICS-P32-W-B-121514															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.4 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P18-W-A-121614	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.23	1.0 U	4.1 J	0.16 J	0.20 U	0.20 U	0.10 J	0.10 J	0.20 U
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-B-121614	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.3 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

** bold-typed values resemble corresponding petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis-1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans-1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-P27A-W-111114	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P13-W-111314	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	25 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P14-W-111414	0.14 J	3.9 J	0.20 U	0.20 U	0.20 U	0.19 J	0.20 U	0.60	0.20 U	0.20 U	3.1	0.20 U	0.20 U	6.2	5.0 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	8.2	1.0 U	1.0 U	25 U	25 U
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P11-W-111714	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0	1.0 U	1.0 U	25 U	25 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714	1.0 U	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	48	1.0 U	1.0 U	25 U	25 U
ICS-P12-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P21-W-A-120814	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.61	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-B-120814	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P33-W-A-120814	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P33-W-A-120814															
ICS-P33-W-A-120814															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	cis-1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans-1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-P33-W-A-120814															
ICS-P33-W-B-120814															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P30-W-120914	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.4	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P31-W-120914	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P31-W-120914															
ICS-P31-W-120914															
ICS-P31-W-120914															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P16-W-121014	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.54	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P29-W-121014	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P29-W-121014															
ICS-P29-W-121014															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P28-W-121514	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P32-W-A-121514	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-B-121514	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P32-W-B-121514															
ICS-P32-W-B-121514															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P18-W-A-121614	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	8.6	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-B-121614	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27B-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P20-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P20-W-111214																
ICS-P20-W-111214																
ICS-P23-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	1.4	5.0 U	0.20 U	0.20 U
ICS-P23-W-111214																
ICS-P23-W-111214																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P13-W-111314	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P26-W-111314	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P26-W-111314																
ICS-P26-W-111314																
ICS-P26-W-111314																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P14-W-111414	0.20 U	0.20 U	7.8	0.20 U	0.72	0.20 U	0.20 U	0.20 U	2.0	1.0	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P15-W-111414	1.0 U	1.0 U	22	1.0 U	87	1.0 U	1.0 U	1.0 U	150	39	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P15-W-111414																
ICS-P15-W-111414																
ICS-P15-W-111414																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P11-W-111714	1.0 U	1.0 U	1.8	1.0 U	15	1.0 U	1.0 U	1.0 U	4.2	1.2	1.0 U	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P12-W-111714	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.4 J	1.0 U	0.50 J	1.0 U	1.0 U	25 U	1.0 U	1.0 U
ICS-P12-W-111714																
ICS-P12-W-111714																
ICS-P12-W-111714																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P21-W-A-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P21-W-A-120814																
ICS-P21-W-A-120814																
ICS-P21-W-A-120814																
ICS-P21-W-B-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P21-W-B-120814																
ICS-P21-W-B-120814																
ICS-P21-W-B-120814																
ICS-P33-W-A-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P33-W-A-120814																
ICS-P33-W-A-120814																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-P33-W-A-120814																
ICS-P33-W-B-120814																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P30-W-120914	0.20 U	0.20 U	4.2	0.56	2.6	0.20 U	0.20 U	0.20 U	6.4	2.6	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P30-W-120914																
ICS-P30-W-120914																
ICS-P30-W-120914																
ICS-P31-W-120914	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P31-W-120914																
ICS-P31-W-120914																
ICS-P31-W-120914																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P16-W-121014	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P16-W-121014																
ICS-P16-W-121014																
ICS-P16-W-121014																
ICS-P29-W-121014	0.20 U	0.20 U	0.49	0.20 U	1.3	0.20 U	0.20 U	0.20 U	0.73	0.26	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P29-W-121014																
ICS-P29-W-121014																
ICS-P29-W-121014																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P28-W-121514	0.20 U	0.20 U	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.24 J	0.10 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P28-W-121514																
ICS-P28-W-121514																
ICS-P28-W-121514																
ICS-P32-W-A-121514	0.20 U	0.20 U	0.74	0.20 U	0.54	0.20 U	0.20 U	0.20 U	1.7	0.64	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P32-W-A-121514																
ICS-P32-W-A-121514																
ICS-P32-W-A-121514																
ICS-P32-W-B-121514	0.20 U	0.20 U	0.33	0.20 U	0.30	0.20 U	0.20 U	0.20 U	0.91	0.34	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P32-W-B-121514																
ICS-P32-W-B-121514																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P18-W-A-121614	0.20 U	0.20 U	0.52	0.20 U	0.23	0.20 U	0.20 U	0.20 U	1.6	0.60	0.15 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P18-W-A-121614																
ICS-P18-W-A-121614																
ICS-P18-W-A-121614																
ICS-P18-W-B-121614	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40	0.17 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P18-W-B-121614																
ICS-P18-W-B-121614																
ICS-P18-W-B-121614																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P23-W-111214															
ICS-P23-W-111214															
ICS-P23-W-111214															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P13-W-111314	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414	1.0 U	1.0 U	2.5 U	5.0 U	12	36	1.0 U	1.0 U	1.0 U	1.0 U	2.4	2.8	1.0 U	1.0 U	1.0 U
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P11-W-111714	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714	1.0 U	1.0 U	2.5 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	0.55 J	1.0 U	1.0 U	1.0 U
ICS-P12-W-111714															
ICS-P12-W-111714															
ICS-P12-W-111714															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P21-W-A-120814	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-B-120814	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P33-W-A-120814	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P33-W-A-120814															
ICS-P33-W-A-120814															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-P33-W-A-120814															
ICS-P33-W-B-120814															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P30-W-120914	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.95	0.20 U	0.20 U	0.20 U	0.20 U	0.60	0.36	0.20 U	0.20 U	0.20 U
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P31-W-120914	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P31-W-120914															
ICS-P31-W-120914															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P16-W-121014	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P29-W-121014	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.59	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P29-W-121014															
ICS-P29-W-121014															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P28-W-121514	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P32-W-A-121514	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.23	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-B-121514	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P32-W-B-121514															
ICS-P32-W-B-121514															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P18-W-A-121614	0.20 U	0.20 U	0.50 U	1.0 U	0.13 J	0.58	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-B-121614	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.16 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-P27A-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P23-W-111214													
ICS-P23-W-111214													
ICS-P23-W-111214													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P13-W-111314	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	8.3	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P14-W-111414	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	20	1.0 U	2.0 U	4.1	150	1.0 U	2.0 U
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414	1.0 U	1.0 U	5.2	1.0 U	2.5 U	2.5 U	2.5	1.0 U	2.0 U	36	32	1.0 U	2.0 U
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P11-W-111714	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P12-W-111714													
ICS-P12-W-111714													
ICS-P12-W-111714													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P21-W-A-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-B-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P33-W-A-120814	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P33-W-A-120814													
ICS-P33-W-A-120814													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-P33-W-A-120814													
ICS-P33-W-B-120814													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P30-W-120914	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P31-W-120914	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P31-W-120914													
ICS-P31-W-120914													
ICS-P31-W-120914													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P16-W-121014	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P29-W-121014	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P29-W-121014													
ICS-P29-W-121014													
ICS-P29-W-121014													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P28-W-121514	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P32-W-A-121514	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	0.8 J	1.0 U	2.0 U
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-B-121514	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-P18-W-A-121614	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-B-121614	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L
ICS-P27A-W-111114	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P23-W-111214													
ICS-P23-W-111214													
Trip Blank													
ICS-P13-W-111314	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
Trip Blank													
ICS-P14-W-111414	1.0 U	1.0 U	4.2	18 J	3.0 U	0.14	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.12
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414	1.0 U	1.0 U	65	7.3 J	3.0 U	1.4	3.0 U	1.7	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
Trip Blank													
ICS-P11-W-111714	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.57	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714	1.0 U	1.0 U	3.0 U	5.3 J	3.0 U	0.14	3.0 U	3.1	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P12-W-111714													
ICS-P12-W-111714													
Trip Blank													
ICS-P21-W-A-120814	1.0 U	1.0 U	3.0 U	16 J	3.0 U	0.11	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-B-120814	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.05 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P33-W-A-120814	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.05 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P33-W-A-120814													
ICS-P33-W-A-120814													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L
ICS-P33-W-A-120814													
ICS-P33-W-B-120814													
Trip Blank													
ICS-P30-W-120914	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.05 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P31-W-120914	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P31-W-120914													
ICS-P31-W-120914													
Trip Blank													
ICS-P16-W-121014	1.0 U	1.0 U	3.0 U	7.0 J	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P29-W-121014	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.15	3.0 U	2.2	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P29-W-121014													
ICS-P29-W-121014													
Trip Blank													
ICS-P28-W-121514	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P32-W-A-121514	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.09 J	3.0 U	2.0	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-B-121514	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.06 J	3.0 U	1.3	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
Trip Blank													
ICS-P18-W-A-121614	1.0 U	1.0 U	3.0 U	7.6 J	3.0 U	0.19	3.0 U	0.21	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-B-121614	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.09 J	3.0 U	0.07 J	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
Trip Blank													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L
ICS-P27A-W-111114	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.42	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P27A-W-111114														
ICS-P27A-W-111114														
ICS-P27A-W-111114														
ICS-P27B-W-111114	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P27B-W-111114														
ICS-P27B-W-111114														
ICS-P27B-W-111114														
ICS-P20-W-111214	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P20-W-111214														
ICS-P20-W-111214														
ICS-P23-W-111214	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P23-W-111214														
ICS-P23-W-111214														
Trip Blank														
ICS-P13-W-111314	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P13-W-111314														
ICS-P13-W-111314														
ICS-P13-W-111314														
ICS-P26-W-111314	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P26-W-111314														
ICS-P26-W-111314														
ICS-P26-W-111314														
Trip Blank														
ICS-P14-W-111414	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P14-W-111414														
ICS-P14-W-111414														
ICS-P14-W-111414														
ICS-P15-W-111414	0.46	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.11	1.0 U	0.78	0.10 J	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P15-W-111414														
ICS-P15-W-111414														
ICS-P15-W-111414														
Trip Blank														
ICS-P11-W-111714	0.15	0.09 J	3.0 U	3.0 U	1.0 U	1.0 U	0.18	1.0 U	0.36	0.29	1.0 U	0.10 U	1.0 U	0.06 J
ICS-P11-W-111714														
ICS-P11-W-111714														
ICS-P11-W-111714														
ICS-P12-W-111714	0.07 J	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P12-W-111714														
ICS-P12-W-111714														
ICS-P12-W-111714														
Trip Blank														
ICS-P21-W-A-120814	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P21-W-A-120814														
ICS-P21-W-A-120814														
ICS-P21-W-A-120814														
ICS-P21-W-B-120814	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P21-W-B-120814														
ICS-P21-W-B-120814														
ICS-P21-W-B-120814														
ICS-P33-W-A-120814	0.10 U	0.10 U	3.0 U	3.0 U	0.8 J	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P33-W-A-120814														
ICS-P33-W-A-120814														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field I.D.	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L
ICS-P33-W-A-120814														
ICS-P33-W-B-120814														
Trip Blank														
ICS-P30-W-120914	0.07 J	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P30-W-120914														
ICS-P30-W-120914														
ICS-P30-W-120914														
ICS-P31-W-120914	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P31-W-120914														
ICS-P31-W-120914														
ICS-P31-W-120914														
Trip Blank														
ICS-P16-W-121014	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P16-W-121014														
ICS-P16-W-121014														
ICS-P16-W-121014														
ICS-P29-W-121014	0.09 J	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.07 J	1.0 U	0.25 U	0.17	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P29-W-121014														
ICS-P29-W-121014														
ICS-P29-W-121014														
Trip Blank														
ICS-P28-W-121514	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.39	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P28-W-121514														
ICS-P28-W-121514														
ICS-P28-W-121514														
ICS-P32-W-A-121514	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.07 J	1.0 U	7.5	0.20	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P32-W-A-121514														
ICS-P32-W-A-121514														
ICS-P32-W-A-121514														
ICS-P32-W-B-121514	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	2.0	0.08 J	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P32-W-B-121514														
ICS-P32-W-B-121514														
ICS-P32-W-B-121514														
Trip Blank														
ICS-P18-W-A-121614	0.06 J	0.05 J	3.0 U	3.0 U	1.0 U	1.0 U	0.08 J	1.0 U	0.25 U	0.28	1.0 U	0.06 J	1.0 U	0.20
ICS-P18-W-A-121614														
ICS-P18-W-A-121614														
ICS-P18-W-A-121614														
ICS-P18-W-B-121614	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.09 J	1.0 U	0.10 U	1.0 U	0.07 J
ICS-P18-W-B-121614														
ICS-P18-W-B-121614														
ICS-P18-W-B-121614														
Trip Blank														

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-P27A-W-111114	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27A-W-111114													
ICS-P27B-W-111114	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P27B-W-111114													
ICS-P20-W-111214	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P20-W-111214													
ICS-P20-W-111214													
ICS-P23-W-111214	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P23-W-111214													
ICS-P23-W-111214													
ICS-P23-W-111214													
Trip Blank													
ICS-P13-W-111314	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P13-W-111314													
ICS-P26-W-111314	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P26-W-111314													
ICS-P26-W-111314													
ICS-P26-W-111314													
Trip Blank													
ICS-P14-W-111414	0.10 U	1.0 U	0.10 U	10	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.26	0.10 U
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P14-W-111414													
ICS-P15-W-111414	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.1	0.10 U
ICS-P15-W-111414													
ICS-P15-W-111414													
ICS-P15-W-111414													
Trip Blank													
ICS-P11-W-111714	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.2	0.10 U
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P11-W-111714													
ICS-P12-W-111714	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21	0.10 U
ICS-P12-W-111714													
ICS-P12-W-111714													
ICS-P12-W-111714													
Trip Blank													
ICS-P21-W-A-120814	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11	0.10 U
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-A-120814													
ICS-P21-W-B-120814	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P21-W-B-120814													
ICS-P33-W-A-120814	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P33-W-A-120814													
ICS-P33-W-A-120814													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID.	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-P33-W-A-120814													
ICS-P33-W-B-120814													
Trip Blank													
ICS-P30-W-120914	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12	0.10 U
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P30-W-120914													
ICS-P31-W-120914	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P31-W-120914													
ICS-P31-W-120914													
ICS-P31-W-120914													
Trip Blank													
ICS-P16-W-121014	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P16-W-121014													
ICS-P29-W-121014	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.48	0.10 U
ICS-P29-W-121014													
ICS-P29-W-121014													
ICS-P29-W-121014													
Trip Blank													
ICS-P28-W-121514	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P28-W-121514													
ICS-P32-W-A-121514	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.36	0.10 U
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-A-121514													
ICS-P32-W-B-121514	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.14	0.10 U
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
ICS-P32-W-B-121514													
Trip Blank													
ICS-P18-W-A-121614	0.18	1.0 U	0.08 J	3.0 U	0.09 J	1.0 U	0.08 J	0.07 J	0.10 U	0.10 U	0.05 J	0.67	0.75
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-A-121614													
ICS-P18-W-B-121614	0.06 J	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.18	0.13
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
ICS-P18-W-B-121614													
Trip Blank													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-P27A-W-111114	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27A-W-111114																
ICS-P27B-W-111114	0.0025 U	0.0029 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.036	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P27B-W-111114																
ICS-P20-W-111214	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P20-W-111214																
ICS-P20-W-111214																
ICS-P23-W-111214	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0026 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P23-W-111214																
ICS-P23-W-111214																
Trip Blank																
ICS-P13-W-111314	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P13-W-111314																
ICS-P26-W-111314	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P26-W-111314																
ICS-P26-W-111314																
Trip Blank																
ICS-P14-W-111414	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P14-W-111414																
ICS-P15-W-111414	0.0042 U	0.0083 U	0.0025 U	0.0025 U	0.011 U	0.0037 U	0.0058 U	0.0068 U	0.0050 U	0.011 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P15-W-111414																
ICS-P15-W-111414																
Trip Blank																
ICS-P11-W-111714	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P11-W-111714																
ICS-P12-W-111714	0.0025 U	0.0040 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.016 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P12-W-111714																
ICS-P12-W-111714																
Trip Blank																
ICS-P21-W-A-120814	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0077 U	0.0025 U	0.0050 U	0.029 J_p	0.0050 U	0.0050 U	0.040 J_p	0.0050 U	0.019 U	0.025 U
ICS-P21-W-A-120814																
ICS-P21-W-A-120814																
ICS-P21-W-A-120814																
ICS-P21-W-B-120814	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.010	0.0050 U	0.0050 U	0.016 J_p	0.0050 U	0.010 U	0.025 U
ICS-P21-W-B-120814																
ICS-P21-W-B-120814																
ICS-P21-W-B-120814																
ICS-P33-W-A-120814	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.022 U	0.025 U
ICS-P33-W-A-120814																
ICS-P33-W-A-120814																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-P33-W-A-120814																
ICS-P33-W-B-120814																
Trip Blank																
ICS-P30-W-120914	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.010 U	0.0050 U	0.038 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.037 U	0.025 U
ICS-P30-W-120914																
ICS-P30-W-120914																
ICS-P30-W-120914																
ICS-P31-W-120914	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0034 U	0.0025 U	0.0025 U	0.0025 U	0.012 U	0.033 J_p	0.0050 U	0.0050 U	0.039 J_p	0.0050 U	0.026 U	0.025 U
ICS-P31-W-120914																
ICS-P31-W-120914																
ICS-P31-W-120914																
Trip Blank																
ICS-P16-W-121014	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.14	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.25 U
ICS-P16-W-121014																
ICS-P16-W-121014																
ICS-P16-W-121014																
ICS-P29-W-121014	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.010 U	0.021 U	0.019 U	0.0025 U	0.014 U	0.030 J_p	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.045 U	0.025 U
ICS-P29-W-121014																
ICS-P29-W-121014																
ICS-P29-W-121014																
Trip Blank																
ICS-P28-W-121514	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.017 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.038 U	0.025 U
ICS-P28-W-121514																
ICS-P28-W-121514																
ICS-P28-W-121514																
ICS-P32-W-A-121514	0.0025 U	0.0050 U	0.0025 U	0.0025 U	0.0046 U	0.054 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.021 U	0.025 U
ICS-P32-W-A-121514																
ICS-P32-W-A-121514																
ICS-P32-W-A-121514																
ICS-P32-W-B-121514	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0038 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P32-W-B-121514																
ICS-P32-W-B-121514																
ICS-P32-W-B-121514																
Trip Blank																
ICS-P18-W-A-121614	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.020 J_p	0.0050 U	0.0072 U	0.016 J_p	0.0050 U	0.019 U	0.025 U
ICS-P18-W-A-121614																
ICS-P18-W-A-121614																
ICS-P18-W-A-121614																
ICS-P18-W-B-121614	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P18-W-B-121614																
ICS-P18-W-B-121614																
ICS-P18-W-B-121614																
Trip Blank																

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B).

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-P27A-W-111114	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27A-W-111114															
ICS-P27B-W-111114	0.0050 U	0.0050 U	0.0087	0.010	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.015 U	0.025 U	0.016	0.010 U	0.010 U	0.025 U
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P27B-W-111114															
ICS-P20-W-111214	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P20-W-111214															
ICS-P23-W-111214	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P23-W-111214															
ICS-P23-W-111214															
Trip Blank															
ICS-P13-W-111314	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.016	0.017	0.010 U	0.010 U	0.033
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P13-W-111314															
ICS-P26-W-111314	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.012 U	0.020	0.010 U	0.010 U	0.020
ICS-P26-W-111314															
ICS-P26-W-111314															
ICS-P26-W-111314															
Trip Blank															
ICS-P14-W-111414	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P14-W-111414															
ICS-P15-W-111414	0.0050 U	0.0050 U	0.0098 U	0.0054 U	0.25 U	0.0058 U	0.0070 U	0.010 U	0.010 U	0.012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.012 U
ICS-P15-W-111414															
ICS-P15-W-111414															
ICS-P15-W-111414															
Trip Blank															
ICS-P11-W-111714	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P11-W-111714															
ICS-P12-W-111714	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.0060 J	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P12-W-111714															
ICS-P12-W-111714															
Trip Blank															
ICS-P21-W-A-120814	0.0050 U	0.0050 U	0.0025 U	0.0038 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.37	0.36	0.12	0.010 U	0.010 U	0.85
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-A-120814															
ICS-P21-W-B-120814	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.17	0.16	0.049	0.010 U	0.010 U	0.38
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P21-W-B-120814															
ICS-P33-W-A-120814	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.015 U	0.12	0.18	0.010 U	0.010 U	0.30
ICS-P33-W-A-120814															
ICS-P33-W-A-120814															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Groundwater Analyses, November-December 2014

Field ID.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-P33-W-A-120814															
ICS-P33-W-B-120814															
Trip Blank															
ICS-P30-W-120914	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.074	0.070	0.019	0.010 U	0.010 U	0.16
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P30-W-120914															
ICS-P31-W-120914	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.13	0.14	0.078	0.010 U	0.010 U	0.35
ICS-P31-W-120914															
ICS-P31-W-120914															
ICS-P31-W-120914															
Trip Blank															
ICS-P16-W-121014	0.050 U	0.050 U	0.025 U	0.025 U	2.5 U	0.050 U	0.050 U	0.010 U	0.010 U	0.065	0.074	0.020	0.010 U	0.010 U	0.16
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P16-W-121014															
ICS-P29-W-121014	0.028 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.89	0.54	0.33	0.010 U	0.010 U	1.8
ICS-P29-W-121014															
ICS-P29-W-121014															
ICS-P29-W-121014															
Trip Blank															
ICS-P28-W-121514	0.031 U	0.0050 U	0.016	0.029 J	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.050 U	0.23	0.47	0.010 U	0.010 U	0.70
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P28-W-121514															
ICS-P32-W-A-121514	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.23	0.13	0.073	0.010 U	0.010 U	0.43
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-A-121514															
ICS-P32-W-B-121514	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.094	0.063	0.045	0.010 U	0.010 U	0.20
ICS-P32-W-B-121514															
ICS-P32-W-B-121514															
ICS-P32-W-B-121514															
Trip Blank															
ICS-P18-W-A-121614	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.34	0.18	0.070	0.010 U	0.010 U	0.59
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-A-121614															
ICS-P18-W-B-121614	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.060	0.034	0.016	0.010 U	0.010 U	0.11
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
ICS-P18-W-B-121614															
Trip Blank															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.



D.M.D., Inc.

Environmental & Toxicological Services

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MEMORANDUM

TO: Matt Dalton (DOF)
FROM: Raleigh Farlow
DATE: February 26, 2015
SUBJECT: Data Evaluation/Assessment for 77 Push-Probe Soil Samples Collected during November/December 2014 from the ICS / [former] NW Cooperage Site, Seattle, WA

Seventy-seven soil samples were submitted for analyses from 23 push-probe cores by Dalton, Olmsted & Fuglevand (DOF) staff during November 11 through December 16 for the evaluation of subsurface soils. All soil samples were delivered in ten delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 25 hours of collection. Samples were received on ice at temperatures between 0.2 and 5.4 °C. All samples were maintained at the project laboratory at either 4 °C or frozen prior to analyses. Aliquots of all samples were frozen in archives, and some samples for organic compound analyses were taken from frozen archives prior to extraction. No chemical preservatives were specified nor required.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-6 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
SVOC's (selected)	M.8270D-SIM	chlor. pesticides	SW846-M.8081B
PCB's as Aroclors	SW846-M.8082	metals (exc Hg)	SW846-M.6020A
total petroleum HC's	NWTPH-G & -Dx	Hg	SW846-M.7471
PCDD/PCDF's	U.S. EPA M.1613B		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270D in full-scan mode, and selected analytes were further analyzed and reported from analyses performed in the (M.8270D) SIM (selected ion monitoring) mode to improve/lower the reporting limits. These selected analytes include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, butylbenzylphthalate, and pentachlorophenol. Results for detected analytes were reported from the full-scan analyses or from the mode that yielded non-

qualified data. For nondetected analytes, the lowest reporting limit between the two analytical modes was reported in the attached results table; generally from the SIM mode of analyses. PCB's (analyzed and reported as Aroclors) extracts were subjected to sulfur removal, strong acid digestion, and silica gel cleanup steps. Polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/PCDF's) were analyzed by U.S. EPA method 1613B, which is a stable-isotope dilution method employing labeled recovery standards for each and every reported analyte in each sample extract. This allows recovery-correction and reporting of individual recoveries for all analytes in each sample. Extract cleanup options employed include acid digestion, silica gel and florisil liquid chromatographies. TCDD toxicity equivalent concentrations (TEQ's) were determined using the World Health Organization (WHO) 2005 recommended toxicity equivalence factors (TEF's). Extracts for NWTPH-Dx were subjected to strong acid digestion and silica gel chromatographic cleanup. NWTPH-G was analyzed by purge & trap and GC/FID.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Some frozen sample archives were accessed for re-extraction of organic compounds when initial extracts and analyses exhibited noncompliant QC performance(s), and, in some cases, samples were held frozen for up to 36 days prior to extraction for organic analytes (all reported VOC's and TPH-G [organic purgeables] were analyzed from refrigerated samples within the 14-day maximum holding time specification). U.S. EPA recommends a maximum holding time of 1 year for frozen samples requiring extractable organic compound analyses. Sample holding times/conditions are determined to be within acceptable technical limits and/or within SAP specifications.

Generally, [lower] **reporting limits** were consistent with specified-limits presented in the SAP (table SAP-6). Selected extractable organic parameters were analyzed by both full-scan GC/MS (M.8270D) and selected ion monitoring technique (GC/MS M.8270D-SIM) in order to attain lower reporting limits, as specified; these parameters include 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,2,4-trichlorobenzene, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine (as diphenylamine), benzyl alcohol, butylbenzylphthalate, and pentachlorophenol. The two techniques compared well for detected analytes, for example, pentachlorophenol (PCP)_{ICS-P27-SO-3-111114} = 62 J_(full-scan) vs. 72_(SIM), benzyl alcohol_{ICS-P27-SO-11-111114} = 22_(full-scan) vs. 22_(SIM), and 1,2,4-trichlorobenzene_{ICS-P25-SO-10-111114} = 30_(full-scan) vs. 30_(SIM). Five organic analytes were reported as components of two different parameter groups (VOC's vs. SVOC's), in the case of the (3) dichlorobenzenes, 1,2,4-trichlorobenzene and naphthalene. For these parameters, the QC performances and/or lower reporting limits were consistently better in the SVOC reporting group (for the dichlorobenzenes, the sample values for the SVOC reporting group were, with minor exceptions, consistently greater than for the VOC group; indicating heightened recoveries); the results for the VOC analyses are not reported here. Hexachlorobutadiene (HCBd) was analysed and reported in two parameter groups, VOC's by M.8260C and chlorinated pesticides by M.8081B. One method was not consistently better than the other regarding QC performance for HCBd due to matrix and chemical interferences; consequently, only the results with the better QC performance was reported on a sample-by-sample basis. Chlorinated pesticides (by M.8081B) exhibited elevated reporting limits in some cases due to the presence of chemical interferences, such as PCB's. A

significant number of soil samples exhibited sufficient levels of PCB's to affect chlorinated pesticides lower reporting limits. Considerable effort was made by the analysts to achieve the specified lower reporting limits when the sample matrix and chemical interferences would allow it. Analyte concentrations reported at less than the lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Octachlorodibenzo-*p*-dioxin (OCDD) results all (for two samples) exceeded the verifiable linear calibration range of the instrument. Reported OCDD results represent an extrapolation of the instrument calibration range and are subsequently reported as estimates with the "J_E" qualifier code. An initial analysis of VOC's in sample ICS-P18-SO-10-121614 exhibited a response for 1,2,4-trimethylbenzene that exceeded the verifiable linear calibration range of the instrument. A subsequent (diluted) analysis was performed outside the recommended maximum holding time of 14 days. A reevaluation of the initial analysis and quantitation employing alternate characteristic ions yielded an estimated concentration for 1,2,4-trimethylbenzene that was reported with an associated "J_M" qualifier code. This was deemed to yield a more representative value than the result from the analysis performed outside the recommended maximum holding time.

Method blanks were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of some low-level organic compounds:

<u>Parameter</u>	<u>Analytical Group</u>	<u>Method</u>	<u>Value (µg/kg)</u>
methylene chloride	ZJ92 / ZK10 / ZK33	M.8260C	0.8 J / 0.7 J
	ZK50 / ZK75	M.8260C	3.8
	ZN97 / ZO01	M.8260C	3.7 / 0.7 J / 1.1
	ZO28	M.8260C	0.7 J
	ZP37 / ZP53	M.8260C	0.6 J / 1.1 / 1.2
carbon disulfide	ZN97 / ZO01	M.8260C	0.6 J / 0.6 J / 0.7
	ZO28	M.8260C	0.6 J
1,4-dichlorobenzene	ZJ92	M.8260C	0.6 J
hexachlorobutadiene	ZJ92 / ZK10 / ZK33	M.8260C	0.8 J / 0.5 J
	ZK50 / ZK75	M.8260C	0.8 J
	ZN97 / ZO01	M.8260C	0.5 J / 0.6 J
	ZO28	M.8260C	0.5 J
	ZP37 / ZP53	M.8260C	0.4 J / 0.6 J
1,2,4,-trichlorobenzene	ZJ92 / ZK10 / ZK33	M.8260C	1.2 J / 0.9 J
	ZK50 / ZK75	M.8260C	1.0 J
	ZN97 / ZO01	M.8260C	0.7 J / 0.7 J / 0.7 J
	ZO28	M.8260C	0.7 J
	ZP37 / ZP53	M.8260C	0.5 J / 0.7 J / 0.6 J
1,2,3-trichlorobenzene	ZJ92 / ZK10 / ZK33	M.8260C	1.3 J / 0.9 J
	ZK50 / ZK75	M.8260C	1.0 J
	ZN97 / ZO01	M.8260C	0.8 J / 0.8 J / 0.8 J
	ZO28	M.8260C	0.8 J
	ZP37 / ZP53	M.8260C	0.6 J / 0.8 J / 0.8 J
naphthalene	ZJ92 / ZK10 / ZK33	M.8260C	1.8 J / 1.3 J
	ZK50 / ZK75	M.8260C	1.4 J
	ZN97 / ZO01	M.8260C	0.9 J
	ZO28	M.8260C	0.7 J
	ZP37 / ZP53	M.8260C	1.1 / 1.1 / 1.0

bis(2-ethylhexyl)phthalate	ZJ92 / ZK10	M.8270D	84
diethylphthalate	ZK33	M.8270D	21
	ZO28	M.8270D	27
phenol	ZK75	M.8270D	13 J
	ZN97 / ZO01	M.8270D	73
	ZO28	M.8270D	99
naphthalene	ZP37 / ZP53	M.8270D	16 J

Sample results for the above parameters in the respective analytical groups were qualified as estimated with potential positive bias with the “J_B” qualifier code when results have the potential to be significantly impacted by laboratory background levels. Associated values were qualified as estimated when the results were less than or equal to 2x the associated method blank values. Sixty-one sample results were sufficiently low to require “J_B” qualification. No other data required qualification due to method blanks performance.

No field equipment **rinsate blanks** were specified in the project SAP nor were any collected.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. **LCS** recoveries deviating from specified acceptance ranges are as follows:

<u>Parameter</u>	<u>Analytical Group</u>	<u>Method</u>	<u>Recovery (%)</u>
bromomethane	ZJ92 / ZK10 / ZK33	M.8260C	42 / 49
chloroethane	ZJ92 / ZK10 / ZK33	M.8260C	143 / 156
tetrachloroethene	ZK33	M.8260C	79 / 80
1,2,3-trichloropropane	ZK33	M.8260C	79 / 80
<i>trans</i> -1,4-dichloro-2-butene	ZK33	M.8260C	75 / 78
benzyl alcohol	ZK50	M.8270D	35 / 28
benzyl alcohol	ZK50	M.8270D-SIM	45 / 22; 75 / 83 (OK)
2,4-dimethylphenol	ZK50	M.8270D	39 / 45
pentachlorophenol	ZK50	M.8270D	64 / 74 (LCSD OK)
hexachlorobutadiene	ZO28	M.8081B	28
diesel	ZK33 / ZK50	NWTPH-Dx	31.4 / 74.7 (LCSD OK)

Matrix spike (MS/MSD) recoveries deviating from specified acceptance ranges are as follows:

<u>Parameter</u>	<u>Sample</u>	<u>Method</u>	<u>Recovery (%)</u>
bromomethane	ICS-P17-SO-4-111214	M.8260C	16 / 23
2-hexanone	ICS-P17-SO-4-111214	M.8260C	39 / 42
<i>trans</i> -1,4-dichloro-2-butene	ICS-P17-SO-4-111214	M.8260C	63 / 68
benzoic acid	ICS-P20-SO-3-111214	M.8270D	48 / 52
2,4-dimethylphenol	ICS-P20-SO-3-111214	M.8270D	65
2,4-dimethylphenol	ICS-P12-SO-4-111714	M.8270D	39 / 47
fluorene	ICS-P16-SO-4-121014	M.8270D	43 / 45
heptachlor	ICS-P14-SO-16-111414	M.8081B	38 / 45
4,4'-DDT	ICS-P14-SO-16-111414	M.8081B	40 / 51
methoxychlor	ICS-P14-SO-16-111414	M.8081B	38 / 45
diesel	ICS-P25-SO-3-111114	NWTPH-Dx	54 / 56
diesel	ICS-P11-SO-10-111714	NWTPH-Dx	59 / 62
gasoline	ICS-P29-SO-4-121014	NWTPH-G	138 / 127
gasoline	ICS-P18-SO-32-121614	NWTPH-G	234 / 252
antimony (Sb)	ICS-P27-SO-3-111114	M.6020A	11.3
antimony (Sb)	ICS-P17-SO-4-111214	M.6020A	11.9
antimony (Sb)	ICS-P13-SO-4-111314	M.6020A	4.6

antimony (Sb)	ICS-P14-SO-4-111414	M.6020A	8.4
antimony (Sb)	ICS-P11-SO-4-111714	M.6020A	7.0
antimony (Sb)	ICS-P21-SO-7-120814	M.6020A	2.8
antimony (Sb)	ICS-P29-SO-4-121014	M.6020A	3.1
antimony (Sb)	ICS-P28-SO-4-121514	M.6020A	12
antimony (Sb)	ICS-P18-SO-4-121614	M.6020A	11
chromium (Cr)	ICS-P13-SO-4-111314	M.6020A	228
mercury (Hg)	ICS-P13-SO-4-111314	M.7471	133
silver (Ag)	ICS-P21-SO-7-120814	M.6020A	61
zinc (Zn)	ICS-P13-SO-4-111314	M.6020A	145

Recoveries for bromomethane were consistently lower than the specified ranges in both the LCS/LCSD in analytical group ZK10 and ICS-P17-SO-4-111214, requiring the qualification of the parameter in ICS-P17-SO-4-111214 as likely biased low with the qualifier code “J_R”. Other VOC analytes’ (by M.8260C) LCS/LCSD recoveries were just slightly outside specification and are not expected to adversely impact reported results. No MS/MSD analyses were performed for VOC analytes (by M.8260C). Benzyl alcohol, 2,4-dimethylphenol and pentachlorophenol recoveries by M.8270D were slightly outside specification, however, all sample results were reported from the analyses performed by M.8270D-SIM, which exhibited acceptable recoveries in the LCS/LCSD and MS/MSD samples. The less than specified MS/MSD recoveries for fluorene in ICS-P16-SO-4-121014 are not sufficiently low to adversely impact the reported sample results (nondetectable). The LCS recovery for hexachlorobutadiene (HCBd) in analytical group ZO28 was lower than specified at 28%, which was also reflected in a lower than specified TCMX surrogate recovery at 34%. This indicates an accurate tracking of the surrogate recoveries with specific analytes. The [M.8081B] LCS for analytical group ZO28 shows blow-down losses associated with the extract concentration step. Unacceptable blow-down losses (per TCMX recoveries) were not exhibited by other samples within this analytical group. Chlorinated pesticide (M.8081B) recoveries that were outside specification (38-51%) in ICS-P14-SO-16-111414 were not sufficiently low to adversely impact the reported results of target analytes (all nondetects). Diesel fuel MS/MSD recoveries in ICS-P25-SO-3-111114 and ICS-P11-SO-10-111714 were slightly outside specification and are not expected to impact the reported results in these two samples (no diesel fuel identified, and the associated surrogate compound recoveries are within the acceptance range). With the exception of selected bromomethane results, other organic parameters did not require qualification of results due to consistently low recoveries.

Antimony (Sb) matrix spike recoveries are reported consistently low in all samples for which matrix spikes were performed. Antimony (Sb) LCS recoveries, however, are all determined to be acceptable. This behavior for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; consequently, positive hits for Sb are thus qualified with the “J_R” qualifier code to indicate results are considered estimates (biased low) due to low matrix spike recoveries. The PCDD/PCDF LCS, or OPR (on-going precision and recovery sample), exhibited acceptable recoveries for both the labeled as well as the natural isotope compounds at 71-157%. Recoveries of spike analytes for all analyses were determined to be acceptable, with the exceptions noted above for bromomethane and antimony requiring qualification of associated results as estimates with the “J_R” code.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC’s, SVOC’s, TPH-G, TPH-Dx, chlorinated pesticides (including hexachlorobutadiene [HCBd] and

hexachlorobenzene [HCB]), and PCB's. Four surrogate compounds were utilized for the evaluation of VOCs' recovery performances; d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene, and d₄-1,2-dichlorobenzene. Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance. Trifluorotoluene and bromobenzene were employed as surrogates for the TPH-G analyses. *o*-Terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC (M.8270 full scan) recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds, while the SIM analyses recoveries were evaluated with the surrogates 2-fluorophenol and d₁₄-*p*-terphenyl. PCDD/PCDF analyte recoveries are evaluated and recovery-corrected with the use of stable-isotope labeled compounds for each and every target analyte. Isotopic labels included the use of ¹³C and ³⁷Cl enriched compounds. Most surrogate compound performances were within specification with some minor exceptions. The VOC surrogate, d₄-1,2-dichloroethane, exhibited lower than specified recoveries at 67% and 65% in a reanalysis of sample ICS-P30-SO-13-120914. The other three surrogates for ICS-P30-SO-13-120914 showed acceptable recoveries, which does not require qualification of sample results per the U.S. EPA Data Quality Functional Guidelines. Three of four phenolic surrogate compounds (by M.8270D) exhibited lower than specified recoveries in samples ICS-P31-SO-4-120914 and ICS-P31-SO-10-120914; recoveries ranged from 17 to 27%. d₅-Phenol recoveries were acceptable in both samples at 42% and 39%. The single phenolic surrogate compound, 2-fluorophenol, employed in M.8270D-SIM for the same samples showed recoveries of 19% and 16%. No results for these two samples required further qualification since only phenol and benzoic acid were reported as detected, and they are already qualified as estimates due to other factors (*note: nondetected phenolic compounds are not further qualified due to surrogate recoveries ≥ 10%*). *[The consistently low recoveries for phenolic compounds in soils from location P31 suggests the soils have capacity to yield elevated alkalinities, buffering capacities and/or high pH.]*

The PCB's surrogate, DCBP, occasionally exhibited higher (up to 136%) than specified (40-126%) recoveries in a few extracts due to contributions of DCBP from elevated levels of [native] Aroclor 1260 (Aroclor 1260 contains small amounts of DCBP). The TPH-Dx surrogate, *o*-terphenyl, exhibited lower than specified recovery (34%) in LCS111914 (in group ZK33) (acceptance range = 50-150% recovery). The associated LCS recovery for diesel fuel is 31.4%, showing the good comparability of the surrogate and analyte recoveries; all other sample extract recoveries for the TPH-Dx surrogate were within the specified range. (The associated LCSD111914 recoveries for the surrogate and diesel fuel were 80% and 74.7%, respectively.) PCDD/PCDF stable isotope-labeled compound recoveries in site samples were well within acceptable limits; 57-107%. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed out-of-compliance (RPD's > 20) responses for various VOC and SVOC constituents, such as bromomethane and bromoethane (ZK10, ZK33, ZK50, ZK75, ZN97, ZO01, ZO28, ZP37 & ZP53), acetone & carbon disulfide (ZN97, ZO01 & ZO28), acetone, 2-butanone & carbon tetrachloride (ZP37 & ZP53), acrolein (ZJ92), 1,2,3-trichloropropane (ZK10 & ZK33), *trans*-1,4-dichloro-2-butene (ZK10 & ZK33), phenol, diethylphthalate, nitrobenzene, 2,4-dimethylphenol, 1,2,4-trichlorobenzene & 4-chloro-3-methylphenol_{M.8270D-FS} (ZK50), isophorone (ZJ92 & ZK10),

benzyl alcohol & pentachlorophenol_{M.8270D-FS} (ZK10), fluorene & chlorophenylphenylether (ZJ92 & ZK10), butylbenzylphthalate & pentachlorophenol_{M.8270D-SIM} (ZJ92 & ZK10), pentachlorophenol & benzyl alcohol_{M.8270D-SIM} (ZK33), 2-methylphenol_{M.8270D-SIM} (ZN97 & ZO01), benzyl alcohol, butylbenzylphthalate, nitrobenzene, 2,4-dimethylphenol, 2,4-dichlorophenol, 1,2,4-trichlorobenzene, 4-chloro-3-methylphenol & N-nitrosodimethylamine_{M.8270D-FS} (ZN97 & ZO01), 1,2,4-trichlorobenzene, chlorophenylphenylether, benzoic acid, pentachlorophenol, carbazole & N-nitrosodimethylamine_{M.8270D-FS} (ZK33), 2-chlorophenol (ZO28), carbazole & di-n-octylphthalate (ZO28, ZP37 & ZP53), pentachlorophenol_{M.8270D-SIM} (ZK50 & ZK75), and carbazole (ZK75). Reported data for detected analytes associated with noncompliant CCV's are qualified as estimates with the "J_Q" code, even though the data quality by other measures, such as LCS/LCSD and MS/MSD performance, is within acceptable limits. Affected [detected] results are limited and are for acetone, carbon disulfide, 2-butanone, phenol, 2-methylphenol, 2,4-dimethylphenol, 4-chloro-3-methylphenol, pentachlorophenol, carbazole, diethylphthalate and butylbenzylphthalate in selected samples.

Two pairs of blind **field duplicate** samples were collected and submitted for analyses for the assessment of monitoring variability. Duplicate pairs are identified in the attached table of sample results for ICS-P29-SO-16-121014 and ICS-P32-SO-16-121514. Variability in terms of relative percent difference (RPD) for all parameters generally averaged less than 50% for duplicate pairs. Greatest RPDs (up to 130) were observed for VOC analytes in ICS-P32-SO-16-121514. Laboratory duplicate analyses were generally less than 20 RPD (within SAP specifications) for all parameters, with the exception of metals in sample ICS-P27-SO-3-111114, ICS-P11-SO-4-111714 and ICS-P29-SO-4-121014. Variability in metals levels for ICS-P27-SO-3-111114 approached 30 RPD for arsenic, chromium and copper; and RPD's for arsenic, cadmium, copper and nickel in ICS-P29-SO-4-121014 were 28, 38, 56 and 35, respectively - metals for this sample exhibited some of the highest levels during this monitoring event indicating the variability to be associated with natural heterogeneity from contaminated solids. Metals in ICS-P11-SO-4-111714 exhibited outlier values in the initial analyses, whereas the duplicate and the associated matrix spike indicate the secondary values (from the duplicate and the MS) to be more representative and with low variability. In the case of chromium, lead, mercury and zinc for ICS-P11-SO-4-111714, the initial results were replaced with the secondary values (Cr of 39.8 mg/kg replaced with 10.4, Pb of 140 replaced with 4.9, Hg of 0.14 replaced with 0.05, and Zn of 37 replaced with 30 mg/kg). Matrix spike recoveries associated with the secondary values ranged from 89% to 112%. Greatest monitoring variability is demonstrated for metals in soils in the upper soil horizons that exhibit natural variability associated with [the more] contaminated solids. No results required qualification due to monitoring variability.

TPH-Dx analyses indicate the principal recognizable patterns are associated with unresolved complex mixtures (UCM's) characterized as weathered diesel fuel (or heating oil), mineral oil (or dielectric fluid) and lubricant petroleum hydrocarbons. Bold type values are associated with the patterns that most likely identify the hydrocarbon mixture present, such as [weathered] diesel fuel, mineral oil and/or motor/lubricant oil. The greatest levels of petroleum hydrocarbon mixtures are associated with mineral oil and/or dielectric fluid, and secondly with diesel fuel. The mineral oil profiles are associated with PCB's, indicating the likely derivative to be dielectric fluids. TPH-G analyses indicate that several soil samples exhibit a pattern resembling relatively non-weathered gasoline, with the greatest levels of gasoline-type hydrocarbon

mixtures found at P18 and P30. Gasoline, diesel/fuel oil, mineral oil/dielectric fluid, and lubricant-like hydrocarbon profiles were found and highlighted in bold in the attached results table.

Dual-column analyses were performed for chlorinated pesticides (M.8081B) and PCB's (M.8082), as specified. Variability in responses between the two columns is specified to be less than 40% RPD for compound identification and assignment. In some cases, however, the analyst has determined that the analyte is likely present, even though the variability in responses exceeds the criterion of < 40%. 4,4'-DDD, 4,4'-DDE, dieldrin and Aroclor 1254 were determined to be likely present and at estimated concentrations for several project samples, even though the 40%-criterion was not met. In these cases, estimated concentrations (by M.8081B and M.8082) of selected analytes are reported (generally the lower of the two levels from the dual-column analyses) in the attached results table with the associated "Jp" qualifier code.

GC/MS full-scan (M.8270D) instrumental binary files were evaluated for selected samples for confirmation analysis of elevated pesticides and for determination of general chemical contaminant characteristics. 4,4'-DDE was reported at 350 µg/kg by M.8081B in ICS-P29-SO-4-121014, however inspection of M.8270D raw data files indicates that DDE is not present at an estimated lower reporting limit of 200-250 µg/kg. The DDE false positive by M.8081B is likely a result of the elevated levels of PCB's interfering with chlorinated pesticides analyses. Principal contamination in ICS-P29-SO-4-121014 as determined by M.8270D is mineral oil associated with dielectric fluid. M.8270D files were reviewed to confirm the presence of dieldrin reported by M.8081B in ICS-P16-SO-4-121014. Similarly, 4,4'-DDE and 4,4'-DDD are confirmed as present by M.8270D in samples ICS-P18-SO-4-121614 and ICS-P18-SO-16-121614. Principal contamination in ICS-P13-SO-4-111314 is determined by GC/MS (M.8270D) to be associated with the nontarget compounds biphenyl, diphenylether and diphenylmethane at several hundred parts per million (ppm; mg/kg).

The PCDD/PCDF profiles reported for the two soil samples ICS-P18-SO-16-121614 and ICS-P21-SO-13-120814 are similar and are characteristic of contributions from processes associated with both [oxidized] PCB's and chlorinated phenols (principally PCP).

Sample results reported here are determined to be in general compliance with method and SAP requirements. Most deviations of data quality from SAP and method specifications are associated with generally elevated levels of multiple contaminants and/or matrix interferences in site soils. All reported data for subsurface soil samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Antimony 7440-36-0 mg/kg, dry	Arsenic 7440-38-2 mg/kg, dry	Beryllium 7440-41-7 mg/kg, dry	Cadmium 7440-43-9 mg/kg, dry	Chromium 7440-47-3 mg/kg, dry	Copper 7440-50-8 mg/kg, dry	Lead 7439-92-1 mg/kg, dry	Mercury 7439-97-6 mg/kg, dry	Nickel 7440-02-0 mg/kg, dry	Silver 7440-22-4 mg/kg, dry
					%										
ICS-P27-SO-3-111114	soil-pushprobe	11/11/14	1 - 3'	1424562-ZJ92A	78	0.3 J_a	10.9	0.2 U	2.2	29.3	340	388	0.24	24.4	0.9
ICS-P27-SO-11-111114	soil-pushprobe	11/11/14	9 - 11'	1424563-ZJ92B	69	0.3 U	3.9	0.3 U	0.4	17.2	68.5	52.0	0.06	13.9	0.3 U
ICS-P27-SO-16-111114	soil-pushprobe	11/11/14	15 - 17'	1424564-ZJ92C	80	0.2 U	0.9	0.2 U	0.1 U	9.8	10.6	1.4	0.03 U	8.3	0.2 U
ICS-P27-SO-32-111114	soil-pushprobe	11/11/14	31 - 33'	1424565-ZJ92D	78	0.3 U	1.3	0.3 U	0.1 U	11.5	14.5	1.9	0.03 U	9.5	0.3 U
ICS-P25-SO-3-111114	soil-pushprobe	11/11/14	1 - 3'	1424566-ZJ92E	88	0.2 U	6.2	0.2 U	0.3	21.1	21.9	42.2	0.38	13.7	0.2 U
ICS-P25-SO-10-111114	soil-pushprobe	11/11/14	9 - 11'	1424567-ZJ92F	75	0.3 U	2.9	0.3 U	0.1 U	12.3	16.5	5.8	0.05	8.8	0.3 U
ICS-P25-SO-16-111114	soil-pushprobe	11/11/14	15 - 17'	1424568-ZJ92G	76	0.2 U	1.6	0.2 U	0.1 U	9.9	11.9	1.5	0.03 U	7.6	0.2 U
ICS-P17-SO-4-111214	soil-pushprobe	11/12/14	4.5 - 6.5'	1424619-ZK10A	76	0.3 U	1.8	0.3 U	0.1 U	12.3	11.1	8.0	0.06	6.6	0.3 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/14	9 - 11'	1424620-ZK10B	66	0.3 U	6.5	0.3	0.1 U	14	22.4	3.6	0.03	10.9	0.3 U
ICS-P17-SO-16-111214	soil-pushprobe	11/12/14	15 - 17'	1424621-ZK10C	82	0.2 U	2.3	0.2 U	0.1 U	12	13.2	1.5	0.02 U	9.6	0.2 U
ICS-P20-SO-3-111214	soil-pushprobe	11/12/14	2 - 4'	1424622-ZK10D	94	0.2 U	4.3	0.2 U	0.1 U	10	11.6	2.6	0.03	8.5	0.2 U
ICS-P20-SO-10-111214	soil-pushprobe	11/12/14	9.5 - 11'	1424623-ZK10E	73	0.3 U	3.4	0.3 U	0.1 U	12	19.1	2.3	0.03	9.7	0.3 U
ICS-P20-SO-16-111214	soil-pushprobe	11/12/14	15 - 17'	1424624-ZK10F	74	0.2 U	2.0	0.2 U	0.1 U	12	16.4	2.1	0.02 U	9.8	0.2 U
ICS-P23-SO-3-111214	soil-pushprobe	11/12/14	2 - 4'	1424625-ZK10G	93	0.2 U	6.3	0.2 U	0.4	10.2	107	76.4	0.03	12.8	0.2 U
ICS-P23-SO-10-111214	soil-pushprobe	11/12/14	9.5 - 11'	1424626-ZK10H	72	0.3 U	3.3	0.3 U	0.1 U	13.0	20.7	2.6	0.03 U	16.2	0.3 U
ICS-P23-SO-16-111214	soil-pushprobe	11/12/14	15 - 17'	1424627-ZK10I	75	0.3 U	1.9	0.3 U	0.1 U	11.2	16.5	1.9	0.03 U	9.8	0.3 U
ICS-P13-SO-4-111314	soil-pushprobe	11/13/14	4 - 6'	1424778-ZK33A	89	0.2 U	6.2	0.2 U	0.5	36	21.1	147	0.17	12.3	0.2 U
ICS-P13-SO-10-111314	soil-pushprobe	11/13/14	9.5 - 11'	1424779-ZK33B	78	0.2 U	1.4	0.2 U	0.1 U	11.4	11.5	1.8	0.03 U	6.7	0.2 U
ICS-P13-SO-17-111314	soil-pushprobe	11/13/14	16.5 - 18'	1424780-ZK33C	79	0.2 U	2.2	0.2 U	0.1 U	12	12.4	1.7	0.03 U	8.9	0.2 U
ICS-P24-SO-4-111314	soil-pushprobe	11/13/14	3 - 5'	1424781-ZK33D	89	0.2 U	2.3	0.2 U	0.2	17	12.1	21.3	0.05	13.3	0.2 U
ICS-P24-SO-10-111314	soil-pushprobe	11/13/14	9 - 10.5'	1424782-ZK33E	78	0.3 U	3.7	0.3 U	0.2	20	16.0	34.0	2.05	11.6	0.3 U
ICS-P24-SO-16-111314	soil-pushprobe	11/13/14	15 - 17'	1424783-ZK33F	79	0.2 U	1.0	0.2 U	0.1 U	10	8.8	1.2	0.03 U	8.1	0.2 U
ICS-P26-SO-4-111314	soil-pushprobe	11/13/14	3 - 5'	1424784-ZK33G	89	0.2 U	25.7	0.3	0.4	31	37.8	75.5	0.06	33.5	0.2 U
ICS-P26-SO-10-111314	soil-pushprobe	11/13/14	9 - 11'	1424785-ZK33H	68	0.3 U	2.7	0.3 U	0.1 U	13.3	22.7	2.8	0.03 U	11.7	0.3 U
ICS-P26-SO-16-111314	soil-pushprobe	11/13/14	15 - 17'	1424786-ZK33I	72	0.3 U	2.5	0.3 U	0.1 U	13.8	21.9	2.8	0.03 U	12.4	0.3 U
ICS-P14-SO-4-111414	soil-pushprobe	11/14/14	3 - 5'	1424892-ZK50A	83	0.2 U	2.5	0.2 U	0.4	69.4	13.3	48.6	0.07	11.8	0.2 U
ICS-P14-SO-10-111414	soil-pushprobe	11/14/14	10 - 11.5'	1424893-ZK50B	71	0.3 U	3.4	0.3 U	0.1 U	14.8	20.6	3.4	0.05	10.7	0.3 U
ICS-P14-SO-16-111414	soil-pushprobe	11/14/14	15 - 17'	1424894-ZK50C	78	0.2 U	1.9	0.2 U	0.1 U	11.4	12.6	1.6	0.03 U	8.0	0.2 U
ICS-P15-SO-4-111414	soil-pushprobe	11/14/14	3 - 5'	1424895-ZK50D	81	0.2 U	3.0	0.2 U	0.3	16.6	34.9	45.7	0.07	10.1	0.2 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/14	8.5 - 10'	1424896-ZK50E	68	0.3 U	4.6	0.3 U	0.3	16.4	25.3	9.0	0.05	23.4	0.3 U
ICS-P15-SO-16-111414	soil-pushprobe	11/14/14	15 - 17'	1424897-ZK50F	78	0.2 U	1.4	0.2 U	0.1 U	8.7	9.5	1.2	0.03 U	7.8	0.2 U
ICS-P22-SO-4-111414	soil-pushprobe	11/14/14	3 - 4.5'	1424898-ZK50G	89	0.2 U	3.1	0.2 U	0.2	19.1	16.1	42.1	0.06	12.0	0.2 U
ICS-P22-SO-10-111414	soil-pushprobe	11/14/14	9 - 11'	1424899-ZK50H	76	0.3 U	3.2	0.3 U	0.1 U	13.6	20.1	2.8	0.03	10.7	0.3 U
ICS-P22-SO-16-111414	soil-pushprobe	11/14/14	15 - 17'	1424900-ZK50I	70	0.3 U	2.6	0.3 U	0.1 U	12.9	21.9	2.7	0.03 U	10.8	0.3 U
ICS-P11-SO-4-111714	soil-pushprobe	11/17/14	3 - 4.5'	1424964-ZK75A	79	0.2 U	1.4	0.2 U	0.1 U	10.4	13.6	4.9	0.05	9.9	0.2 U
ICS-P11-SO-10-111714	soil-pushprobe	11/17/14	9.5 - 11'	1424965-ZK75B	64	0.3 U	5.2	0.3 U	0.1 U	16.2	29.3	4.2	0.04 U	12.3	0.3 U
ICS-P11-SO-16-111714	soil-pushprobe	11/17/14	15 - 17'	1424966-ZK75C	81	0.2 U	0.8	0.2 U	0.1 U	8.4	9.0	1.3	0.02 U	6.1	0.2 U
ICS-P12-SO-4-111714	soil-pushprobe	11/17/14	3 - 4.5'	1424967-ZK75D	89	0.2 U	1.0	0.2 U	0.1 U	10.1	9.9	1.7	0.03 U	8.2	0.2 U
ICS-P12-SO-10-111714	soil-pushprobe	11/17/14	9.8 - 11'	1424968-ZK75E	68	0.3 U	4.7	0.3 U	0.1 U	14.2	22.4	3.1	0.04	12.1	0.3 U
ICS-P12-SO-13-111714	soil-pushprobe	11/17/14	12 - 14'	1424970-ZK75G	69	0.3 U	3.6	0.3 U	0.1 U	13.7	20.1	2.8	0.03	10.4	0.3 U
ICS-P12-SO-16-111714	soil-pushprobe	11/17/14	15 - 17'	1424969-ZK75F	75	0.3 U	3.6	0.3 U	0.1 U	12.5	18.5	2.1	0.03 U	10.5	0.3 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Antimony 7440-36-0 mg/kg, dry	Arsenic 7440-38-2 mg/kg, dry	Beryllium 7440-41-7 mg/kg, dry	Cadmium 7440-43-9 mg/kg, dry	Chromium 7440-47-3 mg/kg, dry	Copper 7440-50-8 mg/kg, dry	Lead 7439-92-1 mg/kg, dry	Mercury 7439-97-6 mg/kg, dry	Nickel 7440-02-0 mg/kg, dry	Silver 7440-22-4 mg/kg, dry
					%										
ICS-P21-SO-7-120814	soil-pushprobe	12/8/14	6 - 8'	1426680-ZN97A	84	0.2 U	3.3	0.2 U	0.3	32.1	27.5	127	0.23	21.3	0.2 U
ICS-P21-SO-13-120814	soil-pushprobe	12/8/14	12 - 14'	1426681-ZN97B	70	0.3 U	4.7	0.3	0.3	23.0	21.7	23.6	2.94	15.0	0.3 U
ICS-P21-SO-16-120814	soil-pushprobe	12/8/14	15 - 17'	1426682-ZN97C	74	0.3 U	2.4	0.3 U	0.1 U	11.1	17.6	2.3	0.04	9.0	0.3 U
ICS-P21-SO-32-120814	soil-pushprobe	12/8/14	31 - 33'	1426683-ZN97D	80	0.2 U	0.7	0.2 U	0.1 U	9.5	9.8	1.3	0.03 U	7.3	0.2 U
ICS-P33-SO-16-120814	soil-pushprobe	12/8/14	15 - 17'	1426684-ZN97E	74	0.3 U	1.9	0.3 U	0.1 U	13.2	19.7	2.5	0.03 U	10.8	0.3 U
ICS-P33-SO-32-120814	soil-pushprobe	12/8/14	31 - 33'	1426685-ZN97F	81	0.2 U	0.7	0.2 U	0.1 U	9.6	9.3	1.1	0.03 U	6.8	0.2 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/14	6 - 7'	1426754-ZO01A	90	0.2 U	2.7	0.2 U	0.4	46.1	58.8	71.1	0.26	34.8	0.2 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/14	12.5 - 13.5'	1426755-ZO01B	85	0.2 U	4.4	0.2	0.6	27.1	37.5	41.9	0.08	25.0	0.3
ICS-P30-SO-16-120914	soil-pushprobe	12/9/14	15 - 16.5'	1426756-ZO01C	62	0.3 U	7.6	0.3	0.2 U	19.7	29.2	17.5	0.12	16.7	0.3 U
ICS-P30-SO-32-120914	soil-pushprobe	12/9/14	31 - 33'	1426757-ZO01D	83	0.2 U	1.3	0.2 U	0.1 U	8.7	9.4	1.3	0.02 U	8.2	0.2 U
ICS-P31-SO-4-120914	soil-pushprobe	12/9/14	3 - 4'	1426758-ZO01E	81	0.2 U	3.6	0.2 U	0.1 U	14.2	17.6	6.6	0.06	10.8	0.2 U
ICS-P31-SO-10-120914	soil-pushprobe	12/9/14	9 - 11'	1426759-ZO01F	75	0.3 U	1.6	0.3 U	0.1 U	12.9	13.3	1.9	0.03 U	7.5	0.3 U
ICS-P31-SO-16-120914	soil-pushprobe	12/9/14	15 - 17'	1426760-ZO01G	74	0.3 U	1.2	0.3 U	0.1 U	11.7	11.7	1.6	0.03 U	8.9	0.3 U
ICS-P31-SO-32-120914	soil-pushprobe	12/9/14	31 - 33'	1426761-ZO01H	80	0.2 U	3.6	0.2 U	0.1 U	8.7	8.9	1.1	0.03 U	7.8	0.2 U
ICS-P29-SO-4-121014	soil-pushprobe	12/10/14	3 - 4'	1426963-ZO28A	82	1.3 J _R	12.2	0.2	8.1	755	205	4590	5.3	156	0.3
ICS-P29-SO-10-121014	soil-pushprobe	12/10/14	9 - 10'	1426964-ZO28B	71	0.3 U	0.8	0.6	0.1 U	21.5	21.1	8.2	0.03 U	6.9	0.3
ICS-P29-SO-16-121014	soil-pushprobe	12/10/14	15 - 17'	1426965-ZO28C	76	0.3 U	1.7	0.3 U	0.1 U	11.8	14.7	2.1	0.03	8.5	0.3 U
ICS-DUP2-121014	soil-pushprobe	12/10/14	dup. of P29-SO-16	1426970-ZO28H	76	0.2 U	1.7	0.2 U	0.1 U	12.2	13.7	2.0	0.04	8.8	0.2 U
ICS-P29-SO-32-121014	soil-pushprobe	12/10/14	31 - 33'	1426966-ZO28D	73	0.3 U	2.4	0.3 U	0.1 U	11.3	17.1	2.1	0.03	9.5	0.3 U
ICS-P16-SO-4-121014	soil-pushprobe	12/10/14	3 - 4'	1426967-ZO28E	95	0.2 U	4.0	0.2 U	0.3	15.9	11.2	2.1	0.02 U	7.7	0.2 U
ICS-P16-SO-10-121014	soil-pushprobe	12/10/14	9 - 10'	1426968-ZO28F	73	0.3 U	2.3	0.3 U	0.1 U	12.9	18.5	2.2	0.03	9.7	0.3 U
ICS-P16-SO-16-121014	soil-pushprobe	12/10/14	15 - 17'	1426969-ZO28G	74	0.3 U	1.8	0.3 U	0.1 U	11.0	14.8	1.9	0.03 U	8.4	0.3 U
ICS-P28-SO-4-121514	soil-pushprobe	12/15/14	3 - 5'	1427558-ZP37A	72	0.3 U	5.3	0.3	0.1 U	11.5	15.9	2.2	0.03 U	9.2	0.3 U
ICS-P28-SO-10-121514	soil-pushprobe	12/15/14	8.5 - 10'	1427559-ZP37B	56	0.3 U	4.6	0.4	0.2 U	14.0	25.1	3.4	0.04 U	11.9	0.3 U
ICS-P28-SO-16-121514	soil-pushprobe	12/15/14	15 - 17'	1427560-ZP37C	81	0.2 U	1.7	0.3	0.1 U	8.7	10.2	1.2	0.02 U	6.8	0.2 U
ICS-P28-SO-32-121514	soil-pushprobe	12/15/14	31 - 33'	1427561-ZP37D	80	0.2 U	0.8	0.2 U	0.1 U	7.1	6.3	0.8	0.02 U	4.9	0.2 U
ICS-P32-SO-16-121514	soil-pushprobe	12/15/14	16 - 17.5'	1427562-ZP37E	80	0.2 U	3.6	0.3	0.1 U	9.9	10.1	1.2	0.02 U	8.0	0.2 U
ICS-SO-DUPL3-121514	soil-pushprobe	12/15/14	dup. of P32-SO-16	1427564-ZP37G	82	0.2 U	1.9	0.2 U	0.1 U	9.4	9.2	1.1	0.03 U	7.0	0.2 U
ICS-P32-SO-32-121514	soil-pushprobe	12/15/14	31 - 33'	1427563-ZP37F	83	0.2 U	1.1	0.2	0.1 U	8.7	8.2	0.9	0.03 U	7.2	0.2 U
ICS-P18-SO-4-121614	soil-pushprobe	12/16/14	3 - 5'	1427717-ZP53A	92	0.2 U	2.7	0.2 U	0.4	24.3	19.7	38.1	0.20	15.3	0.2 U
ICS-P18-SO-10-121614	soil-pushprobe	12/16/14	9 - 10'	1427718-ZP53B	86	0.2 U	3.8	0.2 U	0.4	60.4	21.1	68.5	0.22	23.2	0.2 U
ICS-P18-SO-16-121614	soil-pushprobe	12/16/14	14 - 16'	1427719-ZP53C	79	0.3 J _R	6.9	0.3 U	1.0	63.1	108	950	4.8	17.0	0.3
ICS-P18-SO-32-121614	soil-pushprobe	12/16/14	31 - 33'	1427720-ZP53D	81	0.2 U	0.7	0.2 U	0.1 U	9.9	7.5	1.2	0.03 U	7.3	0.2 U
ICS-P19-SO-4-121614	soil-pushprobe	12/16/14	3 - 4'	1427721-ZP53E	92	0.2 U	3.9	0.2 U	0.3	30.8	19.2	60.5	0.10	23.0	0.2 U
ICS-P19-SO-10-121614	soil-pushprobe	12/16/14	9 - 10'	1427722-ZP53F	75	0.3 U	3.9	0.3 U	0.1 U	15.1	21.0	2.9	0.03 U	13.8	0.3 U
ICS-P19-SO-16-121614	soil-pushprobe	12/16/14	15 - 17'	1427723-ZP53G	78	0.3 U	2.4	0.3 U	0.1 U	11.7	21.8	6.2	0.04	9.2	0.3 U

J_R = estimate; due to low matrix spike recovery. Value likely biased low.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Zinc	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	7440-66-6 mg/kg, dry	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	74-87-3 µg/kg, dry	74-83-9 µg/kg, dry	75-01-4 µg/kg, dry	75-00-3 µg/kg, dry	75-09-2 µg/kg, dry	67-64-1 µg/kg, dry	75-15-0 µg/kg, dry	75-35-4 µg/kg, dry	75-34-3 µg/kg, dry	156-60-5 µg/kg, dry	156-59-2 µg/kg, dry	67-66-3 µg/kg, dry
ICS-P27-SO-3-111114	910	8.7 U	9	34	47	77	1.5 U	1.5 U	3.1	110	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P27-SO-11-111114	690	12 U	7.2 U	14 U	1.6 U	1.6 U	1.6 U	1.6 U	3.9	23	4.6	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P27-SO-16-111114	24	6.7 U	6.2 U	12 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5	7.9	1.5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32-111114	27	7.7 U	8.8	13 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	6.2 U	2.3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3-111114	140	8.6 U	27	53 *	1.5 U	1.5 U	1.5 U	1.5 U	2.9 U	26	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10-111114	46	8.5 U	14	37	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-16-111114	24	8.1 U	12	13 U	1.5 U	1.5 U	1.5 U	1.5 U	3.7	13	1.6	1.5 U	1.5 U	1.5 U	2.0	1.5 U
ICS-P17-SO-4-111214	26	150	950	290 *	1.4 U	98 J_R	1.4 U	1.4 U	5.6	68	4.9	1.4 U	2.7	1.4 U	8.3	1.4 U
ICS-P17-SO-10-111214	33	13 U	7.7 U	16	2.0 U	1.1 J	2.0 U	2.0 U	4.4	89	3.0	2.0 U	3.4	1.8 J	2.0 U	2.0 U
ICS-P17-SO-16-111214	29	8.1 U	6.1 U	12 U	1.4 U	1.4 U	1.4 U	1.4 U	5.3	130	7.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P20-SO-3-111214	39	7.7 U	11	11	1.5 U	1.5 U	1.5 U	1.5 U	6.0	7.8	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10-111214	30	9.2 U	6.8 U	14 U	1.3 U	1.3 U	1.3 U	1.3 U	3.5	14	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-16-111214	30	9.0 U	6.6 U	13 U	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	5.9 J	2.0	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P23-SO-3-111214	137	9.3 U	5.4	22	1.4 U	1.4 U	1.4 U	1.4 U	5.4	26	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10-111214	32	10 U	6.8 U	14 U	0.7 U	0.7 U	0.7 U	0.7 U	1.9	10	1.1	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
ICS-P23-SO-16-111214	27	8.7 U	6.9 U	14 U	1.3 U	1.3 U	1.3 U	1.3 U	5.3	6.6 U	4.0	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P13-SO-4-111314	200	80 U	1600	760 *	1.4 U	1.4 U	1.4 U	1.4 U	4.4	63	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P13-SO-10-111314	23	8.2 U	6.4 U	13 U	1.5 U	1.5 U	1.5 U	1.5 U	6.8	70	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17-111314	27	7.4 U	6.2 U	12 U	1.5 U	1.5 U	1.5 U	1.5 U	6.4	40	5.7	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-4-111314	89	6.9 U	12	20	1.6 U	1.6 U	1.6 U	1.6 U	6.8	18	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10-111314	82	7.6 U	810 *	2000 *	1.5 U	1.5 U	1.5 U	1.5 U	4.2	10	4.7	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-16-111314	23	8.6 U	6.2 U	12 U	1.2 U	1.2 U	1.2 U	1.2 U	3.2	12	1.2	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P26-SO-4-111314	100	9.9 U	28	86	1.3 U	1.3 U	1.3 U	1.3 U	3.1	21	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P26-SO-10-111314	33	8.8 U	6.9 U	14 U	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U	19	1.9	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16-111314	37	11 U	6.8 U	14 U	1.4 U	1.4 U	1.4 U	1.4 U	3.0	14	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-4-111414	96	10	15	20	1.4 U	1.4 U	1.4 U	1.4 U	6.2 J_B	44	7.6	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-10-111414	39	96 U	6.7 U	13 U	1.4 U	1.4 U	0.7 J	1.4 U	4.2 J_B	28	5.8	1.4 U	1.4 U	1.4 U	9.9	1.4 U
ICS-P14-SO-16-111414	25	8.4 U	6.1 U	12 U	1.4 U	1.4 U	1.4 U	1.4 U	6.1 J_B	16	2.1	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4-111414	68	7.5 U	260	160	1.5 U	1.5 U	32	1.5 U	7.4 J_B	19	2.0	1.5 U	180	6.1	32	1.5 U
ICS-P15-SO-10-111414	67	11 U	25	78	1.8 U	1.8 U	1.8 U	1.8 U	6.4 J_B	150	4.3	1.8 U	2.7	1.4 J	30	1.8 U
ICS-P15-SO-16-111414	24	9.8 U	6.2 U	12 U	1.6 U	1.6 U	1.6 U	1.6 U	5.5 J_B	24	4.3	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P22-SO-4-111414	60	10	15	41	2.4 U	2.4 U	2.4 U	2.4 U	9.9 J_B	140	6.0	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
ICS-P22-SO-10-111414	30	9.0 U	8.7	19	1.3 U	1.3 U	1.3 U	1.3 U	4.6 J_B	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P22-SO-16-111414	31	10 U	6.7 U	13 U	1.5 U	1.5 U	1.5 U	1.5 U	5.0 J_B	32	0.9 J	1.5 U	1.5 U	1.5 U	1.6	1.5 U
ICS-P11-SO-4-111714	30	9.0 U	5.2 U	10 U	1.6 U	1.6 U	1.6 U	1.6 U	8.4 J_B	55	2.7	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P11-SO-10-111714	33	13 U	8.2 U	17	1.9 U	1.9 U	1.9 U	1.9 U	6.8 J_B	71	2.5	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P11-SO-16-111714	24	7.4 U	6.0 U	12 U	1.2 U	1.2 U	1.2 U	1.2 U	2.9 J_B	23	1.0 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4-111714	26	23	6.9	11 U	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	46	2.7	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P12-SO-10-111714	34	9.0 U	7.0 U	14 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	28	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-13-111714	30	11 U	6.8 U	14 U	1.8 U	1.8 U	1.8 U	1.8 U	6.7 J_B	42	1.3 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-16-111714	29	9.9 U	6.5 U	13 U	1.6 U	1.6 U	1.6 U	1.6 U	3.3 J_B	7.9 U	1.1 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Zinc	Total Petroleum Hydrocarbons			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	7440-66-6 mg/kg, dry	Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry	74-87-3 µg/kg, dry	74-83-9 µg/kg, dry	75-01-4 µg/kg, dry	75-00-3 µg/kg, dry	75-09-2 µg/kg, dry	67-64-1 µg/kg, dry	75-15-0 µg/kg, dry	75-35-4 µg/kg, dry	75-34-3 µg/kg, dry	156-60-5 µg/kg, dry	156-59-2 µg/kg, dry	67-66-3 µg/kg, dry
ICS-P21-SO-7-120814	82	94	270 *	500 *	1.7 U	1.7 U	1.7 U	1.7 U	4.6 J _b	8.6 U	3.4	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P21-SO-13-120814	79	28	290 *	690 *	2.2 U	2.2 U	2.2 U	2.2 U	5.2 J _b	110	12	2.2 U	2.2 U	5.9	45	2.2 U
ICS-P21-SO-16-120814	25	8.9 U	6.7 U	13 U	1.4 U	1.4 U	1.4 U	1.4 U	3.0 J _b	65	3.6	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P21-SO-32-120814	21	8.7 U	6.1 U	12 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	39	2.2 J _o	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P33-SO-16-120814	29	8.6 U	6.7 U	14 U	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	7.1 U	1.9 J _o	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32-120814	20	7.4 U	6.2 U	12 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 J _b	22	6.0 J _o	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P30-SO-7-120914	96	100	800 *	2500 *	1.0 U	1.0 U	1.0 U	1.0 U	3.4 J _b	120	5.7 J _o	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-13-120914	157	40	230 *	810 *	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.5 J _o	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-16-120914	53	16 U	16 *	31 *	2.8 U	2.8 U	2.8 U	2.8 U	6.7 J _b	95	11 J _o	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
ICS-P30-SO-32-120914	24	7.3 U	6.0 U	12 U	1.4 U	1.4 U	1.4 U	1.4 U	6.8 J _b	17	4.3 J _o	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-4-120914	117	8.5 U	6.5 U	13 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 J _b	64	1.7 J _o	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-10-120914	25	8.5 U	6.8 U	14 U	1.6 U	1.6 U	1.6 U	1.6 U	8.1	24	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16-120914	24	10 U	6.8 U	14 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	28	2.5 J _o	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32-120914	22	9.1 U	6.2 U	12 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	6.7 U	3.3 J _o	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P29-SO-4-121014	1390	340	17,000 *	48,000 *	0.9 U	0.9 U	0.9 U	0.9 U	2.7	49	1.6 J _o	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
ICS-P29-SO-10-121014	38	32	110 *	220 *	1.6 U	1.6 U	1.6 U	1.6 U	5.1	700	6.3 J _o	1.6 U	45	8.4	73	1.6 U
ICS-P29-SO-16-121014	23	44	32 *	34 *	1.6 U	1.6 U	1.6 U	1.6 U	6.1	80	5.7 J _o	1.6 U	1.6 U	2.7	11	1.6 U
ICS-DUP2-121014	23	52	30 *	34 *	2.1 U	2.1 U	2.1 U	2.1 U	8.0	120	6.5 J _o	2.1 U	1.4 J	3.5	15	2.1 U
ICS-P29-SO-32-121014	26	9.6 U	6.4 U	13 U	1.6 U	1.6 U	1.6 U	1.6 U	4.1	25	2.3 J _o	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4-121014	65	10 U	5.4 U	11 U	0.8 U	0.8 U	0.8 U	0.8 U	2.0	14	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-10-121014	26	13 U	7.0 U	14 U	2.0 U	2.0 U	2.0 U	2.0 U	6.2	79	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16-121014	22	10 U	6.8 U	14 U	2.3 U	2.3 U	2.3 U	2.3 U	9.6	43	2.5 J _o	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
ICS-P28-SO-4-121514	26	9.2	13	13 U	1.9 U	1.9 U	1.9 U	1.9 U	4.3 J _b	19	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10-121514	29	19 U	9.4 U	25	2.6 U	2.6 U	2.6 U	2.6 U	5.8	59	5.6	2.6 U	3.5	11	48	2.6 U
ICS-P28-SO-16-121514	24	9.2 U	6.0 U	12 U	1.1 U	1.1 U	1.1 U	1.1 U	2.5 J _b	160	3.6	1.1 U	0.6 J	2.0	0.7 J	1.1 U
ICS-P28-SO-32-121514	15	8.7 U	6.0 U	12 U	1.6 U	1.6 U	1.6 U	1.6 U	5.0	61	4.8	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P32-SO-16-121514	24	8.8 U	6.2 U	12 U	1.6 U	1.6 U	1.6 U	1.6 U	3.5 J _b	29	4.1	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3-121514	23	9.1 U	6.0 U	12 U	3.0 U	3.0 U	3.0 U	3.0 U	9.6	77 J _o	6.6	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32-121514	22	10 U	5.8 U	12 U	1.6 U	1.6 U	1.6 U	1.6 U	4.6	48	8.6	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P18-SO-4-121614	1230	46	840	740 *	2.5 U	2.5 U	2.5 U	2.5 U	8.7	88 J _o	3.0	2.5 U	2.5 U	2.5 U	2.3 J	2.5 U
ICS-P18-SO-10-121614	205	150	210 *	410 *	1.5 U	1.5 U	1.5 U	1.5 U	5.8	82 J _o	5.7	1.5 U	1.5 U	0.7 J	1.5 U	1.5 U
ICS-P18-SO-16-121614	680	190	2900 *	5500 *	1.4 U	1.4 U	1.4 U	1.4 U	3.3 J _b	7.1 U	3.1	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-32-121614	21	8.8 U	6.1 U	12 U	1.4 U	1.4 U	1.4 U	1.4 U	5.9	7.1 U	3.8	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P19-SO-4-121614	73	12	300 *	1100 *	1.8 U	1.8 U	1.8 U	1.8 U	5.4	70 J _o	2.1	1.8 U	0.9 J	1.8 U	1.8 U	1.8 U
ICS-P19-SO-10-121614	32	12 U	29 *	50 *	1.9 U	1.9 U	1.9 U	1.9 U	7.2	43 J _o	5.5	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P19-SO-16-121614	30	8.5 U	7.6	19	1.6 U	1.6 U	1.6 U	1.6 U	4.0	49 J _o	1.5 J	1.6 U	0.9 J	1.6 U	1.0 J	1.6 U

* profile resembles mineral oil or dielectric fluid

black-bolded or highlighted TPH values resemble profiles associated with gasoline, diesel fuel/oil and motor oil lubricant.

J = estimate associated with value less than the verifiable lower quantitation limit.

J_o = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	1,2-Dichloro-ethane 107-06-2 µg/kg, dry	2-Butanone 78-93-3 µg/kg, dry	1,1,1-Tri-chloroethane 71-55-6 µg/kg, dry	Carbon tetrachloride 56-23-5 µg/kg, dry	Bromo-dichloromethane 75-27-4 µg/kg, dry	1,2-Dichloro-propane 78-87-5 µg/kg, dry	cis -1,3-Dichloro-propene 10061-01-5 µg/kg, dry	Trichloro-ethene 79-01-6 µg/kg, dry	Dibromo-chloromethane 124-48-1 µg/kg, dry	1,1,2-Trichloro-ethane 79-00-5 µg/kg, dry	Benzene 71-43-2 µg/kg, dry	trans -1,3-Dichloropropene 10061-02-6 µg/kg, dry	Bromo-form 75-25-2 µg/kg, dry	4-Methyl-2-pentanone 108-10-1 µg/kg, dry	2-Hexanone 591-78-6 µg/kg, dry	Tetrachloro-ethene 127-18-4 µg/kg, dry
ICS-P27-SO-3-111114	1.5 U	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	2.3	1.5 U	1.5 U	7.4 U	7.4 U	1.5 U
ICS-P27-SO-11-111114	1.6 U	7.1 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.8 U	7.8 U	1.6 U
ICS-P27-SO-16-111114	1.2 U	6.0 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.0 U	6.0 U	1.2 U
ICS-P27-SO-32-111114	1.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	6.2 U	1.2 U
ICS-P25-SO-3-111114	1.5 U	6.1 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.8 J	1.5 U	1.5 U	7.3 U	7.3 U	1.5 U
ICS-P25-SO-10-111114	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P25-SO-16-111114	1.5 U	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.2 J	1.5 U	1.5 U	7.5 U	7.5 U	1.5 U
ICS-P17-SO-4-111214	1.4 U	7.0 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.2	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U	7.0 U	7.0 U	1.4 U
ICS-P17-SO-10-111214	2.0 U	17	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	15	2.0 U	2.0 U	10 U	10 U	2.0 U
ICS-P17-SO-16-111214	1.4 U	14	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.7	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P20-SO-3-111214	1.5 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	7.6 U	1.5 U
ICS-P20-SO-10-111214	1.3 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U
ICS-P20-SO-16-111214	1.5 U	7.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.7 U	7.7 U	1.5 U
ICS-P23-SO-3-111214	1.4 U	4.9 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.6	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P23-SO-10-111214	0.7 U	2.9 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	3.6 U	3.6 U	0.7 U
ICS-P23-SO-16-111214	1.3 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U
ICS-P13-SO-4-111314	1.4 U	8.9	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U	7.0 U	7.0 U	5.1
ICS-P13-SO-10-111314	1.5 U	11	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	7.4 U	1.5 U
ICS-P13-SO-17-111314	1.5 U	5.9 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.3 U	7.3 U	1.5 U
ICS-P24-SO-4-111314	1.6 U	9.1	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	7.9 U	2.4
ICS-P24-SO-10-111314	1.5 U	13	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	2.7	1.5 U	1.5 U	3.9	1.5 U	1.5 U	7.6 U	7.6 U	1.5 U
ICS-P24-SO-16-111314	1.2 U	5.8 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.8 U	5.8 U	1.2 U
ICS-P26-SO-4-111314	1.3 U	4.7 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4	1.3 U	1.3 U	6.4 U	6.4 U	0.7 J
ICS-P26-SO-10-111314	1.6 U	4.8 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	8.2 U	1.6 U
ICS-P26-SO-16-111314	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	7.1 U	1.4 U
ICS-P14-SO-4-111414	1.4 U	4.5 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.0 U	7.0 U	1.4 U
ICS-P14-SO-10-111414	1.4 U	5.5 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.0 J	1.4 U	1.4 U	2.2	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P14-SO-16-111414	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	7.1 U	1.4 U
ICS-P15-SO-4-111414	1.4 J	7.6 U	1.5 U	1.5 U	1.5 U	3.8	1.5 U	7.3	1.5 U	1.5 U	9.3	1.5 U	1.5 U	7.6 U	7.6 U	0.8 J
ICS-P15-SO-10-111414	1.8 U	29	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	4.0	1.8 U	1.8 U	2.4	1.8 U	1.8 U	8.9 U	8.9 U	1.7 J
ICS-P15-SO-16-111414	1.6 U	8.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.1 U	8.1 U	1.6 U
ICS-P22-SO-4-111414	2.4 U	16	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	5.9	2.4 U	2.4 U	9.9	2.4 U	2.4 U	12 U	12 U	2.4 U
ICS-P22-SO-10-111414	1.3 U	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.9 J	1.3 U	1.3 U	11	1.3 U	1.3 U	6.5 U	6.5 U	1.3 U
ICS-P22-SO-16-111414	1.5 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15	1.5 U	1.5 U	7.6 U	7.6 U	1.5 U
ICS-P11-SO-4-111714	1.6 U	6.1 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1	1.6 U	1.6 U	8.1 U	8.1 U	1.6 U
ICS-P11-SO-10-111714	1.9 U	18	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.7 J	1.9 U	1.9 U	9.7 U	9.7 U	1.9 U
ICS-P11-SO-16-111714	1.2 U	3.8 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	5.9 U	1.2 U
ICS-P12-SO-4-111714	1.6 U	4.5 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.5	1.6 U	1.6 U	7.9 U	7.9 U	1.6 U
ICS-P12-SO-10-111714	1.8 U	8.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	20	1.8 U	1.8 U	8.9 U	8.9 U	1.8 U
ICS-P12-SO-13-111714	1.8 U	7.1 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	5.7	1.8 U	1.8 U	8.8 U	8.8 U	1.8 U
ICS-P12-SO-16-111714	1.6 U	7.9 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	7.9 U	1.6 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	1,2-Dichloro-ethane 107-06-2 µg/kg, dry	2-Butanone 78-93-3 µg/kg, dry	1,1,1-Tri-chloroethane 71-55-6 µg/kg, dry	Carbon tetrachloride 56-23-5 µg/kg, dry	Bromo-dichloromethane 75-27-4 µg/kg, dry	1,2-Dichloro-propane 78-87-5 µg/kg, dry	cis -1,3-Dichloro-propene 10061-01-5 µg/kg, dry	Trichloro-ethene 79-01-6 µg/kg, dry	Dibromo-chloromethane 124-48-1 µg/kg, dry	1,1,2-Trichloro-ethane 79-00-5 µg/kg, dry	Benzene 71-43-2 µg/kg, dry	trans -1,3-Dichloropropene 10061-02-6 µg/kg, dry	Bromo-form 75-25-2 µg/kg, dry	4-Methyl-2-pentanone 108-10-1 µg/kg, dry	2-Hexanone 591-78-6 µg/kg, dry	Tetrachloro-ethene 127-18-4 µg/kg, dry
ICS-P21-SO-7-120814	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	17	1.7 U	1.7 U	8.6 U	8.6 U	1.7 U
ICS-P21-SO-13-120814	2.2 U	14	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	3.7	2.2 U	2.2 U	50	2.2 U	2.2 U	11 U	11 U	2.2 U
ICS-P21-SO-16-120814	1.4 U	6.0 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	6.4	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P21-SO-32-120814	1.2 U	5.9 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	5.9 U	1.2 U
ICS-P33-SO-16-120814	1.4 U	5.3 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	7.1 U	1.4 U
ICS-P33-SO-32-120814	1.3 U	6.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.5 U	6.5 U	1.3 U
ICS-P30-SO-7-120914	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	4.1	1.0 U	1.0 U	5.0 U	5.0 U	0.8 J
ICS-P30-SO-13-120914	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	21	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U
ICS-P30-SO-16-120914	2.8 U	10 J	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8	2.8 U	2.8 U	14 U	14 U	2.8 U
ICS-P30-SO-32-120914	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.2 J	1.4 U	1.4 U	7.2 U	7.2 U	1.4 U
ICS-P31-SO-4-120914	1.4 U	5.7 J	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	1.4 U	1.4 U	6.8 U	6.8 U	1.4 U
ICS-P31-SO-10-120914	1.6 U	8.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	8.2 U	1.6 U
ICS-P31-SO-16-120914	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	8.6 U	1.7 U
ICS-P31-SO-32-120914	1.3 U	6.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.7 U	6.7 U	1.3 U
ICS-P29-SO-4-121014	0.9 U	4.6 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1.0	0.9 U	0.9 U	1.6	0.9 U	0.9 U	4.6 U	4.6 U	0.9 U
ICS-P29-SO-10-121014	1.6 U	66	1.6 U	1.6 U	1.6 U	10	1.6 U	14	1.6 U	1.6 U	18	1.6 U	1.6 U	8.1 U	8.1 U	5.8
ICS-P29-SO-16-121014	1.6 U	8.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	4.8	1.6 U	1.6 U	8.0	1.6 U	1.6 U	8.1 U	8.1 U	1.6 U
ICS-DUP2-121014	2.1 U	10 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	8.7	2.1 U	2.1 U	11	2.1 U	2.1 U	10 U	10 U	1.1 J
ICS-P29-SO-32-121014	1.6 U	8.0 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.0 U	8.0 U	1.6 U
ICS-P16-SO-4-121014	0.8 U	4.1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	4.1 U	4.1 U	0.8 U
ICS-P16-SO-10-121014	2.0 U	5.5 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	1.8 J
ICS-P16-SO-16-121014	2.3 U	6.6 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	11 U	11 U	2.3 U
ICS-P28-SO-4-121514	1.9 U	9.5 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U	9.5 U	1.9 U
ICS-P28-SO-10-121514	2.6 U	19	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	7.8	2.6 U	2.6 U	8.4	2.6 U	2.6 U	13 U	13 U	2.6 U
ICS-P28-SO-16-121514	1.1 U	20	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	21	1.1 U	1.1 U	5.7 U	5.7 U	1.1 U
ICS-P28-SO-32-121514	1.6 U	4.5 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U	8.1 U	8.1 U	1.6 U
ICS-P32-SO-16-121514	1.6 U	7.9 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	7.9 U	1.6 U
ICS-SO-DUPL3-121514	3.0 U	17 J ₀	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	15 U	15 U	3.0 U
ICS-P32-SO-32-121514	1.6 U	10	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	8.2 U	1.6 U
ICS-P18-SO-4-121614	2.5 U	29 J ₀	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.4	2.5 U	2.5 U	12 U	12 U	2.5 U
ICS-P18-SO-10-121614	1.5 U	33 J ₀	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	4.8	1.5 U	1.5 U	7.4 U	7.4 U	1.5 U
ICS-P18-SO-16-121614	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	6.3	1.4 U	1.4 U	7.1 U	7.1 U	1.4 U
ICS-P18-SO-32-121614	1.4 U	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	7.1 U	1.4 U
ICS-P19-SO-4-121614	1.8 U	24 J ₀	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	6.2	1.8 U	1.8 U	9.1 U	9.1 U	1.8 U
ICS-P19-SO-10-121614	1.9 U	5.2 J	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U	9.5 U	1.9 U
ICS-P19-SO-16-121614	1.6 U	4.3 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.1 J	1.6 U	1.6 U	0.9 J	1.6 U	1.6 U	7.9 J	7.9 J	1.6 U

J = estimate associated with value less than the verifiable lower quantitation limit.

*J*₀ = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	1,1,2,2-Tetra- chloroethane 79-34-5 µg/kg, dry	Toluene 108-88-3 µg/kg, dry	Chloro- benzene 108-90-7 µg/kg, dry	Ethyl- benzene 100-41-4 µg/kg, dry	Styrene 100-42-5 µg/kg, dry	Trichloro- fluoromethane 75-69-4 µg/kg, dry	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/kg, dry	m - & p - Xylenes 179601-23-1 µg/kg, dry	o -Xylene 95-47-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Acrolein 107-02-8 µg/kg, dry	Bromoethane 74-96-4 µg/kg, dry	1,1-Dichloro- propene 563-58-6 µg/kg, dry
ICS-P27-SO-3-111114	1.5 U	2.3	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P27-SO-11-111114	1.6 U	1.8	1.6 U	1.6 U	1.6 U	1.6 U	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	78 U	3.1 U	1.6 U
ICS-P27-SO-16-111114	1.2 U	0.6 J	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	60 U	2.4 U	1.2 U
ICS-P27-SO-32-111114	1.2 U	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	62 U	2.5 U	1.2 U
ICS-P25-SO-3-111114	1.5 U	1.0 J	1.5 U	1.5 U	1.5 U	1.5 U	2.9 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	73 U	2.9 U	1.5 U
ICS-P25-SO-10-111114	1.4 U	1.1 J	1.2 J	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	0.9 J	72 U	2.9 U	1.4 U
ICS-P25-SO-16-111114	1.5 U	0.9 J	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	75 U	3.0 U	1.5 U
ICS-P17-SO-4-111214	1.4 U	1.8	2.7	2.8	1.4 U	1.4 U	2.8 U	3.8	3.3	8.9	470	520	70 U	2.8 U	1.4 U
ICS-P17-SO-10-111214	2.0 U	19	18	13	2.0 U	2.0 U	4.1 U	19	7.8	2.0 U	2.0 U	2.0 U	100 U	4.1 U	2.0 U
ICS-P17-SO-16-111214	1.4 U	2.2	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.1 J	0.7 J	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P20-SO-3-111214	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P20-SO-10-111214	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.7 U	1.3 U
ICS-P20-SO-16-111214	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	77 U	3.1 U	1.5 U
ICS-P23-SO-3-111214	1.4 U	1.5	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P23-SO-10-111214	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.4 U	0.7 U	0.7 U	0.7 U	0.7 U	2.6	36 U	1.4 U	0.7 U
ICS-P23-SO-16-111214	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	66 U	2.6 U	1.3 U
ICS-P13-SO-4-111314	1.4 U	6.9	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.3 J	1.0 J	1.4 U	1.4 U	1.4 U	70 U	2.8 U	1.4 U
ICS-P13-SO-10-111314	1.5 U	3.4	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P13-SO-17-111314	1.5 U	2.5	1.5 U	1.5 U	1.5 U	1.5 U	2.9 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	73 U	2.9 U	1.5 U
ICS-P24-SO-4-111314	1.6 U	0.8 J	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P24-SO-10-111314	1.5 U	2.4	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 J	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P24-SO-16-111314	1.2 U	0.8 J	1.2 U	1.2 U	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	58 U	2.3 U	1.2 U
ICS-P26-SO-4-111314	1.3 U	2.2	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	64 U	2.6 U	1.3 U
ICS-P26-SO-10-111314	1.6 U	1.3 J	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P26-SO-16-111314	1.4 U	1.0 J	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P14-SO-4-111414	1.4 U	1.0 J	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	70 U	2.8 U	1.4 U
ICS-P14-SO-10-111414	1.4 U	9.7	1.4 U	1.9	1.4 U	1.4 U	2.9 U	5.5	1.3 J	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P14-SO-16-111414	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P15-SO-4-111414	1.5 U	17	1.5 U	48	1.5 U	1.5 U	3.1 U	33	35	1.5 U	1.5 U	1.5 U	76 U	3.1 U	1.5 U
ICS-P15-SO-10-111414	1.8 U	73	1.8 U	50	1.8 U	1.8 U	3.6 U	110	30	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P15-SO-16-111414	1.6 U	1.6	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	81 U	3.2 U	1.6 U
ICS-P22-SO-4-111414	2.4 U	7.6	2.4 U	170	2.4 U	2.4 U	4.9 U	57	19	1.8 J	2.4 U	2.4 U	120 U	4.9 U	2.4 U
ICS-P22-SO-10-111414	1.3 U	1.2 J	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.7	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U
ICS-P22-SO-16-111414	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	76 U	3.0 U	1.5 U
ICS-P11-SO-4-111714	1.6 U	3.5	1.6 U	7.1	1.6 U	1.6 U	3.2 U	8.0	2.7	1.6 U	1.6 U	1.6 U	81 U	3.2 U	1.6 U
ICS-P11-SO-10-111714	1.9 U	1.1 J	1.9 U	1.9 U	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	97 U	3.9 U	1.9 U
ICS-P11-SO-16-111714	1.2 U	2.0	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	59 U	2.4 U	1.2 U
ICS-P12-SO-4-111714	1.6 U	3.4	1.6 U	7.6	1.6 U	1.6 U	3.2 U	31	3.4	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P12-SO-10-111714	1.8 U	2.0	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	8.2	2.1	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P12-SO-13-111714	1.8 U	0.9 J	1.8 U	1.8 U	1.8 U	1.8 U	3.5 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	88 U	3.5 U	1.8 U
ICS-P12-SO-16-111714	1.6 U	2.0	1.6 U	1.6 U	1.6 U	1.6 U	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.1 U	1.6 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	1,1,2,2-Tetra- chloroethane 79-34-5 µg/kg, dry	Toluene 108-88-3 µg/kg, dry	Chloro- benzene 108-90-7 µg/kg, dry	Ethyl- benzene 100-41-4 µg/kg, dry	Styrene 100-42-5 µg/kg, dry	Trichloro- fluoromethane 75-69-4 µg/kg, dry	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/kg, dry	m - & p - Xylenes 179601-23-1 µg/kg, dry	o -Xylene 95-47-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Acrolein 107-02-8 µg/kg, dry	Bromoethane 74-96-4 µg/kg, dry	1,1-Dichloro- propene 563-58-6 µg/kg, dry
ICS-P21-SO-7-120814	1.7 U	3.9	1.7 U	1.6 J	1.7 U	1.7 U	3.5 U	5.4	2.1	1.7 U	1.7 U	1.7 U	86 U	3.5 U	1.7 U
ICS-P21-SO-13-120814	2.2 U	290	2.2 U	280	2.2 U	2.2 U	4.5 U	190	92	2.7	2.2 U	2.2 U	110 U	4.5 U	2.2 U
ICS-P21-SO-16-120814	1.4 U	2.9	1.4 U	0.9 J	1.4 U	1.4 U	2.9 U	30	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P21-SO-32-120814	1.2 U	1.3	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	59 U	2.4 U	1.2 U
ICS-P33-SO-16-120814	1.4 U	0.7 J	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P33-SO-32-120814	1.3 U	0.8 J	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	65 U	2.6 U	1.3 U
ICS-P30-SO-7-120914	1.0 U	390	1.0 U	2700	87	1.0 U	2.0 U	730	510	140	1.0 U	6.0	50 U	2.0 U	1.0 U
ICS-P30-SO-13-120914	1.0 U	4.0	1.0 U	2.0	0.7 J	1.0 U	2.0 U	5.3	2.2	1.0 U	1.0 U	1.0 U	50 U	2.0 U	1.0 U
ICS-P30-SO-16-120914	2.8 U	2.1 J	2.8 U	2.8 U	2.8 U	2.8 U	5.6 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	140 U	5.6 U	2.8 U
ICS-P30-SO-32-120914	1.4 U	0.9 J	1.4 U	1.1 J	1.4 U	1.4 U	2.9 U	3.4	1.4 U	1.4 U	1.4 U	1.4 U	72 U	2.9 U	1.4 U
ICS-P31-SO-4-120914	1.4 U	1.5	1.4 U	1.4 U	1.4 U	1.4 U	2.7 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	68 U	2.7 U	1.4 U
ICS-P31-SO-10-120914	1.6 U	0.9 J	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P31-SO-16-120914	1.7 U	1.1 J	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	86 U	3.4 U	1.7 U
ICS-P31-SO-32-120914	1.3 U	0.9 J	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	67 U	2.7 U	1.3 U
ICS-P29-SO-4-121014	0.9 U	3.0	0.9 U	1.9	0.9 U	0.9 U	1.8 U	4.5	5.3	47	13	73	46 U	1.8 U	0.9 U
ICS-P29-SO-10-121014	1.6 U	1900	3.8	720	100	1.6 U	3.2 U	570	220	19	3.3	5.3	81 U	3.2 U	1.6 U
ICS-P29-SO-16-121014	1.6 U	110	1.6 U	66	1.3 J	1.6 U	3.2 U	120	51	1.8	1.6 U	1.6 U	81 U	3.2 U	1.6 U
ICS-DUP2-121014	2.1 U	150	2.1 U	96	2.0 J	2.1 U	4.1 U	170	76	3.2	2.1 U	2.1 U	100 U	4.1 U	2.1 U
ICS-P29-SO-32-121014	1.6 U	0.9 J	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	80 U	3.2 U	1.6 U
ICS-P16-SO-4-121014	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1.7 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	41 U	1.7 U	0.8 U
ICS-P16-SO-10-121014	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	100 U	4.1 U	2.0 U
ICS-P16-SO-16-121014	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	110 U	4.5 U	2.3 U
ICS-P28-SO-4-121514	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	95 U	3.8 U	1.9 U
ICS-P28-SO-10-121514	2.6 U	84	25	67	2.6 U	2.6 U	1.5 J	90	41	45	64	200	130 U	5.1 U	2.6 U
ICS-P28-SO-16-121514	1.1 U	33	5.7	28	1.1 U	1.1 U	2.3 U	26	9.6	1.1 U	1.1 U	0.6 J	57 U	2.3 U	1.1 U
ICS-P28-SO-32-121514	1.6 U	1.2 J	1.6 J	1.6 U	1.6 U	1.6 U	2.5 J	1.6 U	1.6 U	1.6 U	1.6 U	0.9 J	81 U	3.2 U	1.6 U
ICS-P32-SO-16-121514	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-SO-DUPL3-121514	3.0 U	7.7	3.0 U	3.0 U	3.0 U	3.0 U	6.1 U	3.8	3.0 U	3.0 U	3.0 U	3.0 U	150 U	6.1 U	3.0 U
ICS-P32-SO-32-121514	1.6 U	1.0 J	1.6 U	1.6 U	1.6 U	1.6 U	3.3 U	1.2 J	1.6 U	1.6 U	1.6 U	1.6 U	82 U	3.3 U	1.6 U
ICS-P18-SO-4-121614	2.5 U	4.3	2.5 U	4.4	2.5 U	2.5 U	4.9 U	8.0	3.2	2.4 J	2.5 U	2.5 U	120 U	4.9 U	2.5 U
ICS-P18-SO-10-121614	1.5 U	65	1.5 U	8.7	1.5 U	1.5 U	2.9 U	480	220	17	1.5 U	1.5 U	74 U	2.9 U	1.5 U
ICS-P18-SO-16-121614	1.4 U	1.1 J	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 J	4.0	1.4 U	1.4 U	1.4 U	71 U	2.8 U	1.4 U
ICS-P18-SO-32-121614	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	71 U	2.9 U	1.4 U
ICS-P19-SO-4-121614	1.8 U	2.6	1.8 U	3.4	1.8 U	1.8 U	3.6 U	2.8	2.5	1.8 U	1.8 U	1.8 U	91 U	3.6 U	1.8 U
ICS-P19-SO-10-121614	1.9 U	1.1 J	3.1	1.9 U	1.9 U	1.9 U	3.8 U	1.9 U	1.9 U	3.6	2.5	6.1	95 U	3.8 U	1.9 U
ICS-P19-SO-16-121614	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Dibromo- methane 74-95-3 µg/kg, dry	1,1,1,2-Tetra- chloroethane 630-20-6 µg/kg, dry	1,2,3-Trichloro- propane 96-18-4 µg/kg, dry	trans -1,4-Dichloro-2- butene 110-57-6 µg/kg, dry	1,3,5-Trimethyl- benzene 108-67-8 µg/kg, dry	1,2,4-Trimethyl- benzene 95-63-6 µg/kg, dry	Hexachlorobutadiene 87-68-3 µg/kg, dry	Ethylene dibromide * 106-93-4 µg/kg, dry	Bromochloro- methane 74-97-5 µg/kg, dry	2,2-Dichloro- propane 294-20-7 µg/kg, dry	1,3-Dichloro- propane 142-28-9 µg/kg, dry	Isopropyl- benzene 98-82-8 µg/kg, dry	n-Propyl- benzene 103-65-1 µg/kg, dry	Bromo- benzene 108-86-1 µg/kg, dry	2-Chloro- toluene 95-49-8 µg/kg, dry
ICS-P27-SO-3-111114	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P27-SO-11-111114	1.6 U	1.6 U	3.1 U	7.8 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P27-SO-16-111114	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see M.8081B result)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P27-SO-32-111114	1.2 U	1.2 U	2.5 U	6.2 U	1.2 U	1.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P25-SO-3-111114	1.5 U	1.5 U	2.9 U	7.3 U	1.5 U	1.5 U	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P25-SO-10-111114	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P25-SO-16-111114	1.5 U	1.5 U	3.0 U	7.5 U	1.5 U	1.5 U	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P17-SO-4-111214	1.4 U	1.4 U	2.8 U	7.0 U	1.4 U	5.0	7.0 U	1.4 U	1.4 U	1.4 U	1.4 U	110	95	1.4 U	1.4 U
ICS-P17-SO-10-111214	2.0 U	2.0 U	4.1 U	10 U	2.0 U	2.7	10 U	2.0 U	2.0 U	2.0 U	2.0 U	1.8 J	2.0 U	2.0 U	2.0 U
ICS-P17-SO-16-111214	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	7.2 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P20-SO-3-111214	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	7.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P20-SO-10-111214	1.3 U	1.3 U	2.7 U	6.6 U	1.3 U	1.3 U	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P20-SO-16-111214	1.5 U	1.5 U	3.1 U	7.7 U	1.5 U	1.5 U	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P23-SO-3-111214	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P23-SO-10-111214	0.7 U	0.7 U	1.4 U	3.6 U	0.7 U	0.7 U	(see M.8081B result)	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
ICS-P23-SO-16-111214	1.3 U	1.3 U	2.6 U	6.6 U	1.3 U	1.3 U	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P13-SO-4-111314	1.4 U	1.4 U	2.8 U	7.0 U	2.0	5.7	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.3 J	1.4 U	1.4 U
ICS-P13-SO-10-111314	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	2.1	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P13-SO-17-111314	1.5 U	1.5 U	2.9 U	7.3 U	1.5 U	1.3 J	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-4-111314	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P24-SO-10-111314	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P24-SO-16-111314	1.2 U	1.2 U	2.3 U	5.8 U	1.2 U	1.2 U	(see M.8081B result)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P26-SO-4-111314	1.3 U	1.3 U	2.6 U	6.4 U	1.3 U	1.3 U	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P26-SO-10-111314	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P26-SO-16-111314	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-4-111414	1.4 U	1.4 U	2.8 U	7.0 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-10-111414	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P14-SO-16-111414	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P15-SO-4-111414	1.5 U	1.5 U	3.1 U	7.6 U	4.4	12	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.3 J	1.4 J	1.5 U	1.5 U
ICS-P15-SO-10-111414	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see M.8081B result)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P15-SO-16-111414	1.6 U	1.6 U	3.2 U	8.1 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P22-SO-4-111414	2.4 U	2.4 U	4.9 U	12 U	8.4	32	(see M.8081B result)	2.4 U	2.4 U	2.4 U	2.4 U	5.3	4.9	2.4 U	2.4 U
ICS-P22-SO-10-111414	1.3 U	1.3 U	2.6 U	6.5 U	1.3 U	0.8 J	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	0.8 J	1.3 U	1.3 U	1.3 U
ICS-P22-SO-16-111414	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P11-SO-4-111714	1.6 U	1.6 U	3.2 U	8.1 U	2.1	11	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 J	3.2	1.6 U	1.6 U
ICS-P11-SO-10-111714	1.9 U	1.9 U	3.9 U	9.7 U	1.9 U	1.9 U	(see M.8081B result)	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P11-SO-16-111714	1.2 U	1.2 U	2.4 U	5.9 U	1.2 U	1.2 U	(see M.8081B result)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P12-SO-4-111714	1.6 U	1.6 U	3.2 U	7.9 U	2.4	17	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.4 J	2.5	1.6 U	1.6 U
ICS-P12-SO-10-111714	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see M.8081B result)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-13-111714	1.8 U	1.8 U	3.5 U	8.8 U	1.8 U	1.8 U	(see M.8081B result)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P12-SO-16-111714	1.6 U	1.6 U	3.1 U	7.9 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Dibromo- methane 74-95-3 µg/kg, dry	1,1,1,2-Tetra- chloroethane 630-20-6 µg/kg, dry	1,2,3-Trichloro- propane 96-18-4 µg/kg, dry	trans -1,4-Dichloro-2- butene 110-57-6 µg/kg, dry	1,3,5-Trimethyl- benzene 108-67-8 µg/kg, dry	1,2,4-Trimethyl- benzene 95-63-6 µg/kg, dry	Hexachlorobutadiene 87-68-3 µg/kg, dry	Ethylene dibromide * 106-93-4 µg/kg, dry	Bromochloro- methane 74-97-5 µg/kg, dry	2,2-Dichloro- propane 294-20-7 µg/kg, dry	1,3-Dichloro- propane 142-28-9 µg/kg, dry	Isopropyl- benzene 98-82-8 µg/kg, dry	n-Propyl- benzene 103-65-1 µg/kg, dry	Bromo- benzene 108-86-1 µg/kg, dry	2-Chloro- toluene 95-49-8 µg/kg, dry
ICS-P21-SO-7-120814	1.7 U	1.7 U	3.5 U	8.6 U	1.7 J	2.7	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	3.8	1.7 J	1.7 U	1.7 U
ICS-P21-SO-13-120814	2.2 U	2.2 U	4.5 U	11 U	11	32	(see M.8081B result)	2.2 U	2.2 U	2.2 U	2.2 U	5.2	3.2	2.2 U	2.4
ICS-P21-SO-16-120814	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	34	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	3.1	1.4 U	1.4 U	1.4 U
ICS-P21-SO-32-120814	1.2 U	1.2 U	2.4 U	5.9 U	1.2 U	0.9 J	(see M.8081B result)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-P33-SO-16-120814	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P33-SO-32-120814	1.3 U	1.3 U	2.6 U	6.5 U	1.3 U	1.3 U	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P30-SO-7-120914	1.0 U	1.0 U	2.0 U	5.0 U	250	1700	(see M.8081B result)	1.0 U	1.0 U	1.0 U	1.0 U	140	270	1.0 U	1.0 U
ICS-P30-SO-13-120914	1.0 U	1.0 U	2.0 U	5.0 U	1.3	3.5	(see M.8081B result)	1.0 U	1.0 U	1.0 U	1.0 U	0.9 J	0.8 J	1.0 U	1.0 U
ICS-P30-SO-16-120914	2.8 U	2.8 U	5.6 U	14 U	2.8 U	2.8 U	(see M.8081B result)	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
ICS-P30-SO-32-120914	1.4 U	1.4 U	2.9 U	7.2 U	1.4 U	2.1	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-4-120914	1.4 U	1.4 U	2.7 U	6.8 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P31-SO-10-120914	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P31-SO-16-120914	1.7 U	1.7 U	3.4 U	8.6 U	1.7 U	1.7 U	(see M.8081B result)	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P31-SO-32-120914	1.3 U	1.3 U	2.7 U	6.7 U	1.3 U	1.3 U	(see M.8081B result)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P29-SO-4-121014	0.9 U	0.9 U	1.8 U	4.6 U	0.9 U	6.5	4.6 U	0.9 U	0.9 U	0.9 U	0.9 U	16	34	0.9 U	0.9 U
ICS-P29-SO-10-121014	1.6 U	1.6 U	3.2 U	8.1 U	120	410	8.1 U	1.6 U	1.6 U	1.6 U	1.6 U	13	31	1.6 U	1.6 U
ICS-P29-SO-16-121014	1.6 U	1.6 U	3.2 U	8.1 U	22	55	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	5.5	7.3	1.6 U	1.6 U
ICS-DUP2-121014	2.1 U	2.1 U	4.1 U	10 U	37	95	(see M.8081B result)	2.1 U	2.1 U	2.1 U	2.1 U	8.1	12	2.1 U	2.1 U
ICS-P29-SO-32-121014	1.6 U	1.6 U	3.2 U	8.0 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P16-SO-4-121014	0.8 U	0.8 U	1.7 U	4.1 U	0.8 U	0.8 U	4.1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
ICS-P16-SO-10-121014	2.0 U	2.0 U	4.1 U	10 U	2.0 U	2.0 U	(see M.8081B result)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P16-SO-16-121014	2.3 U	2.3 U	4.5 U	11 U	2.3 U	2.3 U	(see M.8081B result)	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
ICS-P28-SO-4-121514	1.9 U	1.9 U	3.8 U	9.5 U	1.9 U	1.9 U	(see M.8081B result)	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P28-SO-10-121514	2.6 U	2.6 U	5.1 U	13 U	17	140	(see M.8081B result)	2.6 U	2.6 U	2.6 U	2.6 U	17	28	2.6 U	2.6 U
ICS-P28-SO-16-121514	1.1 U	1.1 U	2.3 U	5.7 U	1.1 U	1.7	(see M.8081B result)	1.1 U	1.1 U	1.1 U	1.1 U	0.6 J	1.1 U	1.1 U	1.1 U
ICS-P28-SO-32-121514	1.6 U	1.6 U	3.2 U	8.1 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P32-SO-16-121514	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-SO-DUPL3-121514	3.0 U	3.0 U	6.1 U	15 U	3.0 U	3.0 U	(see M.8081B result)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
ICS-P32-SO-32-121514	1.6 U	1.6 U	3.3 U	8.2 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P18-SO-4-121614	2.5 U	2.5 U	4.9 U	12 U	5.5	52	(see M.8081B result)	2.5 U	2.5 U	2.5 U	2.5 U	2.4 J	5.6	2.5 U	2.5 U
ICS-P18-SO-10-121614	1.5 U	1.5 U	2.9 U	7.4 U	75	440 J_M	(see M.8081B result)	1.5 U	1.5 U	1.5 U	1.5 U	14	24	1.5 U	1.5 U
ICS-P18-SO-16-121614	1.4 U	1.4 U	2.8 U	7.1 U	1.4 U	8.3	7.1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P18-SO-32-121614	1.4 U	1.4 U	2.9 U	7.1 U	1.4 U	1.4 U	(see M.8081B result)	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ICS-P19-SO-4-121614	1.8 U	1.8 U	3.6 U	9.1 U	1.8 U	3.0	(see M.8081B result)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P19-SO-10-121614	1.9 U	1.9 U	3.8 U	9.5 U	1.9 U	1.9 U	9.5 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
ICS-P19-SO-16-121614	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	(see M.8081B result)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U

* aka 1,2-Dibromoethane

J = estimate associated with value less than the verifiable lower quantitation limit.*J_M* = estimate associated with manual evaluation; see narrative.*U* = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID.	4-Chloro- toluene 106-43-4 µg/kg, dry	tert -Butyl- benzene 98-06-6 µg/kg, dry	sec -Butyl- benzene 135-98-8 µg/kg, dry	4-Isopropyl- toluene 99-87-6 µg/kg, dry	n-Butyl- benzene 104-51-8 µg/kg, dry	1,2,3-Trichloro- benzene 87-61-6 µg/kg, dry	Phenol 108-95-2 µg/kg, dry	2-Chloro- phenol 95-57-8 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry	Benzyl alcohol 100-51-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	2-Methyl- phenol 95-48-7 µg/kg, dry	4-Methyl- phenol 106-44-5 µg/kg, dry	N-Nitroso-di-n- propylamine 621-64-7 µg/kg, dry
ICS-P27-SO-3-111114	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	16 J	19 U	4.8 U	2.7 J	19 U	4.8 U	2.8 J	19 U	19 U
ICS-P27-SO-11-111114	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.8 U	24	19 U	4.8 U	4.8 U	22	4.8 U	3.4 J	19 U	19 U
ICS-P27-SO-16-111114	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.0 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P27-SO-32-111114	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	9.3 J	19 U	4.6 U	4.6 U	19 U	4.6 U	4.6 U	19 U	19 U
ICS-P25-SO-3-111114	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.3 U	13 J	19 U	13	45	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P25-SO-10-111114	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	19 U	19 U	20	44	19 U	3.7 J	4.7 U	19 U	19 U
ICS-P25-SO-16-111114	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P17-SO-4-111214	1.4 U	1.4 U	83 J	48 J	130	2300	27	19 U	240	370	19 U	18	4.7 U	19 U	19 U
ICS-P17-SO-10-111214	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	110	19 U	110	320	19 U	14	4.5 J	48	19 U
ICS-P17-SO-16-111214	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	10 J	19 U	2.4 J	3.2 J	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P20-SO-3-111214	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	19 U	19 U	4.8 U	2.6 J	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P20-SO-10-111214	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	9.7 J	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P20-SO-16-111214	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.7 U	10 J	19 U	4.7 U	4.7 U	19 U	4.7 U	2.8 J	19 U	19 U
ICS-P23-SO-3-111214	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	19 U	19 U	4.9 U	4.9 U	19 U	4.9 U	4.9 U	19 U	19 U
ICS-P23-SO-10-111214	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	3.6 U	13 J	19 U	4.8 U	110	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P23-SO-16-111214	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	20	20 U	5.0 U	5.0 U	13 J	5.0 U	5.0 U	20 U	20 U
ICS-P13-SO-4-111314	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.0 U	620	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U	20 U
ICS-P13-SO-10-111314	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	9.8 J	20 U	4.9 U	4.9 U	20 U	4.9 U	4.9 U	20 U	20 U
ICS-P13-SO-17-111314	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.3 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P24-SO-4-111314	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	18 U	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	18 U	18 U
ICS-P24-SO-10-111314	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	19	19 U	4.8 U	4.8 U	19 U	19	4.0 J	38	19 U
ICS-P24-SO-16-111314	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.8 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P26-SO-4-111314	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.4 U	24	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P26-SO-10-111314	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U	20 U
ICS-P26-SO-16-111314	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	20 U	20 U	4.9 U	4.9 U	15 J	4.9 U	4.9 U	20 U	20 U
ICS-P14-SO-4-111414	1.4 U	1.4 U	8.1	1.4 U	2.0	7.0 U	25 J_o	19 U	7.5	11	19 U	16	29	62	19 U
ICS-P14-SO-10-111414	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	28 J_o	19 U	4.4 J	5.1	19 U	5.0	8.1	170	19 U
ICS-P14-SO-16-111414	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	5.1	19 U	19 U
ICS-P15-SO-4-111414	1.5 U	1.5 U	0.9 J	2.1	1.5 U	7.6 U	21 J_o	20 U	5.0 U	5.0 U	20 U	5.0 U	37	46	20 U
ICS-P15-SO-10-111414	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	8.9 U	1200	20 U	4.9 U	6.3	20 U	3.2 J	2100	4300	20 U
ICS-P15-SO-16-111414	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.1 U	14 J	19 U	4.8 U	4.8 U	19 U	4.8 U	11	30	19 U
ICS-P22-SO-4-111414	2.4 U	2.4 U	3.3	3.7	2.2 J	12 U	10 J	19 U	4.7 U	4.7 U	19 U	8.5	3.3 J	15 J	19 U
ICS-P22-SO-10-111414	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.5 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P22-SO-16-111414	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P11-SO-4-111714	1.6 U	1.6 U	1.0 J	0.9 J	0.8 J	8.1 U	19 U	19 U	6.2	7.4	19 U	8.1	6.0	19 U	19 U
ICS-P11-SO-10-111714	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.7 U	180	19 U	4.2 J	4.2 J	19 U	4.2 J	16	33	19 U
ICS-P11-SO-16-111714	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U	20 U
ICS-P12-SO-4-111714	1.6 U	1.6 U	0.9 J	2.3	1.6 U	7.9 U	20 U	20 U	4.9 U	4.9 U	20 U	2.9 J	4.9 U	20 U	20 U
ICS-P12-SO-10-111714	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	8.9 U	23	19 U	2.9 J	3.0 J	19 U	3.3 J	4.1 J	19 U	19 U
ICS-P12-SO-13-111714	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	8.8 U	20 U	20 U	4.9 U	4.9 U	20 U	4.9 U	4.9 U	20 U	20 U
ICS-P12-SO-16-111714	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	19 U	19 U	4.7 U	4.7 U	19 U	2.3 J	3.2 J	19 U	19 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID.	4-Chloro- toluene	<i>tert</i> -Butyl- benzene	<i>sec</i> -Butyl- benzene	4-Isopropyl- toluene	n-Butyl- benzene	1,2,3-Trichloro- benzene	Phenol	2-Chloro- phenol	1,3-Dichloro- benzene	1,4-Dichloro- benzene	Benzyl alcohol	1,2-Dichloro- benzene	2-Methyl- phenol	4-Methyl- phenol	N-Nitroso-di-n- propylamine
	106-43-4 <u>µg/kg, dry</u>	98-06-6 <u>µg/kg, dry</u>	135-98-8 <u>µg/kg, dry</u>	99-87-6 <u>µg/kg, dry</u>	104-51-8 <u>µg/kg, dry</u>	87-61-6 <u>µg/kg, dry</u>	108-95-2 <u>µg/kg, dry</u>	95-57-8 <u>µg/kg, dry</u>	541-73-1 <u>µg/kg, dry</u>	106-46-7 <u>µg/kg, dry</u>	100-51-6 <u>µg/kg, dry</u>	95-50-1 <u>µg/kg, dry</u>	95-48-7 <u>µg/kg, dry</u>	106-44-5 <u>µg/kg, dry</u>	621-64-7 <u>µg/kg, dry</u>
ICS-P21-SO-7-120814	1.7 U	1.1 J	2.6	1.7 U	1.7 U	8.6 U	150 J_b	37 U	9.4	8.2	18 U	29	10 J_o	70	37 U
ICS-P21-SO-13-120814	2.2 U	2.2 U	2.2 U	10	2.2 U	11 U	210 J_b	34 U	6.4 J	6.9 J	34 U	22	38	160	34 U
ICS-P21-SO-16-120814	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	88 J_b	19 U	4.8 U	4.8 U	19 U	3.7 J	4.8 U	18 J	19 U
ICS-P21-SO-32-120814	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.9 U	83 J_b	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P33-SO-16-120814	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	88 J_b	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P33-SO-32-120814	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.5 U	86 J_b	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P30-SO-7-120914	1.0 U	1.0 U	1.0 U	100	150	5.0 U	120 J_b	44 U	5.3 J	7.9	22 U	31	8.8 J_o	44 U	44 U
ICS-P30-SO-13-120914	1.0 U	1.0 U	1.3	0.7 J	1.0 U	5.0 U	110 J_b	20 U	4.8 J	4.4 J	20 U	14	7.0 J_o	28	20 U
ICS-P30-SO-16-120914	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	14 U	61 J_b	20 U	4.9 U	4.9 U	20 U	4.9 U	4.3 J	20 U	20 U
ICS-P30-SO-32-120914	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.2 U	71 J_b	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	18 U	18 U
ICS-P31-SO-4-120914	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	6.8 U	59 J_b	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P31-SO-10-120914	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	51 J_b	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P31-SO-16-120914	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	69 J_b	20 U	4.9 U	4.9 U	39	4.9 U	4.9 U	20 U	20 U
ICS-P31-SO-32-120914	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.7 U	77 J_b	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P29-SO-4-121014	0.9 U	0.9 U	21	27	0.9 U	4.6 U	1600 J_b	230 U	100	520	230 U	360	150	200 J	230 U
ICS-P29-SO-10-121014	1.6 U	1.6 U	10	17	16	12	140 J_b	19 U	6.0	7.6	19 U	20	25	44	19 U
ICS-P29-SO-16-121014	1.6 U	1.6 U	4.3	8.1	7.3	8.1 U	110 J_b	19 U	4.7 U	4.7 U	19 U	5.6	12	29	19 U
ICS-DUP2-121014	2.1 U	2.1 U	7.5	15	13	10 U	98 J_b	19 U	4.7 U	4.7 U	19 U	5.3	9.9	25	19 U
ICS-P29-SO-32-121014	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.0 U	100 J_b	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U	20 U
ICS-P16-SO-4-121014	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	4.1 U	120 J_b	20 U	4.9 U	70	20 U	4.9 U	4.9 U	20 U	20 U
ICS-P16-SO-10-121014	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	85 J_b	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U	20 U
ICS-P16-SO-16-121014	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	11 U	94 J_b	20 U	4.9 U	4.9 U	15 J	4.9 U	4.9 U	20 U	20 U
ICS-P28-SO-4-121514	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U	12 J	20 U	34	97	20 U	23	2.7 J	20 U	20 U
ICS-P28-SO-10-121514	2.6 U	2.6 U	15	27	19	13 U	390	20 U	6.7	22	20 U	4.9 U	14	72	20 U
ICS-P28-SO-16-121514	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.7 U	13 J	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	18 U	18 U
ICS-P28-SO-32-121514	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.1 U	9.3 J	19 U	4.6 U	4.6 U	19 U	4.6 U	4.6 U	19 U	19 U
ICS-P32-SO-16-121514	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	8.6 J	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-SO-DUPL3-121514	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	15 U	10 J	18 U	4.6 U	4.6 U	18 U	4.6 U	4.6 U	18 U	18 U
ICS-P32-SO-32-121514	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.2 U	8.7 J	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U	19 U
ICS-P18-SO-4-121614	2.5 U	2.5 U	6.4	4.0	8.8	12 U	200 U	200 U	4.9 U	3.6 J	20 U	21	4.8 J	200 U	200 U
ICS-P18-SO-10-121614	1.5 U	1.5 U	17	29	23	7.4 U	46	39 U	4.8 U	4.8 U	19 U	74	10	100	39 U
ICS-P18-SO-16-121614	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	110	84 U	19 J	32	84 U	110	21 U	84	84 U
ICS-P18-SO-32-121614	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	7.1 U	15 J	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U	19 U
ICS-P19-SO-4-121614	1.8 U	1.8 U	1.8 U	1.1 J	1.8 U	9.1 U	22	22 U	5.4 U	2.7 J	22 U	3.8 J	5.4 U	16 J	22 U
ICS-P19-SO-10-121614	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U	20	19 U	3.6 J	9.1	19 U	5.5	4.7 U	19 U	19 U
ICS-P19-SO-16-121614	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	20	20 U	3.2 J	8.9	20 U	4.9 U	4.9 U	20 U	20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_b = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

J_o = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Hexachloro- ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl- phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro- phenol 120-83-2 µg/kg, dry	1,2,4-Trichloro- benzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	4-Chloro-3- methylphenol 59-50-7 µg/kg, dry	2-Methyl- naphthalene 91-57-6 µg/kg, dry	2,4,6-Trichloro- phenol 88-06-2 µg/kg, dry	2,4,5-Trichloro- phenol 95-95-4 µg/kg, dry	2-Chloro- naphthalene 91-58-7 µg/kg, dry	Dimethyl- phthalate 131-11-3 µg/kg, dry	Acenaph- thylene 208-96-8 µg/kg, dry
ICS-P27-SO-3-111114	19 U	19 U	19 U	24 U	130 J	97 U	2.6 J	33	97 U	14 J	97 U	97 U	19 U	19 U	19 U
ICS-P27-SO-11-111114	19 U	19 U	19 U	24 U	170 J	96 U	2.6 J	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P27-SO-16-111114	19 U	19 U	19 U	24 U	190 U	95 U	3.8 J	19 U	95 U	19 U	95 U	95 U	19 U	19 U	19 U
ICS-P27-SO-32-111114	19 U	19 U	19 U	23 U	190 U	93 U	5.2	19 U	93 U	19 U	93 U	93 U	19 U	19 U	19 U
ICS-P25-SO-3-111114	19 U	19 U	19 U	24 U	59 J	95 U	25	26	95 U	13 J	95 U	95 U	19 U	19 U	19
ICS-P25-SO-10-111114	19 U	19 U	19 U	23 U	190 U	93 U	30	19 U	93 U	19 U	93 U	93 U	19 U	19 U	19 U
ICS-P25-SO-16-111114	19 U	19 U	19 U	23 U	190 U	94 U	38	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P17-SO-4-111214	19 U	19 U	19 U	23 U	190 U	94 U	20,000	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P17-SO-10-111214	19 U	19 U	19 U	970	350	96 U	73	24	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P17-SO-16-111214	19 U	19 U	19 U	24 U	190 U	94 U	39	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P20-SO-3-111214	19 U	19 U	19 U	24 U	190 U	97 U	36	14 J	97 U	22	97 U	97 U	19 U	19 U	19 U
ICS-P20-SO-10-111214	19 U	19 U	19 U	24 U	190 U	97 U	19	19 U	97 U	19 U	97 U	97 U	19 U	19 U	19 U
ICS-P20-SO-16-111214	19 U	19 U	19 U	24 U	65 J	94 U	16	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P23-SO-3-111214	19 U	19 U	19 U	24 U	190 U	97 U	13	19 U	97 U	19 U	97 U	97 U	19 U	19 U	19 U
ICS-P23-SO-10-111214	19 U	19 U	19 U	13 J	190 U	97 U	12	19 U	97 U	19 U	97 U	97 U	19 U	19 U	19 U
ICS-P23-SO-16-111214	20 U	20 U	20 U	25 U	76 J	99 U	11	20 U	99 U	20 U	99 U	99 U	20 U	20 U	20 U
ICS-P13-SO-4-111314	20 U	20 U	96	25 U	120 J	99 U	5.0 U	43	99 U	30	99 U	99 U	20 U	20 U	20 U
ICS-P13-SO-10-111314	20 U	20 U	20 U	25 U	200 U	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P13-SO-17-111314	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P24-SO-4-111314	18 U	18 U	18 U	23 U	180 U	92 U	4.6 U	54	92 U	18	92 U	92 U	18 U	18 U	18 U
ICS-P24-SO-10-111314	19 U	19 U	19 U	260	68 J	97 U	7.0	920	97 U	130	97 U	97 U	19 U	19 U	19 U
ICS-P24-SO-16-111314	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P26-SO-4-111314	19 U	19 U	19 U	24 U	120 J	94 U	4.8	24	94 U	38	94 U	94 U	19 U	19 U	19 U
ICS-P26-SO-10-111314	20 U	20 U	20 U	25 U	200 U	100 U	5.0 U	20 U	100 U	20 U	100 U	100 U	20 U	20 U	20 U
ICS-P26-SO-16-111314	20 U	20 U	20 U	24 U	200 U	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P14-SO-4-111414	19 U	19 U	19 U	26	92 J	95 U	12	57	29 J	32	95 U	95 U	19 U	8.6 J	12 J
ICS-P14-SO-10-111414	19 U	19 U	10 J	24	120 J	96 U	5.6	16 J	96 U	14 J	96 U	96 U	19 U	19 U	19 U
ICS-P14-SO-16-111414	19 U	19 U	19 U	24 U	190 U	94 U	3.1 J	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P15-SO-4-111414	20 U	20 U	20 U	44	200 U	100 U	5.0 U	30	100 U	40	100 U	100 U	20 U	20 U	20 U
ICS-P15-SO-10-111414	20 U	20 U	20 U	3300 J_o	1200	49 J	4.9 U	160	99 U	20 U	99 U	99 U	20 U	20 U	20 U
ICS-P15-SO-16-111414	19 U	19 U	19 U	17 J	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P22-SO-4-111414	19 U	19 U	19 U	9.7 J	190 U	94 U	3.5 J	610	94 U	60	94 U	94 U	19 U	19 U	19 U
ICS-P22-SO-10-111414	19 U	19 U	19 U	26 J	80 J	96 U	4.8 U	19	96 U	19 U	96 U	96 U	19 U	27	19 U
ICS-P22-SO-16-111414	19 U	19 U	19 U	24 U	82 J	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P11-SO-4-111714	19 U	19 U	19 U	12 J	190 U	94 U	7.4	22	94 U	35	94 U	94 U	19 U	19 U	19 U
ICS-P11-SO-10-111714	19 U	19 U	19 U	20 J	1400	96 U	6.4	19	96 U	11 J	96 U	96 U	19 U	19 U	19 U
ICS-P11-SO-16-111714	20 U	20 U	20 U	25 U	200 U	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U	20 U	20 U
ICS-P12-SO-4-111714	20 U	20 U	20 U	24 U	200 U	98 U	4.9 U	17 J	98 U	11 J	98 U	98 U	20 U	20 U	20 U
ICS-P12-SO-10-111714	19 U	19 U	19 U	9.7 J	160 J	94 U	3.8 J	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P12-SO-13-111714	20 U	20 U	20 U	24 U	60 J	97 U	4.9 U	20 U	97 U	20 U	97 U	97 U	20 U	20 U	20 U
ICS-P12-SO-16-111714	19 U	19 U	19 U	23 U	88 J	93 U	2.9 J	19 U	93 U	19 U	93 U	93 U	19 U	19 U	19 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Hexachloro-ethane 67-72-1 µg/kg, dry	Nitrobenzene 98-95-3 µg/kg, dry	Isophorone 78-59-1 µg/kg, dry	2,4-Dimethyl-phenol 105-67-9 µg/kg, dry	Benzoic acid 65-85-0 µg/kg, dry	2,4-Dichloro-phenol 120-83-2 µg/kg, dry	1,2,4-Trichloro-benzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	4-Chloro-3-methylphenol 59-50-7 µg/kg, dry	2-Methyl-naphthalene 91-57-6 µg/kg, dry	2,4,6-Trichloro-phenol 88-06-2 µg/kg, dry	2,4,5-Trichloro-phenol 95-95-4 µg/kg, dry	2-Chloro-naphthalene 91-58-7 µg/kg, dry	Dimethyl-phthalate 131-11-3 µg/kg, dry	Acenaph-ethylene 208-96-8 µg/kg, dry
ICS-P21-SO-7-120814	37 U	37 U	37 U	31	370 U	180 U	120	1900	180 U	1400	180 U	180 U	37 U	37 U	37 U
ICS-P21-SO-13-120814	34 U	34 U	34 U	5400 J_o	230 J	170 U	22	260	890 J_o	150	170 U	170 U	110	34 U	34 U
ICS-P21-SO-16-120814	19 U	19 U	19 U	94	190 U	96 U	4.8 U	15 J	96 U	11 J	96 U	96 U	19 U	19 U	19 U
ICS-P21-SO-32-120814	19 U	19 U	19 U	23 U	190 U	93 U	4.7 U	11 J	93 U	11 J	93 U	93 U	19 U	19 U	19 U
ICS-P33-SO-16-120814	19 U	19 U	19 U	24 U	74 J	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P33-SO-32-120814	19 U	19 U	19 U	9.8 J	190 U	95 U	4.8 U	19 U	95 U	19 U	95 U	95 U	19 U	19 U	19 U
ICS-P30-SO-7-120914	44 U	44 U	44 U	22 J	440 U	220 U	36	600	220 U	510	220 U	220 U	44 U	44 U	31 J
ICS-P30-SO-13-120914	20 U	20 U	20 U	20 J	200 U	100 U	41	370	100 U	200	100 U	100 U	20 U	19 J	31
ICS-P30-SO-16-120914	20 U	20 U	20 U	12 J	200 U	98 U	4.9 U	21	98 U	26	98 U	98 U	20 U	20 U	20 U
ICS-P30-SO-32-120914	18 U	18 U	18 U	23 U	180 U	92 U	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U	18 U	18 U
ICS-P31-SO-4-120914	19 U	19 U	19 U	23 U	62 J	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P31-SO-10-120914	19 U	19 U	19 U	24 U	67 J	97 U	4.8 U	19 U	97 U	19 U	97 U	97 U	19 U	19 U	19 U
ICS-P31-SO-16-120914	20 U	20 U	20 U	24 U	120 J	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P31-SO-32-120914	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P29-SO-4-121014	230 U	230 U	230 U	290 U	2300 U	1200 U	270	350	1200 U	2200	1200 U	1200 U	230 U	230 U	230 U
ICS-P29-SO-10-121014	19 U	19 U	19 U	32	190 U	93 U	210	220	93 U	2700	93 U	93 U	19 U	19 U	19 U
ICS-P29-SO-16-121014	19 U	19 U	19 U	27	190 U	94 U	3.6 J	530	94 U	410	94 U	94 U	19 U	19 U	19 U
ICS-DUP2-121014	19 U	19 U	19 U	22 J	190 U	95 U	3.5 J	480	95 U	380	95 U	95 U	19 U	19 U	19 U
ICS-P29-SO-32-121014	20 U	20 U	20 U	25 U	200 U	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U	20 U	20 U
ICS-P16-SO-4-121014	20 U	20 U	20 U	24 U	200 U	98 U	4.9 U	13 J	98 U	13 J	98 U	98 U	20 U	20 U	20 U
ICS-P16-SO-10-121014	20 U	20 U	20 U	25 U	65 J	99 U	5.0 U	20 U	99 U	20 U	99 U	99 U	20 U	20 U	20 U
ICS-P16-SO-16-121014	20 U	20 U	20 U	24 U	67 J	98 U	4.9 U	20 U	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P28-SO-4-121514	20 U	20 U	20 U	27 J	78 J	98 U	5.4	230	98 U	660	98 U	98 U	20 U	20 U	20 U
ICS-P28-SO-10-121514	20 U	20 U	20 U	200	200 U	98 U	4.9 U	28	98 U	68	98 U	98 U	20 U	20 U	20 U
ICS-P28-SO-16-121514	18 U	18 U	18 U	23 U	180 U	92 U	4.6 U	18 U	92 U	18 U	92 U	92 U	18 U	18 U	18 U
ICS-P28-SO-32-121514	19 U	19 U	19 U	23 U	190 U	93 U	4.6 U	19 U	93 U	19 U	93 U	93 U	19 U	19 U	19 U
ICS-P32-SO-16-121514	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-SO-DUPL3-121514	18 U	18 U	18 U	23 U	180 U	93 U	4.6 U	18 U	93 U	18 U	93 U	93 U	18 U	18 U	18 U
ICS-P32-SO-32-121514	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P18-SO-4-121614	200 U	200 U	200 U	21 J	2000 U	980 U	8.8	2200	980 U	2800	980 U	980 U	200 U	200 U	98 J
ICS-P18-SO-10-121614	39 U	39 U	39 U	280	390 U	190 U	5.6	1200	190 U	2000	190 U	190 U	39 U	39 U	39 U
ICS-P18-SO-16-121614	84 U	84 U	84 U	660	840 U	420 U	47	880	420 U	920	420 U	420 U	84 U	84 U	84 U
ICS-P18-SO-32-121614	19 U	19 U	19 U	24 U	190 U	94 U	4.7 U	19 U	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P19-SO-4-121614	22 U	22 U	22 U	27 U	220 U	110 U	7.6	260	110 U	110	110 U	110 U	22 U	22 U	22 U
ICS-P19-SO-10-121614	19 U	19 U	19 U	28 J	190 U	95 U	3.5 J	19 U	95 U	19	95 U	95 U	19 U	19 U	19 U
ICS-P19-SO-16-121614	20 U	20 U	20 U	16 J	62 J	97 U	4.9 U	20 U	97 U	12 J	97 U	97 U	20 U	20 U	20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_o = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Acenaphthene 83-32-9 µg/kg, dry	Dibenzo-furan 132-64-9 µg/kg, dry	2,6-Dinitro- toluene 606-20-2 µg/kg, dry	2,4-Dinitro- toluene 121-14-2 µg/kg, dry	Diethyl- phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl- phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi- phenylamine 86-30-6 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry	Pyrene 129-00-0 µg/kg, dry
ICS-P27-SO-3-111114	19 U	16 J	97 U	97 U	19 U	19 U	4.8 U	72	77	11 J	19 U	19 U	25	61	56
ICS-P27-SO-11-111114	19 U	19 U	96 U	96 U	19 U	19 U	4.8 U	19 U	12 J	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P27-SO-16-111114	19 U	19 U	95 U	95 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P27-SO-32-111114	19 U	19 U	93 U	93 U	19 U	19 U	4.6 U	19 U	14 J	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P25-SO-3-111114	19 U	10 J	95 U	95 U	19 U	19 U	3.0 J	19 U	120	12 J	12 J	19 U	170	160	
ICS-P25-SO-10-111114	19 U	19 U	93 U	93 U	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P25-SO-16-111114	19 U	19 U	94 U	94 U	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P17-SO-4-111214	100	19 U	94 U	94 U	19 U	19 U	450	4.7 U	19 U	480	19 U	39	19 U	35	52
ICS-P17-SO-10-111214	19 U	19 U	96 U	96 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P17-SO-16-111214	19 U	19 U	94 U	94 U	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P20-SO-3-111214	19 U	19 U	97 U	97 U	19 U	19 U	4.8 U	19 U	25	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P20-SO-10-111214	19 U	19 U	97 U	97 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P20-SO-16-111214	19 U	19 U	94 U	94 U	19 U	19 U	4.7 U	11 J	9.4 J	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P23-SO-3-111214	19 U	19 U	97 U	97 U	28	19 U	4.9 U	19 U	19 U	19 U	19 U	19 U	19 U	68	56
ICS-P23-SO-10-111214	19 U	19 U	97 U	97 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P23-SO-16-111214	20 U	20 U	99 U	99 U	34	20 U	5.0 U	20 U	11 J	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P13-SO-4-111314	20	220	99 U	99 U	24 J_a	20 U	18 J	5.0 U	220 J_o	70	20 U	12 J	180	81	100
ICS-P13-SO-10-111314	20 U	20 U	98 U	98 U	20 J_a	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P13-SO-17-111314	19 U	19 U	96 U	96 U	21 J_a	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P24-SO-4-111314	18 U	18 U	92 U	18 U	21 J_a	18 U	4.6 U	18 U	37	18 U	18 U	13 J	18	17 J	
ICS-P24-SO-10-111314	40	29	97 U	97 U	32 J_a	19 U	37	51	34 J_o	92	19 U	24	19 U	130	180
ICS-P24-SO-16-111314	19 U	19 U	96 U	96 U	41 J_a	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P26-SO-4-111314	19 U	9.4 J	94 U	94 U	38 J_a	19 U	17 J	11	19 U	110	19 U	16 J	49	89	110
ICS-P26-SO-10-111314	20 U	20 U	100 U	100 U	28 J_a	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P26-SO-16-111314	20 U	20 U	98 U	98 U	26 J_a	20 U	4.9 U	20 U	14 J	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P14-SO-4-111414	14 J	17 J	95 U	95 U	19 U	19 U	24	14	23 J_o	65	22	17 J	11 J	65	57
ICS-P14-SO-10-111414	16 J	15 J	96 U	96 U	19 U	19 U	24	3.0 J	18 J	270	32	38	9.6 J	360	250
ICS-P14-SO-16-111414	19 U	19 U	94 U	94 U	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P15-SO-4-111414	20 U	20 U	100 U	100 U	21 J_o	20 U	10 J	5.0 U	29 J_o	45	20 U	13 J	20 U	30	36
ICS-P15-SO-10-111414	20 U	40	99 U	99 U	20 U	20 U	4.9 U	11 J	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P15-SO-16-111414	19 U	19 U	96 U	96 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P22-SO-4-111414	57	46	94 U	94 U	19 U	19 U	64	4.7 U	19 U	140	54	23	12 J	38	33
ICS-P22-SO-10-111414	19 U	19 U	96 U	96 U	19 U	19 U	4.8 U	19 U	19 U	15 J	19 U	19 U	19 U	12 J	14 J
ICS-P22-SO-16-111414	19 U	19 U	96 U	96 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P11-SO-4-111714	13 J	11 J	94 U	94 U	20	19 U	13 J	5.5	13 J	18 J	10 J	19 U	19 U	16 J	16 J
ICS-P11-SO-10-111714	19 U	19 U	96 U	96 U	19	19 U	4.8 U	17 J	22	19 U	9.6 J	19 U	12 J	12 J	
ICS-P11-SO-16-111714	20 U	20 U	99 U	99 U	20 U	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-4-111714	20 U	20 U	98 U	98 U	20 U	20 U	3.6 J	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-10-111714	19 U	19 U	94 U	94 U	19 U	19 U	4.7 U	11 J	11 J	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P12-SO-13-111714	20 U	20 U	97 U	97 U	20 U	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P12-SO-16-111714	19 U	19 U	93 U	93 U	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	Acenaphthene 83-32-9 µg/kg, dry	Dibenzo-furan 132-64-9 µg/kg, dry	2,6-Dinitro- toluene 606-20-2 µg/kg, dry	2,4-Dinitro- toluene 121-14-2 µg/kg, dry	Diethyl- phthalate 84-66-2 µg/kg, dry	4-Chlorophenyl- phenylether 7005-72-3 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	N-Nitrosodi- phenylamine 86-30-6 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Carbazole 86-74-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Di-n-butyl- phthalate 84-74-2 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry	Pyrene 129-00-0 µg/kg, dry
ICS-P21-SO-7-120814	690	360	180 U	180 U	37 U	37 U	620	53	150	2100	140	400	37 U	1200	1000
ICS-P21-SO-13-120814	60	29 J	170 U	170 U	34 U	34 U	64	70	54	230	33 J	74	34 U	310	330
ICS-P21-SO-16-120814	19 U	19 U	96 U	96 U	19 U	19 U	19 U	4.8 U	19 U	14 J	19 U	19 U	19 U	11 J	9.6 J
ICS-P21-SO-32-120814	19 U	19 U	93 U	93 U	19 U	19 U	19 U	4.7 U	19 U	11 J	19 U	19 U	19 U	19 U	19 U
ICS-P33-SO-16-120814	19 U	19 U	96 U	96 U	19 U	19 U	19 U	4.8 U	19 U	9.6 J	19 U	19 U	19 U	19 U	19 U
ICS-P33-SO-32-120814	19 U	19 U	95 U	95 U	19 U	19 U	19 U	4.8 U	19 U	8.6 J	19 U	19 U	19 U	19 U	19 U
ICS-P30-SO-7-120914	44 U	44 U	220 U	220 U	44 U	44 U	140	140	50	1000	150	230	280	1400	1900
ICS-P30-SO-13-120914	65	55	100 U	100 U	20 U	20 U	76	160	36	490	37	120	270	690	790
ICS-P30-SO-16-120914	20 U	20 U	98 U	98 U	20 U	20 U	8.8 J	4.9 U	20 U	14 J	20 U	20 U	20 U	11 J	14 J
ICS-P30-SO-32-120914	18 U	18 U	92 U	92 U	18 U	18 U	3.0 J	18 U	14 J	18 U	18 U	18 U	18 U	9.2 J	11 J
ICS-P31-SO-4-120914	19 U	19 U	94 U	94 U	19 U	19 U	19 U	4.7 U	19 U	13 J	19 U	19 U	19 U	19 U	19 U
ICS-P31-SO-10-120914	19 U	6.8 J	97 U	97 U	19 U	19 U	19 U	4.8 U	19 U	42	19 U	19 U	19 U	48	39
ICS-P31-SO-16-120914	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U	20 U	12 J	20 U	20 U	20 U	20 U	20 U
ICS-P31-SO-32-120914	19 U	19 U	96 U	96 U	39	19 U	19 U	4.8 U	19 U	12 J	19 U	19 U	19 U	19 U	19 U
ICS-P29-SO-4-121014	640	360	1200 U	1200 U	260 J_B	230 U	350	58 U	410	2400	230 U	480	310	1100	1500
ICS-P29-SO-10-121014	38	26	93 U	93 U	19 U	19 U	30	4.7 U	35	410	44 J_O	25	19 U	47	90
ICS-P29-SO-16-121014	230	230	94 U	94 U	19 U	19 U	150	4.7 U	50	860	120 J_O	81	19 U	330	210
ICS-DUP2-121014	200	190	95 U	95 U	19 U	19 U	150	4.7 U	48	660	110 J_O	72	19 U	270	170
ICS-P29-SO-32-121014	20 U	20 U	99 U	99 U	20 U	20 U	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P16-SO-4-121014	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U	20 U	21	20 U	20 U	20 U	24	22
ICS-P16-SO-10-121014	20 U	20 U	99 U	99 U	20 U	20 U	20 U	5.0 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P16-SO-16-121014	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P28-SO-4-121514	20	12 J	98 U	98 U	19 J	20 U	54	4.9 U	14 J	34	11 J	20 U	20 U	20 U	20 U
ICS-P28-SO-10-121514	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ICS-P28-SO-16-121514	18 U	18 U	92 U	92 U	19	18 U	18 U	4.6 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
ICS-P28-SO-32-121514	19 U	19 U	93 U	93 U	18 J	19 U	19 U	4.6 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P32-SO-16-121514	19 U	19 U	96 U	96 U	33	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-SO-DUPL3-121514	18 U	18 U	93 U	93 U	18	18 U	18 U	4.6 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
ICS-P32-SO-32-121514	19 U	19 U	96 U	96 U	19 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P18-SO-4-121614	1800	1300	980 U	980 U	200 U	200 U	2900	4.9 U	50	12,000	1100 J_O	3500	210	12,000	12,000
ICS-P18-SO-10-121614	420	230	190 U	190 U	39 U	39 U	480	4.8 U	19 U	1200	58 J_O	87	16 J	480	360
ICS-P18-SO-16-121614	570	310	420 U	420 U	170	84 U	610	21 U	100	2700	160 J_O	500	100	1700	1700
ICS-P18-SO-32-121614	19 U	19 U	94 U	94 U	25	19 U	19 U	4.7 U	19 U	19 U	19 U	19 U	19 U	6.6 J	5.7 J
ICS-P19-SO-4-121614	45	33	110 U	110 U	23	22 U	71	5.4 U	53	310	21 J	47	14 J	230	250
ICS-P19-SO-10-121614	19 U	19 U	95 U	95 U	23	19 U	19 U	4.7 U	15 J	17 J	19 U	7.6 J	19 U	8.5 J	19
ICS-P19-SO-16-121614	20 U	20 U	97 U	97 U	18 J	20 U	20 U	4.9 U	20 U	18 J	20 U	20 U	20 U	11 J	9.7 J

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

J_O = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID.	Butylbenzyl- phthalate 85-68-7 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry	Di-n-octyl- phthalate 117-84-0 µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene 50-32-8 µg/kg, dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg, dry	Dibenz(a,h)- anthracene 53-70-3 µg/kg, dry	Benzo(g,h,i)- perylene 191-24-2 µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry
ICS-P27-SO-3-111114	8.0 J_o	20	48 J_b	56	19 U	78	19	28	9.7 J	39	110	367	2.5 U	2.5 U	2.5 U
ICS-P27-SO-11-111114	4.8 U	19 U	33 J_b	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.47 U	0.47 U	0.47 U
ICS-P27-SO-16-111114	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P27-SO-32-111114	4.6 U	19 U	46 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U	0.48 U	0.48 U	0.48 U
ICS-P25-SO-3-111114	15 J_o	62	72 J_b	95	19 U	150	76	59	16 J	65	177	853	2.4 U	2.4 U	2.4 U
ICS-P25-SO-10-111114	5.3 J_o	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U	0.48 U	0.48 U	0.48 U
ICS-P25-SO-16-111114	9.2 J_o	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.54 U	0.48 U
ICS-P17-SO-4-111214	4.7 U	19 U	47 U	30	19 U	37 U	19 U	19 U	19 U	19 U	1069	117	4.8 U	4.8 U	4.8 U
ICS-P17-SO-10-111214	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	24	39 U	0.48 U	0.48 U	0.48 U
ICS-P17-SO-16-111214	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P20-SO-3-111214	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	39	39 U	0.48 U	0.48 U	0.48 U
ICS-P20-SO-10-111214	2.7 J	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	39 U	39 U	0.47 U	0.47 U	0.47 U
ICS-P20-SO-16-111214	3.6 J	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	38 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P23-SO-3-111214	4.9 U	31	49 U	50	19 U	91	33	40	14 J	45	19 U	428	0.48 U	0.48 U	0.48 U
ICS-P23-SO-10-111214	5.2 J_o	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	19 U	39 U	0.47 U	0.47 U	0.47 U
ICS-P23-SO-16-111214	4.8 J	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U	0.48 U	0.48 U	0.48 U
ICS-P13-SO-4-111314	20	37	190	79	20 U	130	46	48	13 J	58	163	592	2.4 U	2.4 U	2.4 U
ICS-P13-SO-10-111314	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.47 U	0.47 U	0.47 U
ICS-P13-SO-17-111314	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P24-SO-4-111314	3.3 J	18 U	46 U	14 J	18 U	16 J	18 U	18 U	18 U	18 U	19 U	65	0.50 U	0.50 U	0.50 U
ICS-P24-SO-10-111314	4.8 U	50	390	150	19 U	170	100	30	19 U	22	1113	832	2.5 U	8.5 U	2.5 U
ICS-P24-SO-16-111314	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P26-SO-4-111314	4.7	45	31 J	64	19 U	83	47	29	13 J	39	167	519	0.47 U	0.47 U	0.47 U
ICS-P26-SO-10-111314	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U	0.48 U	0.48 U	0.48 U
ICS-P26-SO-16-111314	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.48 U	0.48 U	0.48 U
ICS-P14-SO-4-111414	10	24	48 U	39	9.5 J	50	23	22	11 J	36	189	327	0.48 U	0.48 U	0.48 U
ICS-P14-SO-10-111414	9.0	70	48 U	100	19 U	100	37	26	13 J	42	364	998	0.49 U	0.49 U	0.49 U
ICS-P14-SO-16-111414	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P15-SO-4-111414	26	14 J	65	25	20 U	22 J	20 U	20 U	20 U	20 U	98	127	0.47 U	0.47 U	0.47 U
ICS-P15-SO-10-111414	12	20 U	49 U	20 U	20 U	16 J	20 U	20 U	20 U	20 U	160	20 U	0.90 U	0.50 U	0.50 U
ICS-P15-SO-16-111414	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P22-SO-4-111414	4.7 U	11 J	28 J	16 J	19 U	23 J	19 U	19 U	19 U	19 U	894	121	0.47 U	0.47 U	0.47 U
ICS-P22-SO-10-111414	5.5	19 U	28 J	19 U	19 U	16 J	19 U	19 U	19 U	19 U	34	42	0.50 U	0.50 U	0.50 U
ICS-P22-SO-16-111414	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P11-SO-4-111714	7.7	12 J	47 U	12 J	19 U	23 J	12 J	12 J	19 U	21	66	124	0.46 U	0.46 U	0.46 U
ICS-P11-SO-10-111714	8.1	19 U	91	19 U	19 U	16 J	19 U	19 U	19 U	11 J	51	51	35 U	29 U	4.9 U
ICS-P11-SO-16-111714	2.7 J	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U	0.49 U	0.49 U	0.49 U
ICS-P12-SO-4-111714	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.48 U	0.48 U	0.48 U
ICS-P12-SO-10-111714	8.0	19 U	47 U	19 U	19 U	11 J	19 U	19 U	19 U	12 J	19 U	19 U	0.49 U	0.49 U	0.49 U
ICS-P12-SO-13-111714	3.1 J	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.47 U	0.47 U	0.47 U
ICS-P12-SO-16-111714	5.0	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U	0.48 U	0.48 U	0.48 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID.	Butylbenzyl- phthalate 85-68-7 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry	Di-n-octyl- phthalate 117-84-0 µg/kg, dry	total Benzo- fluoranthenes µg/kg, dry	Benzo(a)- pyrene 50-32-8 µg/kg, dry	Indeno(1,2,3- cd)pyrene 193-39-5 µg/kg, dry	Dibenz(a,h)- anthracene 53-70-3 µg/kg, dry	Benzo(g,h,i)- perylene 191-24-2 µg/kg, dry	LPAH µg/kg, dry	HPAH µg/kg, dry	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry
ICS-P21-SO-7-120814	130	350	970	460	37 U	500	310	180	65	190	5710	4255	4.7 U	4.7 U	4.7 U
ICS-P21-SO-13-120814	8.6 U	160	210	230	34 U	270	130	79	40	74	688	1623	4.8 U	4.8 U	4.8 U
ICS-P21-SO-16-120814	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	29	39 U	0.50 U	0.50 U	0.50 U
ICS-P21-SO-32-120814	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	22	37 U	0.48 U	0.48 U	0.48 U
ICS-P33-SO-16-120814	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.50 U	0.50 U	0.50 U
ICS-P33-SO-32-120814	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P30-SO-7-120914	690	940	2400	1100	44 U	1400	1300	580	220	850	2001	9690	2.5 U	5.4 U	2.5 U
ICS-P30-SO-13-120914	140	280	660	420	20 U	420	240	150	46	180	1152	3216	2.5 U	5.9 U	2.5 U
ICS-P30-SO-16-120914	2.6 J	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	44	39 U	0.48 U	0.48 U	0.48 U
ICS-P30-SO-32-120914	2.8 J	5.6 J	46 U	9.2 J	18 U	11 J	18 U	18 U	18 U	18 U	18 U	46	0.47 U	0.47 U	0.47 U
ICS-P31-SO-4-120914	19 U	47 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U	0.48 U	0.48 U	0.48 U
ICS-P31-SO-10-120914	3.4 J	13 J	48 U	17 J	19 U	20 J	19 U	19 U	19 U	19 U	42	137	0.47 U	0.47 U	0.47 U
ICS-P31-SO-16-120914	7.0	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.47 U	0.47 U	0.47 U
ICS-P31-SO-32-120914	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.49 U	0.49 U	0.49 U
ICS-P29-SO-4-121014	58 U	340	7600	660	230 U	310 J	230 U	230 U	230 U	230 U	4220	3910	30 U	170 U	30 U
ICS-P29-SO-10-121014	4.7 U	16 J	34 J	26	19 U	20 J	7.5 J	19 U	19 U	19 U	723	207	4.9 U	4.9 U	4.9 U
ICS-P29-SO-16-121014	4.7 U	71	47 U	81	19 U	58	30	11 J	19 U	16 J	1851	807	0.98 U	1.6 U	0.98 U
ICS-DUP2-121014	4.7 U	54	47 U	67	19 U	49	26	19 U	19 U	11 J	1562	647	0.98 U	1.5 U	0.98 U
ICS-P29-SO-32-121014	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U	0.47 U	0.47 U	0.47 U
ICS-P16-SO-4-121014	4.9 U	7.8 J	49 U	17 J	20 U	26 J	20 U	11 J	20 U	14 J	34	122	4.8 U	4.8 U	4.8 U
ICS-P16-SO-10-121014	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U	0.48 U	0.48 U	0.48 U
ICS-P16-SO-16-121014	2.7 J	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.48 U	0.48 U	0.48 U
ICS-P28-SO-4-121514	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	338	39 U	0.47 U	0.47 U	0.47 U
ICS-P28-SO-10-121514	11	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	28	39 U	0.49 U	0.49 U	0.49 U
ICS-P28-SO-16-121514	4.6 U	18 U	46 U	18 U	18 U	37 U	18 U	18 U	18 U	18 U	18 U	37 U	0.47 U	0.47 U	0.47 U
ICS-P28-SO-32-121514	4.6 U	19 U	46 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U	0.47 U	0.47 U	0.47 U
ICS-P32-SO-16-121514	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-SO-DUPL3-121514	4.6 U	18 U	46 U	18 U	18 U	37 U	18 U	18 U	18 U	18 U	18 U	37 U	0.47 U	0.47 U	0.47 U
ICS-P32-SO-32-121514	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P18-SO-4-121614	23	6800	490 U	8100	200 U	11,000	7200	3900	1700	3900	22,498	66,600	2.7 U	14 U	2.7 U
ICS-P18-SO-10-121614	22	75	200	99	39 U	75 J	39	21 J	39 U	33 J	3387	1182	0.48 U	1.4 U	0.48 U
ICS-P18-SO-16-121614	210	640	1100	1000	84 U	1200	570	180	80 J	180	5260	7250	16 U	16 U	32 U
ICS-P18-SO-32-121614	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U	0.48 U	0.48 U	0.48 U
ICS-P19-SO-4-121614	5.4 U	140	220	230	22 U	250	140	28	18 J	32	733	1318	2.4 U	2.4 U	2.4 U
ICS-P19-SO-10-121614	4.7 U	19 U	35 J	19 U	19 U	38 U	19 U	19 U	19 U	19 U	25	38 U	4.9 U	4.9 U	4.9 U
ICS-P19-SO-16-121614	5.3	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U	0.50 U	0.50 U	0.50 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value may be biased high due to contribution from laboratory background or method blank.

J_O = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Diieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry
ICS-P27-SO-3-111114	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	87	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	25 U	5.0 U
ICS-P27-SO-11-111114	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	1.6	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
ICS-P27-SO-16-111114	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P27-SO-32-111114	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-P25-SO-3-111114	2.4 U	2.4 U	2.4 U	16 U	2.4 U	49 U	4.8 U	29 U	4.8 U	4.8 U	4.8 U	130 U	24 U	94 U
ICS-P25-SO-10-111114	0.48 U	0.48 U	0.48 U	3.7 U	0.48 U	10 U	4.0 U	8.9 U	0.96 U	0.96 U	0.96 U	19 U	4.8 U	16 U
ICS-P25-SO-16-111114	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P17-SO-4-111214	4.8 U	4.8 U	4.8 U	84 U	4.8 U	650 U	48 U	220 U	9.6 U	9.6 U	48 U	1600 U	240 U	9.6 U
ICS-P17-SO-10-111214	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	6.1 U	4.8 U	4.3 U
ICS-P17-SO-16-111214	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P20-SO-3-111214	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P20-SO-10-111214	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	1.3 U	4.7 U	0.94 U
ICS-P20-SO-16-111214	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
ICS-P23-SO-3-111214	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	6.4 U	2.1 U	2.7 U	0.96 U	0.96 U	0.96 U	26 U	4.8 U	40 U
ICS-P23-SO-10-111214	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	1.5	0.94 U	0.94 U	2.5 J_p	0.94 U	2.5 U	4.7 U	2.5 U
ICS-P23-SO-16-111214	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-P13-SO-4-111314	2.4 U	2.4 U	2.4 U	18 U	2.4 U	4.9 U	4.9 U	6.6 U	4.9 U	120 J_p	4.9 U	57 U	24 U	17 U
ICS-P13-SO-10-111314	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	1.2 U
ICS-P13-SO-17-111314	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
ICS-P24-SO-4-111314	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.3 U	11 U	3.4 U
ICS-P24-SO-10-111314	2.5 U	10 U	2.5 U	50 U	14 U	50 U	140	18 U	49 U	480 J_p	5.0 U	140 U	200 U	50 U
ICS-P24-SO-16-111314	0.49 U	0.49 U	0.49 U	2.2 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	33 U	0.98 U	4.9 U	2.4 U
ICS-P26-SO-4-111314	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	1.9 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	6.2 U	4.7 U	5.0 U
ICS-P26-SO-10-111314	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P26-SO-16-111314	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P14-SO-4-111414	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	2.4 U	0.95 U	4.8 U	1.4 U
ICS-P14-SO-10-111414	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
ICS-P14-SO-16-111414	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P15-SO-4-111414	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	1.5 U	4.7 U	0.94 U
ICS-P15-SO-10-111414	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U	1.0 U	5.0 U	1.0 U
ICS-P15-SO-16-111414	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
ICS-P22-SO-4-111414	0.47 U	0.54 U	0.47 U	1.3 U	0.47 U	1.9 J_p	2.9 U	1.6 U	0.94 U	15 J_p	4.6 U	7.8 U	4.7 U	5.1 U
ICS-P22-SO-10-111414	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
ICS-P22-SO-16-111414	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
ICS-P11-SO-4-111714	0.46 U	0.46 U	0.46 U	0.93 U	0.46 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	4.6 U	0.93 U
ICS-P11-SO-10-111714	85 U	4.9 U	4.9 U	9.7 U	4.9 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	9.7 U	49 U	9.7 U
ICS-P11-SO-16-111714	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
ICS-P12-SO-4-111714	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-P12-SO-10-111714	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
ICS-P12-SO-13-111714	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
ICS-P12-SO-16-111714	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry	Endrin 72-20-8 µg/kg, dry	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry
ICS-P21-SO-7-120814	4.7 U	36 U	4.7 U	47 U	4.7 U	57 U	130 J_p	62 U	31 U	290 J_p	21 U	130 U	47 U	72 U
ICS-P21-SO-13-120814	4.8 U	12 U	4.8 U	28 U	4.8 U	41 U	98 J_p	9.6 U	9.6 U	120 J_p	9.6 U	78 U	48 U	25 U
ICS-P21-SO-16-120814	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
ICS-P21-SO-32-120814	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P33-SO-16-120814	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
ICS-P33-SO-32-120814	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P30-SO-7-120914	2.5 U	7.1 U	2.5 U	4.9 U	2.5 U	4.9 U	28 J_p	4.9 U	4.9 U	17 J_p	4.9 U	29 U	25 U	15 U
ICS-P30-SO-13-120914	2.5 U	5.7 U	2.5 U	5.0 U	2.5 U	5.0 U	23 J_p	5.0 U	5.0 U	15 J_p	5.0 U	24 U	25 U	15 U
ICS-P30-SO-16-120914	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P30-SO-32-120914	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	1.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P31-SO-4-120914	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-P31-SO-10-120914	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P31-SO-16-120914	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P31-SO-32-120914	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
ICS-P29-SO-4-121014	47 U	140 U	30 U	390 U	30 U	97 U	250 U	61 U	200 U	61 U	61 U	590 U	300 U	61 U
ICS-P29-SO-10-121014	4.9 U	6.0 U	4.9 U	21 U	4.9 U	9.7 U	14	9.7 U	9.7 U	9.7 U	9.7 U	34 U	49 U	9.7 U
ICS-P29-SO-16-121014	0.98 U	1.8 U	0.98 U	8.3 U	0.98 U	2.0 U	27 J_p	2.0 U	3.8 U	2.0 U	2.0 U	10 U	9.8 U	2.0 U
ICS-DUP2-121014	0.98 U	1.8 U	0.98 U	7.3 U	0.98 U	2.0 U	24 J_p	2.0 U	3.1 U	2.0 U	2.0 U	8.0 U	9.8 U	2.0 U
ICS-P29-SO-32-121014	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P16-SO-4-121014	4.8 U	4.8 U	4.8 U	9.6 U	4.8 U	250 J_p	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	14 U	48 U	9.6 U
ICS-P16-SO-10-121014	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-P16-SO-16-121014	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
ICS-P28-SO-4-121514	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P28-SO-10-121514	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
ICS-P28-SO-16-121514	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P28-SO-32-121514	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
ICS-P32-SO-16-121514	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
ICS-SO-DUPL3-121514	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
ICS-P32-SO-32-121514	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
ICS-P18-SO-4-121614	9.3 U	18 U	2.7 U	33 U	2.7 U	9.9 U	41 J_p	5.4 U	5.4 U	71 J_p	5.4 U	27 U	27 U	5.4 U
ICS-P18-SO-10-121614	0.48 U	0.48 U	0.48 U	7.0 U	0.91 U	0.96 U	4.3 U	0.96 U	0.96 U	7.5 J_p	0.96 U	6.3 U	12 U	2.2 U
ICS-P18-SO-16-121614	16 U	16 U	16 U	70 U	16 U	32 U	280	32 U	32 U	450 J_p	32 U	280 U	160 U	100 U
ICS-P18-SO-32-121614	0.48 U	0.48 U	0.48 U	0.96 U	1.2 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	21 U	0.96 U	4.8 U	0.96 U
ICS-P19-SO-4-121614	2.4 U	2.4 U	2.4 U	12 U	2.4 U	4.9 U	4.9 U	4.9 U	4.9 U	35 J_p	4.9 U	18 U	24 U	4.9 U
ICS-P19-SO-10-121614	4.9 U	6.4 U	4.9 U	9.8 U	4.9 U	12 U	60	9.8 U	9.8 U	61 J_p	9.8 U	16 U	49 U	9.8 U
ICS-P19-SO-16-121614	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3 U	5.0 U	1.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID	Endrin aldehyde 7421-93-4 µg/kg, dry	trans- Chlordane 5103-74-2 µg/kg, dry	cis- Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachlorobutadiene 87-68-3 µg/kg, dry	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-P27-SO-3-111114	5.0 U	25	29	120 U	5.0 U	5.0 U	4.0 U	4.0 U	4.0 U	99 U	40	4.0 U	4.0 U	40
ICS-P27-SO-11-111114	0.95 U	0.47 U	0.47 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	5.7 U	3.4 J	3.8 U	3.8 U	5.7 U
ICS-P27-SO-16-111114	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P27-SO-32-111114	0.96 U	0.48 U	0.48 U	24 U	0.96 U	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P25-SO-3-111114	37 U	6.0 U	15 U	120 U	4.8 U	4.8 U	38 U	38 U	38 U	1600	2200	38 U	38 U	3800
ICS-P25-SO-10-111114	5.0 U	0.48 U	0.48 U	24 U	0.96 U	(see M.8260C result)	3.8 U	3.8 U	29 U	220	300	3.8 U	3.8 U	520
ICS-P25-SO-16-111114	0.97 U	0.48 U	0.48 U	24 U	0.97 U	(see M.8260C result)	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P17-SO-4-111214	48 U	4.8 U	4.8 U	240 U	21 U	(see M.8260C result)	490 U	490 U	490 U	9800 U	34,000	490 U	490 U	34,000
ICS-P17-SO-10-111214	0.96 U	0.48 U	0.48 U	24 U	0.96 U	(see M.8260C result)	3.8 U	3.8 U	3.8 U	12 U	22	3.8 U	3.8 U	22
ICS-P17-SO-16-111214	0.95 U	0.48 U	0.48 U	24 U	0.95 U	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	2.1 J	3.8 U	3.8 U	3.8 U
ICS-P20-SO-3-111214	0.95 U	0.48 U	0.48 U	24 U	0.95 U	(see M.8260C result)	3.8 U	3.8 U	3.8 U	3.8 U	5.1	3.8 U	3.8 U	5.1
ICS-P20-SO-10-111214	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	13	14	10	3.8 U	3.8 U	37
ICS-P20-SO-16-111214	0.97 U	0.49 U	0.49 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P23-SO-3-111214	18 U	0.48 U	0.48 U	24 U	2.1	0.96 U	3.8 U	3.8 U	3.8 U	96 U	520	3.8 U	3.8 U	520
ICS-P23-SO-10-111214	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	28	23	14	3.8 U	3.8 U	65
ICS-P23-SO-16-111214	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P13-SO-4-111314	4.9 U	2.4 U	2.4 U	120 U	4.9 U	4.9 U	3.9 U	3.9 U	230	1100	280	3.9 U	3.9 U	1610
ICS-P13-SO-10-111314	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P13-SO-17-111314	0.98 U	0.49 U	0.49 U	24 U	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P24-SO-4-111314	1.6 U	0.97 U	1.6 U	25 U	1.0 U	1.0 U	4.0 U	4.0 U	6.0 U	42	58	4.0 U	4.0 U	100
ICS-P24-SO-10-111314	44 U	8.9 U	7.0 U	120 U	5.0 U	5.0 U	4.0 U	4.0 U	980	1400	420	4.0 U	4.0 U	2800
ICS-P24-SO-16-111314	2.6 U	0.49 U	0.49 U	24 U	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P26-SO-4-111314	0.94 U	0.53 U	1.1 U	23 U	0.94 U	1.3 U	3.8 U	3.8 U	18	53	57	3.8 U	3.8 U	128
ICS-P26-SO-10-111314	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P26-SO-16-111314	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P14-SO-4-111414	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	24	43	27	3.8 U	3.8 U	94
ICS-P14-SO-10-111414	0.99 U	0.49 U	0.49 U	25 U	0.99 U	0.99 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P14-SO-16-111414	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P15-SO-4-111414	0.94 U	0.47 U	0.47 U	23 U	0.94 U	0.94 U	3.7 U	3.7 U	7.5 U	20	5.9	3.7 U	3.7 U	26
ICS-P15-SO-10-111414	1.0 U	0.50 U	0.50 U	25 U	1.8 U	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	5.0 U
ICS-P15-SO-16-111414	0.98 U	0.49 U	0.49 U	24 U	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P22-SO-4-111414	3.8 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.7 U	3.7 U	65	120 J,	98	3.7 U	3.7 U	283
ICS-P22-SO-10-111414	0.99 U	0.50 U	2.6 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	13	19	16	4.0 U	4.0 U	48
ICS-P22-SO-16-111414	0.99 U	0.49 U	0.49 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P11-SO-4-111714	0.93 U	0.46 U	0.46 U	23 U	0.93 U	0.93 U	3.7 U	3.7 U	3.7 U	3.1 J	3.7 U	3.7 U	3.7 U	3.7 U
ICS-P11-SO-10-111714	9.7 U	4.9 U	4.9 U	240 U	9.7 U	9.7 U	3.9 U	3.9 U	9.8 U	3.9 U	3.9 U	3.9 U	3.9 U	9.8 U
ICS-P11-SO-16-111714	0.99 U	0.49 U	0.49 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P12-SO-4-111714	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	3.8 U	5.3	3.8 U	3.8 U	3.8 U	5.3
ICS-P12-SO-10-111714	0.97 U	0.49 U	0.49 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P12-SO-13-111714	0.95 U	0.47 U	0.47 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P12-SO-16-111714	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID	Endrin aldehyde 7421-93-4 µg/kg, dry	trans- Chlordane 5103-74-2 µg/kg, dry	cis- Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachlorobutadiene 87-68-3 µg/kg, dry	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-P21-SO-7-120814	9.4 U	4.7 U	4.7 U	230 U	9.4 U	(see M.8260C result)	380 U	380 U	4400	3300	1500	380 U	380 U	9200
ICS-P21-SO-13-120814	9.6 U	28 U	4.8 U	240 U	9.6 U	9.6 U	96 U	96 U	1900	1900	500	96 U	96 U	4300
ICS-P21-SO-16-120814	0.99 U	0.50 U	0.50 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.6	4.9	4.0 U	4.0 U	4.0 U	9.5
ICS-P21-SO-32-120814	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P33-SO-16-120814	0.99 U	0.50 U	0.50 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P33-SO-32-120814	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P30-SO-7-120914	4.9 U	2.5 U	2.5 U	120 U	13 U	4.9 U	3.9 U	3.9 U	450	330	200	3.9 U	3.9 U	980
ICS-P30-SO-13-120914	5.0 U	2.5 U	2.5 U	120 U	5.0 U	5.0 U	4.0 U	4.0 U	530	400	230	4.0 U	4.0 U	1160
ICS-P30-SO-16-120914	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	19 U	12 U	4.8 U	3.9 U	3.9 U	19 U
ICS-P30-SO-32-120914	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	5.3	6.0	3.8 U	3.8 U	3.8 U	11
ICS-P31-SO-4-120914	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-10-120914	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-16-120914	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P31-SO-32-120914	0.98 U	0.49 U	0.49 U	24 U	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P29-SO-4-121014	61 U	30 U	83 U	1500 U	61 U	(see M.8260C result)	24 U	24 U	17,000	9700	5600	24 U	24 U	32,300
ICS-P29-SO-10-121014	9.7 U	4.9 U	4.9 U	240 U	9.7 U	(see M.8260C result)	3.9 U	3.9 U	460	320	290	3.9 U	3.9 U	1070
ICS-P29-SO-16-121014	2.0 U	0.98 U	0.98 U	49 U	2.0 U	2.0 U	3.9 U	3.9 U	150	170	45	3.9 U	3.9 U	365
ICS-DUP2-121014	2.0 U	0.98 U	0.98 U	49 U	2.0 U	2.0 U	3.9 U	3.9 U	150	160	32	3.9 U	3.9 U	342
ICS-P29-SO-32-121014	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	4.9	2.6 J	2.8 J	3.8 U	3.8 U	10.3
ICS-P16-SO-4-121014	9.6 U	4.8 U	4.8 U	240 U	9.6 U	(see M.8260C result)	3.8 U	3.8 U	13 U	160	23	3.8 U	3.8 U	183
ICS-P16-SO-10-121014	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P16-SO-16-121014	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P28-SO-4-121514	0.94 U	0.54 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	4.7 U	5.4	3.8 U	3.8 U	5.4
ICS-P28-SO-10-121514	0.97 U	0.49 U	0.49 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	5.1	3.9 U	3.9 U	5.1
ICS-P28-SO-16-121514	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	9.4 U	13	3.8 U	3.8 U	13
ICS-P28-SO-32-121514	0.95 U	0.47 U	0.47 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P32-SO-16-121514	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-SO-DUPL3-121514	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P32-SO-32-121514	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P18-SO-4-121614	5.4 U	2.7 U	2.7 U	140 U	5.4 U	5.4 U	22 U	22 U	3500	1600	420	22 U	22 U	5520
ICS-P18-SO-10-121614	3.4 U	1.0 U	1.2 U	24 U	0.96 U	0.96 U	19 U	19 U	110	190	69	19 U	19 U	369
ICS-P18-SO-16-121614	32 U	16 U	16 U	790 U	32 U	(see M.8260C result)	20 U	20 U	3600	6100	2000	20 U	20 U	11,700
ICS-P18-SO-32-121614	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	5.1	3.8 J	3.8 U	3.8 U	3.8 U	8.9
ICS-P19-SO-4-121614	4.9 U	2.4 U	2.4 U	120 U	4.9 U	4.9 U	19 U	19 U	660	670	120	19 U	19 U	1450
ICS-P19-SO-10-121614	9.8 U	4.9 U	4.9 U	240 U	9.8 U	(see M.8260C result)	20 U	20 U	340	290	170	20 U	20 U	800
ICS-P19-SO-16-121614	1.0 U	0.50 U	0.50 U	25 U	1.4	1.0 U	20 U	20 U	28	43 J_p	60	20 U	20 U	131

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to noncompliance with all criteria for identification and/or chemical interference.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	2,3,7,8- TCDF	total TCDF	2,3,7,8- TCDD	total TCDD	1,2,3,7,8- PeCDF	2,3,4,7,8- PeCDF	total PeCDF	1,2,3,7,8- PeCDD	total PeCDD	1,2,3,4,7,8- HxCDF	1,2,3,6,7,8- HxCDF	2,3,4,6,7,8- HxCDF	1,2,3,7,8,9- HxCDF	total HxCDF
51207-31-9	ng/kg, dry	55722-27-5	1746-01-6	41903-57-5	57117-41-6	57117-31-4	30402-15-4	40321-76-4	36088-22-9	70648-26-9	57117-44-9	60851-34-5	72918-21-9	55684-94-1
ICS-P27-SO-3-111114														
ICS-P27-SO-11-111114														
ICS-P27-SO-16-111114														
ICS-P27-SO-32-111114														
ICS-P25-SO-3-111114														
ICS-P25-SO-10-111114														
ICS-P25-SO-16-111114														
ICS-P17-SO-4-111214														
ICS-P17-SO-10-111214														
ICS-P17-SO-16-111214														
ICS-P20-SO-3-111214														
ICS-P20-SO-10-111214														
ICS-P20-SO-16-111214														
ICS-P23-SO-3-111214														
ICS-P23-SO-10-111214														
ICS-P23-SO-16-111214														
ICS-P13-SO-4-111314														
ICS-P13-SO-10-111314														
ICS-P13-SO-17-111314														
ICS-P24-SO-4-111314														
ICS-P24-SO-10-111314														
ICS-P24-SO-16-111314														
ICS-P26-SO-4-111314														
ICS-P26-SO-10-111314														
ICS-P26-SO-16-111314														
ICS-P14-SO-4-111414														
ICS-P14-SO-10-111414														
ICS-P14-SO-16-111414														
ICS-P15-SO-4-111414														
ICS-P15-SO-10-111414														
ICS-P15-SO-16-111414														
ICS-P22-SO-4-111414														
ICS-P22-SO-10-111414														
ICS-P22-SO-16-111414														
ICS-P11-SO-4-111714														
ICS-P11-SO-10-111714														
ICS-P11-SO-16-111714														
ICS-P12-SO-4-111714														
ICS-P12-SO-10-111714														
ICS-P12-SO-13-111714														
ICS-P12-SO-16-111714														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	2,3,7,8-TCDF	total TCDF	2,3,7,8-TCDD	total TCDD	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	total PeCDF	1,2,3,7,8-PeCDD	total PeCDD	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	total HxCDF
51207-31-9	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry	ng/kg, dry
ICS-P21-SO-7-120814														
ICS-P21-SO-13-120814	8.24	267	4.61	78.6	7.14	26.9	693	27.2	165	187	50.6	67.5	20.1	1910
ICS-P21-SO-16-120814														
ICS-P21-SO-32-120814														
ICS-P33-SO-16-120814														
ICS-P33-SO-32-120814														
ICS-P30-SO-7-120914														
ICS-P30-SO-13-120914														
ICS-P30-SO-16-120914														
ICS-P30-SO-32-120914														
ICS-P31-SO-4-120914														
ICS-P31-SO-10-120914														
ICS-P31-SO-16-120914														
ICS-P31-SO-32-120914														
ICS-P29-SO-4-121014														
ICS-P29-SO-10-121014														
ICS-P29-SO-16-121014														
ICS-DUP2-121014														
ICS-P29-SO-32-121014														
ICS-P16-SO-4-121014														
ICS-P16-SO-10-121014														
ICS-P16-SO-16-121014														
ICS-P28-SO-4-121514														
ICS-P28-SO-10-121514														
ICS-P28-SO-16-121514														
ICS-P28-SO-32-121514														
ICS-P32-SO-16-121514														
ICS-SO-DUPL3-121514														
ICS-P32-SO-32-121514														
ICS-P18-SO-4-121614														
ICS-P18-SO-10-121614														
ICS-P18-SO-16-121614	22.3	344	13.2	213	17.2	44.7	1000	47.2	296	354	97.7	128	43.4	3840
ICS-P18-SO-32-121614														
ICS-P19-SO-4-121614														
ICS-P19-SO-10-121614														
ICS-P19-SO-16-121614														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field ID	1,2,3,4,7,8- HxCDD ng/kg, dry	1,2,3,6,7,8- HxCDD ng/kg, dry	1,2,3,7,8,9- HxCDD ng/kg, dry	total HxCDD ng/kg, dry	1,2,3,4,6,7,8- HpCDF ng/kg, dry	1,2,3,4,7,8,9- HpCDF ng/kg, dry	total HpCDF ng/kg, dry	1,2,3,4,6,7,8- HpCDD ng/kg, dry	total HpCDD ng/kg, dry	OCDF ng/kg, dry	OCDD ng/kg, dry	TEQ ND=0 ND/2 ng/kg, dry ng/kg, dry	
ICS-P27-SO-3-111114													
ICS-P27-SO-11-111114													
ICS-P27-SO-16-111114													
ICS-P27-SO-32-111114													
ICS-P25-SO-3-111114													
ICS-P25-SO-10-111114													
ICS-P25-SO-16-111114													
ICS-P17-SO-4-111214													
ICS-P17-SO-10-111214													
ICS-P17-SO-16-111214													
ICS-P20-SO-3-111214													
ICS-P20-SO-10-111214													
ICS-P20-SO-16-111214													
ICS-P23-SO-3-111214													
ICS-P23-SO-10-111214													
ICS-P23-SO-16-111214													
ICS-P13-SO-4-111314													
ICS-P13-SO-10-111314													
ICS-P13-SO-17-111314													
ICS-P24-SO-4-111314													
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ICS-P26-SO-4-111314													
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ICS-P11-SO-4-111714													
ICS-P11-SO-10-111714													
ICS-P11-SO-16-111714													
ICS-P12-SO-4-111714													
ICS-P12-SO-10-111714													
ICS-P12-SO-13-111714													
ICS-P12-SO-16-111714													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Push Probe) Subsurface Soils Analyses, November-December 2014

Field I.D.	1,2,3,4,7,8- HxCDD ng/kg, dry	1,2,3,6,7,8- HxCDD ng/kg, dry	1,2,3,7,8,9- HxCDD ng/kg, dry	total HxCDD ng/kg, dry	1,2,3,4,6,7,8- HpCDF ng/kg, dry	1,2,3,4,7,8,9- HpCDF ng/kg, dry	total HpCDF ng/kg, dry	1,2,3,4,6,7,8- HpCDD ng/kg, dry	total HpCDD ng/kg, dry	OCDF ng/kg, dry	OCDD ng/kg, dry	TEQ ND=0 ND/2 ng/kg, dry ng/kg, dry	
ICS-P21-SO-7-120814													
ICS-P21-SO-13-120814	48.3	157	123	1070	1620	86.0	5460	4630	8400	6230	43,000 J _E	184	184
ICS-P21-SO-16-120814													
ICS-P21-SO-32-120814													
ICS-P33-SO-16-120814													
ICS-P33-SO-32-120814													
ICS-P30-SO-7-120914													
ICS-P30-SO-13-120914													
ICS-P30-SO-16-120914													
ICS-P30-SO-32-120914													
ICS-P31-SO-4-120914													
ICS-P31-SO-10-120914													
ICS-P31-SO-16-120914													
ICS-P31-SO-32-120914													
ICS-P29-SO-4-121014													
ICS-P29-SO-10-121014													
ICS-P29-SO-16-121014													
ICS-DUP2-121014													
ICS-P29-SO-32-121014													
ICS-P16-SO-4-121014													
ICS-P16-SO-10-121014													
ICS-P16-SO-16-121014													
ICS-P28-SO-4-121514													
ICS-P28-SO-10-121514													
ICS-P28-SO-16-121514													
ICS-P28-SO-32-121514													
ICS-P32-SO-16-121514													
ICS-SO-DUPL3-121514													
ICS-P32-SO-32-121514													
ICS-P18-SO-4-121614													
ICS-P18-SO-10-121614													
ICS-P18-SO-16-121614	64.3	314	213	1710	3090	193	10,300	7140	12,200	9320	47,300 J _E	319	319
ICS-P18-SO-32-121614													
ICS-P19-SO-4-121614													
ICS-P19-SO-10-121614													
ICS-P19-SO-16-121614													

J_E = estimated value due to exceedance of verifiable linear calibration range.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM**TO:** Matt Dalton (DOF)**FROM:** Raleigh Farlow**DATE:** May 6, 2015**SUBJECT:** Data Evaluation/Assessment for 3 Subsurface Soils and 2 Stormwaters Collected during February-March 2015 from the Douglas Property and the Second Avenue Stormwater Collection System, Seattle, WA

Three subsurface soils (composites from 24.5-26') from the construction of monitoring wells using hollow-stem auger on the Douglas Property and two stormwater samples from the Second Avenue stormwater collection system were collected by Dalton, Olmsted & Fuglevand (DOF) staff during February and March, 2015 for chemical characterization. All samples were delivered in two separate delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 26 hours of collection. Samples were received on ice at temperatures between 2.4 and 5.8 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. A single trip/transport blank was also submitted and analyzed for VOC's for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Tables SAP-4 and SAP-6 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081B	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (excl Hg)	SW846-M.6010C	Hg (low-level)	SW846-M.7470A
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same extract) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the

reporting limits. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). The attached results table reports only the results for the dichloro- and trichloro-benzenes from the VOC's analyses due to lower reporting limits. Naphthalene and hexachlorobutadiene (HCB) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081B, while only the results generated by M.8081B are retained here due to significantly reduced reporting limits. The lower reporting limit for chlorinated phenols (2,4,6-trichlorophenol and pentachlorophenol) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and strong-acid digestion cleanup steps. NWTPH-G was analyzed by purge & trap and GC/FID. PCB's in soils (by M.8082) was determined by including the extract cleanup options of elemental sulfur (S_x) removal, strong-acid digestion, and silica gel chromatography prior to instrumental analyses.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Aroclor 1248 (commercial PCB mixture) was consistently reported for both analytical groups with elevated reporting limits or nondetects due to elevated or busy baselines. Two soil samples required the qualification of Aroclor 1254 results with the "J_p" qualifier code due to variability in the dual column confirmation analyses (> 40RPD [relative percent difference] in dual-column quantitative confirmation for PCB mixtures). Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of chloromethane and acetone at 1.3 µg/L and 6.3 µg/L, respectively. No chloromethane was detected in any of the project samples. All reported acetone results are qualified with the "J_B" qualifier code to indicate probable bias associated with contributions from laboratory and/or field sampling backgrounds. The trip/transport blank exhibits a similar acetone level (6.7 µg/L) as the laboratory method blank. With the exception of acetone, no results required qualification due to method blanks performance.

A single **trip/transport blank** was generated and submitted for analysis and determination of potential contamination during handling of VOC's samples. Results of these analyses are reported in the attached table. Methylene chloride was reported at 1.6 µg/L, and acetone at 6.7

µg/L in the trip/transport blank. Methylene chloride was not reported in any other project samples, and all reported acetone results are qualified with the “J_B” qualifier code as likely biased high due to sampling/analytical background.

Laboratory control sample (**LCS/LCSD**) recoveries were within specified ranges for most analytes. Matrix spike (**MS**) analyses were only performed for metals and anion analyses; not for organic parameters. MS performance was within acceptance ranges, however, was slightly low at 68% for total antimony (Sb) in ICS-OUTF-SW-032315. The MS for dissolved Sb in the same sample exhibited a recovery of 101%; and because the two (native) sample results (2.8 vs. 2.9 µg/L) are essentially the same and the LCS performance was acceptable, no qualification of data was determined to be necessary. LCSD recoveries were reported lower than specified for 2-methylphenol (30%), 4-methylphenol (45%), 2,4-dimethylphenol (10%), and N-nitrosodiphenylamine (39%). The spike recovery was also reported low for 2,4-dimethylphenol (11%) in the LCS. No alkylphenols or N-nitrosodiphenylamine were reported in associated project samples. No results required qualification due to noncompliant LCS/LCSD and MS recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance; *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses, and trifluorotoluene and bromobenzene used for evaluating TPH-G analytical performance. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries were within specification. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses (CCV RPD compared to initial calibration responses > 20) for chloromethane, chloroethane and acrolein. None of these analytes were reported as detected in any project samples. No results required qualification due to CCV or CCAL performance.

TPH-Dx and TPH-G analyses indicate presence of principally weathered diesel fuel and lubricant/motor oil in the two stormwater samples. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; as summarized above.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7		Cadmium 7440-43-9		Calcium 7440-70-2
					%	mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L
ICS-OUTF-SW-032315	stormwater	3/23/2015	nonfiltered	155638-AC32A	-	728	93.4		2.9		5.0		0.2 U		0.6	39,500
ICS-OUTF-SW-032315	stormwater	3/23/2015	nonfiltered	155643-AC33A	-											
ICS-OUTF-SW-032315	stormwater	3/23/2015	field-filtered, 0.45 µm	155641-AC32D	-			2.8		1.6		0.2 U		0.2		
ICS-OUTF-SW-032315	stormwater	3/23/2015	field-filtered, 0.45 µm	155645-AC33C	-											
ICS-MH1-SW-032315	stormwater	3/23/2015	nonfiltered	155639-AC32B	-	382	51.7		3.3		4.5		0.2 U		0.6	30,000
ICS-MH1-SW-032315	stormwater	3/23/2015	nonfiltered	155644-AC33B	-											
ICS-MH1-SW-032315	stormwater	3/23/2015	field-filtered, 0.45 µm	155642-AC32E	-			3.4		1.2		0.2 U		0.1 U		
ICS-MH1-SW-032315	stormwater	3/23/2015	field-filtered, 0.45 µm	155646-AC33D	-											
Trip Blank	water	3/23/2015	trip/transport blank	155640-AC32C	-											
ICS-MWA-25-SO-021215	soil, hollow-stem auger	2/12/2015	24.5 - 26'	152864-ZW48A	78											
ICS-MWB-25-SO-021215	soil, hollow-stem auger	2/12/2015	24.5 - 26'	152865-ZW48B	66											
ICS-MWC-25-SO-021315	soil, hollow-stem auger	2/13/2015	24.5 - 26'	152866-ZW48C	55											

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Chromium 7440-47-3		Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4		Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5		Zinc 7440-66-6		Hardness mg-CaCO ₃ /L
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	
ICS-OUTF-SW-032315		16		68.9		25.2	47,600				17.6		0.2 U		356,000		199		290
ICS-OUTF-SW-032315								41.5											
ICS-OUTF-SW-032315	1.5		7.6		0.4					1.9		0.2 U					29		
ICS-OUTF-SW-032315								20.0 U											
ICS-MH1-SW-032315		13.7		64.8		23.6	29,100				16.6		0.2 U		209,000		193		200
ICS-MH1-SW-032315								38.2											
ICS-MH1-SW-032315	1.0		7.1		0.1					1.4		0.2 U					17		
ICS-MH1-SW-032315								20.0 U											
Trip Blank																			
ICS-MWA-25-SO-021215																			
ICS-MWB-25-SO-021215																			
ICS-MWC-25-SO-021315																			

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3	Bromo- methane 74-83-9	Vinyl chloride 75-01-4	Chloro- ethane 75-00-3	Methylene chloride 75-09-2	Acetone 67-64-1	Carbon disulfide 75-15-0	1,1-Dichloro- ethene 75-35-4	1,1-Dichloro- ethane 75-34-3	<i>trans</i> -1,2- Dichloroethene 156-60-5	<i>cis</i> -1,2- Dichloroethene 156-59-2	Chloroform 67-66-3
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-OUTF-SW-032315	0.25 U	0.89	1.7	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	26 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-032315															
ICS-OUTF-SW-032315															
ICS-OUTF-SW-032315															
ICS-MH1-SW-032315	0.25 U	0.75	2.3	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	22 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-032315															
ICS-MH1-SW-032315															
ICS-MH1-SW-032315															
Trip Blank				0.50 U	1.0 U	0.20 U	0.20 U	1.6	6.7 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWA-25-SO-021215															
ICS-MWB-25-SO-021215															
ICS-MWC-25-SO-021315															

** bold-typed values resemble corresponding [weathered] petroleum hydrocarbon mixture

J_B = estimate; associated value is likely biased high due to contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field ID	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-OUTF-SW-032315	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-OUTF-SW-032315															
ICS-OUTF-SW-032315															
ICS-MH1-SW-032315	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MH1-SW-032315															
ICS-MH1-SW-032315															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MWA-25-SO-021215															
ICS-MWB-25-SO-021215															
ICS-MWC-25-SO-021315															

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field ID	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-OUTF-SW-032315	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-MH1-SW-032315	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MWA-25-SO-021215																
ICS-MWB-25-SO-021215																
ICS-MWC-25-SO-021315																

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field ID	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	Hexachloro- butadiene 87-68-3 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-OUTF-SW-032315	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-MH1-SW-032315	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
Trip Blank	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWA-25-SO-021215																
ICS-MWB-25-SO-021215																
ICS-MWC-25-SO-021315																

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-OUTF-SW-032315	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-MH1-SW-032315	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-MWA-25-SO-021215													
ICS-MWB-25-SO-021215													
ICS-MWC-25-SO-021315													

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L
ICS-OUTF-SW-032315	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-MH1-SW-032315	1.0 U	1.0 U	3.0 U	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
Trip Blank													
ICS-MWA-25-SO-021215													
ICS-MWB-25-SO-021215													
ICS-MWC-25-SO-021315													

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L
ICS-OUTF-SW-032315	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.06 J	1.0 U	0.10 U	1.0 U	0.08 J
ICS-OUTF-SW-032315														
ICS-OUTF-SW-032315														
ICS-OUTF-SW-032315														
ICS-MH1-SW-032315	0.10 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.11
ICS-MH1-SW-032315														
ICS-MH1-SW-032315														
ICS-MH1-SW-032315														
Trip Blank														
ICS-MWA-25-SO-021215														
ICS-MWB-25-SO-021215														
ICS-MWC-25-SO-021315														

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-OUTF-SW-032315	0.11	1.0 U	0.10 U	2.2 J	0.06 J	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.05 J	0.10 U	0.30
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-OUTF-SW-032315													
ICS-MH1-SW-032315	0.12	1.0 U	0.10 U	3.0 U	0.07 J	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.30
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
ICS-MH1-SW-032315													
Trip Blank													
ICS-MWA-25-SO-021215													
ICS-MWB-25-SO-021215													
ICS-MWC-25-SO-021315													

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-OUTF-SW-032315	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.12 U
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-OUTF-SW-032315																
ICS-MH1-SW-032315	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.12 U
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
ICS-MH1-SW-032315																
Trip Blank																
ICS-MWA-25-SO-021215																
ICS-MWB-25-SO-021215																
ICS-MWC-25-SO-021315																

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater, March 2015, and Douglas Property Subsurface Soils, February 2015, Analyses

<u>Field I.D.</u>	Endrin ketone 53494-70-5 <u>µg/L</u>	Endrin aldehyde 7421-93-4 <u>µg/L</u>	trans- Chlordane 5103-74-2 <u>µg/L</u>	cis- Chlordane 5103-71-9 <u>µg/L</u>	Toxaphene 8001-35-2 <u>µg/L</u>	Hexachloro- benzene 118-74-1 <u>µg/L</u>	Hexachloro- butadiene 87-68-3 <u>µg/L</u>	Aroclor 1016 12674-11-2 <u>µg/L</u>	Aroclor 1242 53469-21-9 <u>µg/L</u>	Aroclor 1248 12672-29-6 <u>µg/L</u>	Aroclor 1254 11097-69-1 <u>µg/L</u>	Aroclor 1260 11096-82-5 <u>µg/L</u>	Aroclor 1221 11104-28-2 <u>µg/L</u>	Aroclor 1232 11141-16-5 <u>µg/L</u>	total PCBs <u>µg/L</u>
ICS-OUTF-SW-032315	0.025 U	0.025 U	0.012 U	0.012 U	1.2 U	0.025 U	0.025 U	0.010 U	0.010 U	0.015 U	0.028	0.027	0.010 U	0.010 U	0.055
ICS-OUTF-SW-032315															
ICS-OUTF-SW-032315															
ICS-OUTF-SW-032315															
ICS-MH1-SW-032315	0.025 U	0.025 U	0.012 U	0.012 U	1.2 U	0.025 U	0.025 U	0.010 U	0.010 U	0.020 U	0.039	0.04	0.010 U	0.010 U	0.079
ICS-MH1-SW-032315															
ICS-MH1-SW-032315															
ICS-MH1-SW-032315															
Trip Blank															
								<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>
ICS-MWA-25-SO-021215								4.0 U	4.0 U	12 U	23	8.4	4.0 U	4.0 U	31
ICS-MWB-25-SO-021215								3.9 U	3.9 U	39 U	14 J_p	6.3	3.9 U	3.9 U	20
ICS-MWC-25-SO-021315								3.9 U	3.9 U	5.9 U	14 J_p	3.7 J	3.9 U	3.9 U	18

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8082).

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)
FROM: Raleigh Farlow
DATE: July 15, 2015
SUBJECT: Data Evaluation/Assessment for 9 Subsurface Soils and 6 Groundwaters
Collected from Soil Push-Probes during June 2015 from the ICS / [former] NW
Cooperage Site, Seattle, WA

Nine subsurface soil composites and six groundwater samples from soil push-probes were collected and submitted for chemical characterization by Dalton, Olmsted & Fuglevand (DOF) staff during June 8-9, 2015. All samples were delivered in four separate delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 22 hours of collection. Samples were received on ice at temperatures between 2.1 and 5.5 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. A single trip/transport blank was submitted and analyzed for VOC's, and two trip/transport blanks were analyzed for TPH-G for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Tables SAP-4 and SAP-6 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. phenols in H ₂ O	SW846-M.8041	SVOC's (PAH's in H ₂ O & selected analytes in soils)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. pesticides	SW846-M.8081B
metals (excl Hg)	SW846-M.6010C	Hg (low-level H ₂ O)	SW846-M.7470A
	& EPA 200.8	Hg (soils)	SW846-M.7471A
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0
		Hexavalent Cr (VI)	SW846-M.7196A

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same

extract, in the case of groundwaters) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. Method 8270-SIM was also performed on separate soil extracts to improve lower reporting limits for dichlorobenzenes, 1,2,4-trichlorobenzene, butylbenzylphthalate, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine, benzyl alcohol and pentachlorophenol. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C) for both groundwaters and soils. The attached results table reports only the results for the dichloro- and trichloro-benzenes in groundwaters from the VOC's analyses due to lower reporting limits. Soils dichlorobenzenes were reported from the VOC's analyses and 1,2,4-trichlorobenzene was reported from the SVOC's analyses (M.8270-SIM) due to lower reporting limits. Groundwater naphthalene and hexachlorobutadiene (HCBD) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC's (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. Naphthalene in soils by SW846-M.8260C (VOA's) exhibited lower reporting limits than by the SVOC's method (M.8270D). Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081B, while only the results generated by M.8081B are retained here due to significantly reduced reporting limits. Chlorinated pesticides (including HCBD and HCB by M.8081B) analyses were supplemented with extract cleanup by GPC (gel permeation chromatography). The lower reporting limit for chlorinated phenols in water (2,4,6-trichlorophenol and pentachlorophenol in H₂O) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and strong-acid digestion cleanup steps. NWTPH-G was analyzed by purge & trap and GC/FID. PCB's in soils (by M.8082) was determined by including the extract cleanup options of elemental sulfur (S_x) removal, strong-acid digestion, and silica gel chromatography prior to instrumental analyses. Hexavalent chromium (Cr[VI]) results (by SW846-M.7196A) were reported significantly greater than either the dissolved or the total chromium results (up to 15x greater in some cases) in groundwaters, indicating high background interference, since the results can be no greater than the dissolved chromium values. Cr(VI) results were thus determined to be unusable and are rejected with the "R" qualifier code.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be acceptable or within SAP specifications. A reextraction and reanalysis of SVOC's in water for ICS-P35-W-20-060815 was performed after 10 days holding time (recommended maximum holding time is 7 days) due to the initial analysis exhibiting low surrogate recoveries. The second analysis exhibited acceptable surrogate recoveries, and both the initial and second analyses revealed identical SVOC analyte results.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Aroclor 1248 (commercial PCB mixture) was reported for ICS-P34-SO-4-060915 with an elevated reporting limit or nondetect due to an elevated or busy baseline. ICS-P34-SO-4-060915 also required the

qualification of Aroclor 1254 results with the “J_p” qualifier code due to variability in the dual column confirmation analyses (> 40RPD [relative percent difference] in dual-column quantitative confirmation for PCB mixtures). Chromatographic or co-elution interference was apparent for hexachlorobenzene (HCB) in ICS-P36-SO-10-060815 and ICS-P36-SO-16-060815 resulting in an elevated reporting limit for nondetects. Several chlorinated pesticide analytes in ICS-P34-SO-4-060915 exhibited elevated reporting limits likely due to the presence of PCB’s reported as Aroclors 1254 and 1260. Two BHC analytes reported in the M.8081B analyses exhibited elevated reporting limits due to the presence of chemical interferences. Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the “J” qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of bromomethane, 1,2,4-trichlorobenzene and naphthalene at 0.8 µg/kg, 0.6 µg/kg and 0.5 µg/kg, respectively, during VOC’s analyses. None of these analytes were detected in any of the project samples. SVOC method blank analyses reported diethylphthalate, anthracene and fluoranthene at 21 µg/kg, 10 µg/kg and 8.0 µg/kg, respectively, during soils analyses. No anthracene was detected in soil extracts. Only three diethylphthalate values and one fluoranthene result were within sufficient range of the method blank values to require qualification with the “J_B” qualifier code as potentially impacted by contributions from sampling/laboratory backgrounds. With the exception of three diethylphthalate and one fluoranthene result in soils, no results required qualification due to method blanks performance.

A single **trip/transport blank** was generated and submitted for analysis and determination of potential contamination during handling of groundwater VOC’s samples, and two trip/transport blanks were submitted and analyzed for TPH-G in groundwaters. Results of these analyses are reported in the attached table. No target analytes were detected in trip/transport blanks.

Laboratory control samples (**LCS/LCSD**) were analyzed for all sample matrices and parameter groups, and recoveries were within specified ranges for most analytes. NWTPH-Dx analyses for TPH-Dx in solids/soils showed a slightly low recovery at 55.1% in an LCS (associated LCSD recovery was acceptable at 61.5%), and benzyl alcohol by SW846-M.8270D and SW846-M.8270D-SIM showed less-than-specified recoveries in the LCSD’s during solids/soils analyses (11.4% and 10.2%; associated LCS recoveries were within acceptable limits of $\geq 39\%$). Matrix spike (**MS**) analyses were performed for metals, including hexavalent chromium, in groundwaters, and SVOC’s, chlorinated pesticides, PCB’s, TPH-Dx, and metals in soils. MS performance was generally within acceptance ranges, with the following exceptions. Total and dissolved silver recoveries in ICS-P34-W-10-060915 exhibited lower-than-specified recoveries (56% and 61%) likely due to presence of [native] chloride in the groundwater (AgCl has extremely limited solubility in aqueous solution). Silver LCS results are within acceptable limits. No qualification of aqueous silver results is required. Hexavalent chromium (Cr[VI]) matrix spike recoveries (in ICS-P36-W-10-060815) are essentially zero, whereas, the results of the [certified] reference material are near 100%. Hexavalent chromium results have been previously determined to be unusable due to high background interference (positive bias) yielding false positive results. Benzyl alcohol matrix spike and matrix spike duplicate recoveries

in soil measured by SW846-M.8270D and SW846-M.8270-SIM in ICS-P35-SO-16-060815 are 0%. LCS/LCSD benzyl alcohol recoveries in soil, as noted above, are also determined to be relatively low. Consequently, all soil benzyl alcohol results, despite the results reported as all nondetects, are determined to be unusable and rejected with the “R” qualifier code. Results for benzyl alcohol in water are acceptable and unaffected by the soils/solids data quality (benzyl alcohol in water LCS/LCSD = 72/97% recovery). Endosulfan sulfate soil matrix spike and matrix spike duplicate recoveries in ICS-P36-SO-4-060815 are 13% and 20%, respectively. All soil results are reported as nondetected for endosulfan sulfate and all associated surrogate recoveries are determined to be acceptable; thus, no soil endosulfan sulfate results required qualification. Recovery for TPH-Dx MS/MSD in ICS-P35-SO-4-060815 was reported lower than specified at 51/57%. The associated surrogate compound (*o*-terphenyl) recovery was in the specified range, and no TPH-Dx results required qualification. Soil antimony matrix spike recovery in ICS-P35-SO-4-060815 is reported lower-than-specified at 17.5%. The associated LCS recovery for antimony in solids is reported at 101%. This behavior for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; however, no detections for Sb are reported and no qualification of results is required for antimony in soils.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance; *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses, and trifluorotoluene and bromobenzene used for evaluating TPH-G analytical performance. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Selected organic parameters by GC/MS-SIM (M.8270D-SIM) utilized the two surrogate compounds 2-fluorophenol and d₁₄-*p*-terphenyl. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All SVOC surrogate recoveries for ICS-P35-W-20-060815 by SW846-M.8270D were low and in the range of 4.8 – 8.7%. A reextraction and reanalysis of the groundwater sample outside the recommended maximum holding time by 3 days (total holding time of 10 days) yielded surrogate recoveries within the acceptance range and the same analyte results as for the initial analyses. The SVOC sample results for ICS-P35-W-20-060815 are determined to be acceptable and reported without qualification. The surrogate, DCBP, in the chlorinated pesticides analysis of ICS-P36-W-20-060815 reported less than specified at 25% (specified acceptance range = 30 – 160%). The associated TCMX recovery (second surrogate compound) was well within acceptance limits, which precludes the requirement for qualification of sample pesticide results. The SVOC surrogate, d₁₄-*p*-terphenyl, in soil samples ICS-P34-SO-16-060915 and ICS-P36-SO-4-060815 exhibited recoveries slightly greater than the specified upper limit of 120%. All other associated surrogate recoveries in the two soil samples were acceptable; thus, no associated SVOC results required qualification. The PCB's analytical surrogate compound, DCBP, in soil sample ICS-P35 –SO-4-060815 exhibited a recovery slightly greater (129%) than the specified upper limit of 126%. The associated second surrogate

compound, TCMX, exhibited acceptable performance. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses (CCV RPD compared to initial calibration responses > 20) for benzoic acid in water, and acetone, bromoform, benzyl alcohol and N-nitrosodiphenylamine in soils/solids. All positive hits/detections for these analytes in the respective matrices were qualified as estimates with the “J_Q” qualifier code.

TPH-Dx and TPH-G analyses indicate presence of relatively little, if any, detectable gasoline, diesel fuel or lubricant/motor oil in the groundwater and soil samples analyzed. Only one sample showed presence of any identifiable hydrocarbon mixture; motor oil-type lubricant in soil ICS-P34-SO-4-060915 at 67 mg/kg.

Sample results reported here are determined to be in general compliance with method and SAP requirements, with the exceptions noted above. All reported data (attached) with the associated qualifiers are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Chloride	Sulfate	Antimony 7440-36-0		Arsenic 7440-38-2		Beryllium 7440-41-7		Cadmium 7440-43-9		Calcium 7440-70-2
					%	mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L
ICS-P36-W-10-060815	GW-pushprobe	6/8/2015	nonfiltered	1510665-AHK9A	-	1890	0.7		0.5 U		2.7		0.5 U		0.2 U	264,000
ICS-P36-W-10-060815	GW-pushprobe	6/8/2015	nonfiltered	1510674-AHL2A	-											
ICS-P36-W-10-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510669-AHK9E	-			0.5 U		1.3		0.5 U		0.2 U		
ICS-P36-W-10-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510677-AHL2D	-											
ICS-P36-W-20-060815	GW-pushprobe	6/8/2015	nonfiltered	1510666-AHK9B	-	1830	0.6		0.5 U		3.0		0.5 U		0.2 U	176,000
ICS-P36-W-20-060815	GW-pushprobe	6/8/2015	nonfiltered	1510675-AHL2B	-											
ICS-P36-W-20-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510670-AHK9F	-			0.5 U		0.5		0.5 U		0.2 U		
ICS-P36-W-20-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510678-AHL2E	-											
ICS-P35-W-20-060815	GW-pushprobe	6/8/2015	nonfiltered	1510667-AHK9C	-	2440	272		0.5 U		10.8		0.6		0.2 U	148,000
ICS-P35-W-20-060815	GW-pushprobe	6/8/2015	nonfiltered	1510676-AHL2C	-											
ICS-P35-W-20-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510671-AHK9G	-			0.5 U		2.0		0.5 U		0.2 U		
ICS-P35-W-20-060815	GW-pushprobe	6/8/2015	field-filtered, 0.45 µm	1510679-AHL2F	-											
Trip Blank	water	6/8/2015	trip/transport blank	1510668-AHK9D	-											
ICS-P34-W-10-060915	GW-pushprobe	6/9/2015	nonfiltered	1510734-AHM8A	-	59.3	27.3		0.2 U		0.9		0.2 U		0.1 U	11,100
ICS-P34-W-10-060915	GW-pushprobe	6/9/2015	nonfiltered	1510741-AHM9A	-											
ICS-P34-W-10-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510738-AHM8E	-			0.2 U		0.3		0.2 U		0.1 U		
ICS-P34-W-10-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510744-AHM9D	-											
ICS-P34-W-20-060915	GW-pushprobe	6/9/2015	nonfiltered	1510735-AHM8B	-	1950	55.3		0.5 U		0.6		0.5 U		0.2 U	46,200
ICS-P34-W-20-060915	GW-pushprobe	6/9/2015	nonfiltered	1510742-AHM9B	-											
ICS-P34-W-20-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510739-AHM8F	-			0.5 U		0.5 U		0.5 U		0.2 U		
ICS-P34-W-20-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510745-AHM9E	-											
ICS-P35-W-10-060915	GW-pushprobe	6/9/2015	nonfiltered	1510736-AHM8C	-	2120	326		0.5 U		1.0		0.5 U		0.2 U	160,000
ICS-P35-W-10-060915	GW-pushprobe	6/9/2015	nonfiltered	1510743-AHM9C	-											
ICS-P35-W-10-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510740-AHM8G	-			0.5 U		0.9		0.5 U		0.2 U		
ICS-P35-W-10-060915	GW-pushprobe	6/9/2015	field-filtered, 0.45 µm	1510746-AHM9F	-											
Trip Blank	water	6/9/2015	trip/transport blank	1510737-AHM8D	-											
							mg/kg, dry		mg/kg, dry		mg/kg, dry		mg/kg, dry			
ICS-P35-SO-4-060815	soil-pushprobe	6/8/2015	3 - 5'	1510685-AHL3A	94				0.2 U		3.0		0.2 U		0.2	
ICS-P35-SO-10-060815	soil-pushprobe	6/8/2015	9 - 11'	1510686-AHL3B	71				0.3 U		1.4		0.3 U		0.1 U	
ICS-P35-SO-16-060815	soil-pushprobe	6/8/2015	15 - 17'	1510687-AHL3C	72				0.3 U		1.7		0.3 U		0.2	
ICS-P36-SO-4-060815	soil-pushprobe	6/8/2015	3 - 4'	1510688-AHL3D	82				0.3 U		3.5		0.3		0.3	
ICS-P36-SO-10-060815	soil-pushprobe	6/8/2015	10 - 12'	1510689-AHL3E	71				0.3 U		3.2		0.3 U		0.1 U	
ICS-P36-SO-16-060815	soil-pushprobe	6/8/2015	15 - 17'	1510690-AHL3F	74				0.3 U		4.6		0.3		0.1 U	
ICS-P34-SO-4-060915	soil-pushprobe	6/9/2015	3 - 5'	1510747-AHN0A	86				0.2 U		8.0		0.3		0.4	
ICS-P34-SO-10-060915	soil-pushprobe	6/9/2015	9 - 11'	1510748-AHN0B	73				0.3 U		2.3		0.3		0.1 U	
ICS-P34-SO-16-060915	soil-pushprobe	6/9/2015	15 - 17'	1510749-AHN0C	74				0.3 U		1.9		0.3 U		0.2	

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	Chromium 7440-47-3		Chromium (VI)	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	diss. µg/L	total µg/L	diss. µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-P36-W-10-060815		5	R		9		0.8	210,000				5		0.5 U	792,000		10 U	1,500,000
ICS-P36-W-10-060815	2				1 U		0.2 U			20.0 U		2		0.5 U			10 U	
ICS-P36-W-10-060815										20.0 U								
ICS-P36-W-10-060815		8	R		20		2.1	153,000				8		0.5 U	959,000		20	1,100,000
ICS-P36-W-20-060815	1 U				1 U		0.2 U			20.0 U		2		0.5 U			10 U	
ICS-P36-W-20-060815										20.0 U								
ICS-P35-W-20-060815		32	R		69		8.5	308,000				33		0.5 U	1,170,000		80	1,600,000
ICS-P35-W-20-060815	6				10		1.4					64.6						
ICS-P35-W-20-060815											11		0.5 U				30	
ICS-P35-W-20-060815										20.0 U								
Trip Blank																		
ICS-P34-W-10-060915		1.8	R		6.6		2.1	25,600				1.3		0.2 U	97,800		4	130,000
ICS-P34-W-10-060915	0.8				0.5 U		0.1 U			20.0 U				0.2 U			4 U	
ICS-P34-W-10-060915										20.0 U		0.9		0.2 U				
ICS-P34-W-20-060915		3	R		1 U		0.4	96,100				1 U		0.5 U	1,170,000		10 U	510,000
ICS-P34-W-20-060915	3				1 U		0.2 U			20.0 U								
ICS-P34-W-20-060915										20.0 U		1		0.5 U			10 U	
ICS-P35-W-10-060915		1 U	R		1 U		0.2 U	141,000				2		0.5 U	1,150,000		10 U	980,000
ICS-P35-W-10-060915	1 U				1 U		0.2 U			20.0 U								
ICS-P35-W-10-060915										20.0 U		2		0.5 U			10 U	
ICS-P35-W-10-060915																		
Trip Blank																		
	mg/kg, dry			mg/kg, dry		mg/kg, dry			mg/kg, dry		mg/kg, dry		mg/kg, dry			mg/kg, dry		
ICS-P35-SO-4-060815		9.0		10.4		1.5			0.03 U		8.4		0.2 U			31		
ICS-P35-SO-10-060815		14.6		24.1		2.5			0.03 U		9.7		0.3 U			32		
ICS-P35-SO-16-060815		10.4		17.7		2.2			0.03 U		8.5		0.3 U			23		
ICS-P36-SO-4-060815		18.2		27.7		7.0			0.06		15.7		0.3 U			67		
ICS-P36-SO-10-060815		12.9		22.8		2.9			0.03		10.3		0.3 U			29		
ICS-P36-SO-16-060815		17.1		24.8		3.3			0.04		15.1		0.3 U			35		
ICS-P34-SO-4-060915		41.8		34.8		123			0.13		52.2		0.2 U			80		
ICS-P34-SO-10-060915		16.6		21.6		2.8			0.05		14.2		0.3 U			36		
ICS-P34-SO-16-060915		10.4		17.7		2.0			0.03 U		8.0		0.3 U			24		

R = results rejected due to high background interference.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3	Bromo- methane 74-83-9	Vinyl chloride 75-01-4	Chloro- ethane 75-00-3	Methylene chloride 75-09-2	Acetone 67-64-1	Carbon disulfide 75-15-0	1,1-Dichloro- ethene 75-35-4	1,1-Dichloro- ethane 75-34-3	trans-1,2- Dichloroethene 156-60-5	cis-1,2- Dichloroethene 156-59-2	Chloroform 67-66-3
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-P36-W-10-060815	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-20-060815	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P35-W-20-060815	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
Trip Blank	0.25 U														
ICS-P34-W-10-060915	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-20-060915	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.27	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P35-W-10-060915	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915															
ICS-P35-W-10-060915															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
	mg/kg, dry	mg/kg, dry	mg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	8.0 U	5.3 U	11 U	1.7 U	1.7 U	1.7 U	1.7 U	3.6	14 J_Q	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10-060815	11 U	7.0 U	14 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	25 J_Q	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16-060815	9.8 U	6.9 U	14 U	1.5 U	1.5 U	1.5 U	1.5 U	2.5 J	31 J_Q	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4-060815	13 U	6.0 U	12 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	17 J_Q	1.9	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-10-060815	12 U	7.0 U	14 U	1.6 U	1.6 U	1.6 U	1.6 U	3.7	43 J_Q	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16-060815	11 U	6.7 U	13 U	1.7 U	1.7 U	1.7 U	1.7 U	2.4 J	35 J_Q	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P34-SO-4-060915	8.0 U	16	67	1.8 U	1.8 U	1.8 U	1.8 U	3.7 U	33 J_Q	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10-060915	12 U	6.8 U	14 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	52 J_Q	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16-060915	11 U	6.6 U	19	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	29 J_Q	3.2	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U

** bold-typed values resemble corresponding [weathered] petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-P36-W-10-060815	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-20-060815	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P35-W-20-060815	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
Trip Blank															
ICS-P34-W-10-060915	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-20-060915	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P35-W-10-060915	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-P35-W-10-060915															
ICS-P35-W-10-060915															
ICS-P35-W-10-060915															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	1.7 U	8.5 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.5 U	8.5 U
ICS-P35-SO-10-060815	1.8 U	8.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	8.9 U	8.9 U
ICS-P35-SO-16-060815	1.5 U	4.3 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	7.5 U
ICS-P36-SO-4-060815	1.5 U	7.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.8 J	1.5 U	1.5 U	7.4 U	7.4 U
ICS-P36-SO-10-060815	1.6 U	4.2 J	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.9 U	7.9 U
ICS-P36-SO-16-060815	1.7 U	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	8.6 U	8.6 U
ICS-P34-SO-4-060915	1.8 U	9.2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	9.2 U	9.2 U
ICS-P34-SO-10-060915	2.1 U	6.2 J	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	10 U	10 U
ICS-P34-SO-16-060915	1.8 U	9.0 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	9.0 U	9.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-P36-W-10-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P36-W-10-060815																
ICS-P36-W-10-060815																
ICS-P36-W-10-060815																
ICS-P36-W-20-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P36-W-20-060815																
ICS-P36-W-20-060815																
ICS-P36-W-20-060815																
ICS-P36-W-20-060815																
ICS-P35-W-20-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P35-W-20-060815																
ICS-P35-W-20-060815																
ICS-P35-W-20-060815																
Trip Blank																
ICS-P34-W-10-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P34-W-10-060915																
ICS-P34-W-10-060915																
ICS-P34-W-10-060915																
ICS-P34-W-20-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P34-W-20-060915																
ICS-P34-W-20-060915																
ICS-P34-W-20-060915																
ICS-P35-W-10-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-P35-W-10-060915																
ICS-P35-W-10-060915																
ICS-P35-W-10-060915																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	85 U	3.4 U	1.7 U
ICS-P35-SO-10-060815	1.8 U	1.8 U	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	89 U	3.6 U	1.8 U
ICS-P35-SO-16-060815	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	75 U	3.0 U	1.5 U
ICS-P36-SO-4-060815	1.5 U	1.5 U	1.4 J	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	74 U	3.0 U	1.5 U
ICS-P36-SO-10-060815	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	79 U	3.2 U	1.6 U
ICS-P36-SO-16-060815	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	86 U	3.4 U	1.7 U
ICS-P34-SO-4-060915	1.8 U	1.8 U	1.7 J	1.8 U	1.8 U	1.8 U	1.8 U	3.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	92 U	3.7 U	1.8 U
ICS-P34-SO-10-060915	2.1 U	2.1 U	1.2 J	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	100 U	4.2 U	2.1 U
ICS-P34-SO-16-060915	1.8 U	1.8 U	1.0 J	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	90 U	3.6 U	1.8 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-P36-W-10-060815	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-20-060815	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P35-W-20-060815	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
Trip Blank															
ICS-P34-W-10-060915	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-20-060915	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P35-W-10-060915	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-P35-W-10-060915															
ICS-P35-W-10-060915															
Trip Blank															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	1.7 U	1.7 U	3.4 U	8.5 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P35-SO-10-060815	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P35-SO-16-060815	1.5 U	1.5 U	3.0 U	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-4-060815	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-P36-SO-10-060815	1.6 U	1.6 U	3.2 U	7.9 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-P36-SO-16-060815	1.7 U	1.7 U	3.4 U	8.6 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P34-SO-4-060915	1.8 U	1.8 U	3.7 U	9.2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P34-SO-10-060915	2.1 U	2.1 U	4.2 U	10 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-P34-SO-16-060915	1.8 U	1.8 U	3.6 U	9.0 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field I.D.	tert-Butyl- benzene 98-06-6 µg/L	sec-Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	Naphthalene 91-20-3 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-P36-W-10-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P36-W-10-060815														
ICS-P36-W-10-060815														
ICS-P36-W-10-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P36-W-20-060815														
ICS-P36-W-20-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P35-W-20-060815														
ICS-P35-W-20-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P35-W-20-060815														
ICS-P35-W-20-060815	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
Trip Blank														
ICS-P34-W-10-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P34-W-10-060915														
ICS-P34-W-10-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P34-W-20-060915														
ICS-P34-W-20-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
ICS-P35-W-10-060915														
ICS-P35-W-10-060915	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U
Trip Blank														
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	1.7 U	1.7 U	1.7 U	1.7 U	(see SVOC's)	8.5 U	8.5 U	17 J	19 U	R	4.8 U	19 U	19 U	19 U
ICS-P35-SO-10-060815	1.8 U	1.8 U	1.8 U	1.8 U	(see SVOC's)	8.9 U	8.9 U	14 J	19 U	R	4.7 U	19 U	19 U	19 U
ICS-P35-SO-16-060815	1.5 U	1.5 U	1.5 U	1.5 U	(see SVOC's)	7.5 U	7.5 U	18 J	20 U	R	4.9 U	20 U	20 U	20 U
ICS-P36-SO-4-060815	1.5 U	1.5 U	1.5 U	1.5 U	(see SVOC's)	7.4 U	7.4 U	14 J	19 U	R	4.7 U	19 U	19 U	19 U
ICS-P36-SO-10-060815	1.6 U	1.6 U	1.6 U	1.6 U	(see SVOC's)	7.9 U	7.9 U	25	19 U	R	4.7 U	19 U	19 U	19 U
ICS-P36-SO-16-060815	1.7 U	1.7 U	1.7 U	1.7 U	(see SVOC's)	8.6 U	8.6 U	11 J	19 U	R	4.8 U	19 U	19 U	19 U
ICS-P34-SO-4-060915	1.8 U	1.8 U	1.8 U	1.8 U	(see SVOC's)	(see SVOC's)	9.2 U	19 U	19 U	R	4.8 U	19 U	19 U	19 U
ICS-P34-SO-10-060915	2.1 U	2.1 U	2.1 U	2.1 U	(see SVOC's)	10 U	10 U	20	20 U	R	4.9 U	20 U	20 U	20 U
ICS-P34-SO-16-060915	1.8 U	1.8 U	1.8 U	1.8 U	(see SVOC's)	9.0 U	9.0 U	14 J	19 U	R	4.8 U	19 U	19 U	19 U

J = estimate associated with value less than the verifiable lower quantitation limit.

R = results rejected due to low MS and LCS recoveries.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L
ICS-P36-W-10-060815	1.0 U	1.0 U	3.0 U	5.5 J	3.0 U	(see VOC's)	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P36-W-10-060815														
ICS-P36-W-10-060815														
ICS-P36-W-10-060815	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.06 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P36-W-20-060815														
ICS-P36-W-20-060815	1.0 U	1.0 U	3.0 U	4.8 J	3.0 U	(see VOC's)	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P35-W-20-060815														
ICS-P35-W-20-060815														
ICS-P35-W-20-060815														
Trip Blank														
ICS-P34-W-10-060915	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.05 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P34-W-10-060915														
ICS-P34-W-10-060915														
ICS-P34-W-10-060915	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.06 J	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P34-W-20-060915														
ICS-P34-W-20-060915														
ICS-P34-W-20-060915	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U
ICS-P35-W-10-060915														
ICS-P35-W-10-060915														
ICS-P35-W-10-060915														
Trip Blank														
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	19 U	19 U	24 U	190 U	96 U	4.8 U	(see VOC's)	96 U	19 U	96 U	96 U	19 U	19 U	19 U
ICS-P35-SO-10-060815	19 U	19 U	23 U	88 J	93 U	4.7 U	(see VOC's)	93 U	19 U	93 U	93 U	19 U	19 U	19 U
ICS-P35-SO-16-060815	20 U	20 U	24 U	90 J	98 U	4.9 U	(see VOC's)	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P36-SO-4-060815	19 U	19 U	23 U	69 J	94 U	4.7 U	(see VOC's)	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P36-SO-10-060815	19 U	19 U	24 U	180 J	94 U	4.7 U	(see VOC's)	94 U	19 U	94 U	94 U	19 U	19 U	19 U
ICS-P36-SO-16-060815	19 U	19 U	24 U	66 J	95 U	4.8 U	(see VOC's)	95 U	19 U	95 U	95 U	19 U	19 U	19 U
ICS-P34-SO-4-060915	19 U	19 U	24 U	190 U	95 U	4.8 U	8.6 J	95 U	7.6 J	95 U	95 U	19 U	19 U	8.6 J
ICS-P34-SO-10-060915	20 U	20 U	24 U	130 J	98 U	4.9 U	(see VOC's)	98 U	20 U	98 U	98 U	20 U	20 U	20 U
ICS-P34-SO-16-060915	19 U	19 U	24 U	83 J	97 U	4.8 U	(see VOC's)	97 U	19 U	97 U	97 U	19 U	19 U	19 U

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field I.D.	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L
ICS-P36-W-10-060815	0.10 U	0.10 U	3.0 U	3.0 U	2.2	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P36-W-10-060815														
ICS-P36-W-10-060815														
ICS-P36-W-10-060815														
ICS-P36-W-20-060815	0.10 U	0.10 U	3.0 U	3.0 U	4.4	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P36-W-20-060815														
ICS-P36-W-20-060815														
ICS-P36-W-20-060815														
ICS-P35-W-20-060815	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P35-W-20-060815														
ICS-P35-W-20-060815														
ICS-P35-W-20-060815														
Trip Blank														
ICS-P34-W-10-060915	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.34	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U
ICS-P34-W-10-060915														
ICS-P34-W-10-060915														
ICS-P34-W-10-060915														
ICS-P34-W-20-060915	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	1.0 U	1.0 U	0.10 U
ICS-P34-W-20-060915														
ICS-P34-W-20-060915														
ICS-P34-W-20-060915														
ICS-P35-W-10-060915	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	1.0 U	1.0 U	0.10 U
ICS-P35-W-10-060915														
ICS-P35-W-10-060915														
ICS-P35-W-10-060915														
Trip Blank														
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	19 U	19 U	96 U	96 U	19 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	19 U	19 U
ICS-P35-SO-10-060815	19 U	19 U	93 U	93 U	19 U	19 U	19 U	4.7 U	19 U	6.5 J	19 U	19 U	9.3 J	19 U
ICS-P35-SO-16-060815	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U	20 U	13 J	20 U	20 U	9.8 J	5.9 J _B
ICS-P36-SO-4-060815	19 U	19 U	94 U	94 U	19 J _B	19 U	19 U	4.7 U	19 U	5.6 J	19 U	19 U	8.4 J	19 U
ICS-P36-SO-10-060815	19 U	19 U	94 U	94 U	19 U	19 U	19 U	4.7 U	19 U	7.5 J	19 U	19 U	6.6 J	19 U
ICS-P36-SO-16-060815	19 U	19 U	95 U	95 U	19 U	19 U	19 U	4.8 U	19 U	19 U	19 U	19 U	6.6 J	19 U
ICS-P34-SO-4-060915	19 U	4.8 J	95 U	95 U	19 J _B	19 U	19 U	4.8 U	19 U	22	8.6 J	19 U	6.7 J	37
ICS-P34-SO-10-060915	20 U	20 U	98 U	98 U	24 J _B	20 U	20 U	4.9 U	20 U	11 J	20 U	20 U	6.9 J	20 U
ICS-P34-SO-16-060915	19 U	19 U	97 U	97 U	19 U	19 U	19 U	4.8 U	19 U	9.7 J	19 U	19 U	19 U	19 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely biased high due to contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-P36-W-10-060815	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P36-W-10-060815													
ICS-P36-W-10-060815													
ICS-P36-W-10-060815													
ICS-P36-W-20-060815	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P36-W-20-060815													
ICS-P36-W-20-060815													
ICS-P35-W-20-060815	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P35-W-20-060815													
ICS-P35-W-20-060815													
ICS-P35-W-20-060815													
Trip Blank													
ICS-P34-W-10-060915	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P34-W-10-060915													
ICS-P34-W-10-060915													
ICS-P34-W-10-060915													
ICS-P34-W-20-060915	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P34-W-20-060915													
ICS-P34-W-20-060915													
ICS-P34-W-20-060915													
ICS-P35-W-10-060915	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-P35-W-10-060915													
ICS-P35-W-10-060915													
ICS-P35-W-10-060915													
Trip Blank													
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	8.6 J	19 U	38 U
ICS-P35-SO-10-060815	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U
ICS-P35-SO-16-060815	7.8 J	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U
ICS-P36-SO-4-060815	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	6.5 J	19 U	37 U
ICS-P36-SO-10-060815	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U
ICS-P36-SO-16-060815	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U
ICS-P34-SO-4-060915	47	9.5	34	120	46	19 U	110	43	30	15 J	30	39	392
ICS-P34-SO-10-060915	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U
ICS-P34-SO-16-060915	5.8 J	4.8 U	19 U	48 U	19 U	19 U	39 U	19 U	19 U	19 U	19 U	19 U	39 U

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-P36-W-10-060815	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P36-W-10-060815																
ICS-P36-W-10-060815																
ICS-P36-W-10-060815																
ICS-P36-W-20-060815	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P36-W-20-060815																
ICS-P36-W-20-060815																
ICS-P36-W-20-060815																
ICS-P35-W-20-060815	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P35-W-20-060815																
ICS-P35-W-20-060815																
ICS-P35-W-20-060815																
Trip Blank																
ICS-P34-W-10-060915	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.013	0.0050 U	0.0050 U	0.010	0.0050 U	0.0050 U	0.025 U
ICS-P34-W-10-060915																
ICS-P34-W-10-060915																
ICS-P34-W-10-060915																
ICS-P34-W-20-060915	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P34-W-20-060915																
ICS-P34-W-20-060915																
ICS-P35-W-10-060915	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.025 U
ICS-P35-W-10-060915																
ICS-P35-W-10-060915																
Trip Blank																
	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>	<u>µg/kg, dry</u>
ICS-P35-SO-4-060815	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U
ICS-P35-SO-10-060815	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U
ICS-P35-SO-16-060815	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	1.9 U	0.95 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.5 U
ICS-P36-SO-4-060815	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.93 U	0.47 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	4.7 U
ICS-P36-SO-10-060815	12 U	10 U	3.7 U	0.49 U	0.49 U	0.49 U	4.1 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U
ICS-P36-SO-16-060815	5.7 U	5.7 U	2.2 U	3.8 U	0.49 U	1.4 U	3.1 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U
ICS-P34-SO-4-060915	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	2.7 U	0.95 U	6.9 U	0.95 U	0.95 U	0.95 U	6.4 U	4.8 U
ICS-P34-SO-10-060915	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U
ICS-P34-SO-16-060915	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater and Subsurface Soils from Push-Probe Sampling, June 2015

Field ID	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-P36-W-10-060815	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-10-060815															
ICS-P36-W-20-060815	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P36-W-20-060815															
ICS-P35-W-20-060815	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P35-W-20-060815															
ICS-P35-W-20-060815															
Trip Blank															
ICS-P34-W-10-060915	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 J	0.010 J	0.0050 J	0.010 U	0.010 U	0.025
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-10-060915															
ICS-P34-W-20-060915	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.14	0.18 J_p	0.085	0.010 U	0.010 U	0.41
ICS-P34-W-20-060915															
ICS-P34-W-20-060915															
ICS-P35-W-10-060915	0.0050 U	0.0050 U	0.0025 U	0.0025 U	0.25 U	0.0050 U	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-P35-W-10-060915															
ICS-P35-W-10-060915															
Trip Blank															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-P35-SO-4-060815	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
ICS-P35-SO-10-060815	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P35-SO-16-060815	1.9 U	1.9 U	0.95 U	0.95 U	48 U	1.9 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P36-SO-4-060815	0.93 U	0.93 U	0.47 U	0.47 U	23 U	0.93 U	0.93 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P36-SO-10-060815	0.98 U	0.98 U	2.9 U	0.49 U	24 U	5.4 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P36-SO-16-060815	0.98 U	0.98 U	2.1 U	0.49 U	25 U	4.6 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P34-SO-4-060915	3.5 U	2.3 U	2.5	2.1	24 U	0.95 U	0.95 U	3.8 U	3.8 U	19 U	57 J_p	60	3.8 U	3.8 U	117
ICS-P34-SO-10-060915	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P34-SO-16-060915	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8082).

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

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MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: August 25, 2015

SUBJECT: Data Evaluation/Assessment for 33 Subsurface Soils (from frozen archival)
Collected from Soil Push-Probes during November-December 2014 from the
ICS / [former] NW Cooperage Site, Seattle, WA

Thirty-three subsurface soil composites from soil push-probes were pulled from frozen archives for analyses of selected parameters. These samples were collected and submitted for archival storage at - 20 °C by Dalton, Olmsted & Fuglevand (DOF) staff during November – December, 2014, to Analytical Resources Inc. (ARI) of Tukwila, Washington within 42 hours of collection. Samples were received on ice at temperatures between 0.3 and 5.4 °C, and maintained at the project laboratory at - 20 °C prior to analyses. Selected samples were retrieved, thawed and assigned to four separate analytical/work groups. Sample holding times and conditions are within the specifications of U.S. EPA Region 10 guidance for extractable organics and metals analyses. Volatile organic compounds (VOC's) analyses for three samples were performed outside the specifications of Regional and National guidances (14-day maximum recommended holding time at 4 °C).

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-6 of the SAP.

VOC's	SW846-M.8260C	PAH's	SW846-M.8270D
pentachlorophenol	SW846-M.8041	lead	SW846-M.6020
	(GC/ECD option)		
PCB's as Aroclors	SW846-M.8082	chlor. pesticides	SW846-M.8081B
total petroleum HC's	NWTPH-Dx & -G		

Polycyclic aromatic hydrocarbons (PAH's) analyses were performed by SW846 M.8270 in full-scan mode. Chlorinated pesticides (including HCB and HCB by M.8081B) analyses were supplemented with extract cleanup by GPC (gel permeation chromatography), silica gel chromatographic cleanup and elemental sulfur S_x removal. Pentachlorophenol (PCP) was

analyzed by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and strong-acid digestion cleanup steps. NWTPH-G was analyzed by purge & trap and GC/MS; outside the 14-day maximum recommended holding time. PCB's in soils (by M.8082) was determined by including the extract cleanup options of S_x removal, strong-acid digestion, and silica gel chromatography prior to instrumental analyses.

TPH-G and VOC's were analyzed from selected archived samples (ICS-P15-SO-7-111414, ICS-P17-SO-7-111214 and ICS-P30-SO-10-120914) at the request of the Washington Department of Ecology, despite exceedance of the maximum recommended holding time of 14 days. Both preserved and non-preserved samples were analyzed for comparison of VOC results; these are identified in the attached results Table as "pres. vial" and archvd soil" for preserved 40-ml VOA's vial and 8-16 oz non-preserved soil with headspace, respectively. Preservation consists of 5 ml of bisulfite solution (in a 40-ml VOA's vial) for samples ICS-P15-SO-7-111414 and ICS-P30-SO-10-120914, and 5 ml of MeOH for ICS-P17-SO-7-111214. Aliquots from non-preserved samples were taken from the center of the soil mass to minimize any bias associated from either sublimation and/or evaporative losses during storage. Also, a non-preserved frozen archived sample was analyzed from selected soil columns to compare archived sample results to results generated for the same location and horizon analyzed in a preserved (non-archived) sample within the recommended holding times (≤ 14 days) [preserved, non-archived sample results are presented in blue-face type in the attached results Table]. In general, there appears to be consistent positive bias associated with methylene chloride, acetone, and carbon disulfide in preserved archived samples compared to non-preserved archivals for the same location. Results for other VOC parameters tended to be comparable and generally within a factor of 2x for sample pairs, with some exceptions. Comparison of results from non-preserved frozen archivals to preserved, non-archived samples analyzed within the 14-day maximum recommended holding time shows general lack of consistency between sample pairs. This may be a result of two potentially significant processes – 1) contaminated solids/soils heterogeneity, and/or 2) sample contamination associated with the archival/storage process, where sublimation, evaporative losses, and [vapor] transfer occurred between samples in the storage compartment. The second process is likely more significant and problematic due to lack of appropriate control mechanisms to minimize cross contamination between samples and from the compartment space. Sample container lids were found to loosen during the freezing process, and accumulation of ice crystals on the inside surface of the sample containers indicates potential sublimation and condensation of volatile constituents. VOC's and TPH-G data from analysis of frozen archived soils is likely unrepresentative of the samples collected, and data quality is considered suspect. The use of VOC's and TPH-G data for decision making from project soils held in archival storage is not recommended.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table, with the exception of VOC's, were completed within the technical holding times and under conditions recommended by the U.S. EPA.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP or dependent on presence of elevated levels of other contaminants or background interferents.

Elevated lower reporting limits for selected target analytes were evident for chlorinated pesticide parameters in samples P18-SO-7-121614, P22-SO-7-111414 and P29-SO-22-121014 due to presence of matrix interferences. Acenaphthylene in ICS-P18-SO-7-121614 is qualified as an estimated value at 24 µg/kg with the “J” qualifier due to some low amount of interference affecting the mass spectrum. Chromatographic or co-elution interference was apparent for hexachlorobutadiene (HCBd) in ICS-P18-SO-7-121614 resulting in an elevated reporting limit for a nondetect at a lower limit of 15 µg/kg (“U” qualified). All analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the “J” qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of acetone, hexachlorobutadiene (HCBd), 1,2,4-trichlorobenzene, naphthalene and 1,2,3-trichlorobenzene at 2.8 µg/kg, 0.5 µg/kg, 0.7 µg/kg, 0.9 µg/kg, and 0.8 µg/kg, respectively, during VOC’s analyses. Concentrations for these analytes at up to twice the method blank levels are determined to be potentially impacted by background levels and are thus qualified with the “J_B” descriptor in the attached Table.

Laboratory control samples (**LCS/LCSD**) were analyzed for all parameter groups, and recoveries were within specified ranges for all analytes. Matrix spike (**MS**) analyses were performed for all parameters in soils, with the exception of TPH-G and [preserved-sample] VOC’s. MS performance exhibited recoveries within the range of 45 – 148%, which is generally within acceptance ranges. The lower recoveries are associated with carbon disulfide (48% in P30-SO-7-120914), chrysene (148% in P30-SO-10-120914), TPH-Dx (57.2% in P24-SO-13-111314) and lead (48.8% in P18-SO-13-121614). Sample heterogeneity is likely responsible for the elevated recovery for lead; the recovery may be closer to 109% if the secondary result from the determination of RPD (duplicate results are 56.1 and 38.3 mg/kg; RPD = 38) is used to calculate recovery. The associated MS duplicates for carbon disulfide, TPH-Dx and chrysene are within the specified acceptance ranges. No results required qualification due to unacceptable analyte recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC’s, PAH’s, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB’s, and chlorinated phenols (pentachlorophenol). Four labeled compounds were utilized for the evaluation of VOC’s recovery performance (d₄-1,2-dichloroethane, d₈-toluene, bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB’s analytical performance; *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses, and trifluorotoluene and bromobenzene used for evaluating TPH-G analytical performance. PAH recoveries were evaluated with the use of the two surrogate compounds 2-fluorobiphenyl and d₁₄-*p*-terphenyl. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries are determined to be within specified acceptance ranges. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed occasional [minor] noncompliant responses (CCV RPD compared to initial calibration responses > 20) for 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1-dichloroethene and hexachlorobutadiene (in VOC's). No positive hits/detections for these analytes are reported; thus no results require qualification due to noncompliant CCV's.

TPH-Dx and TPH-G analyses indicate likely presence of identifiable hydrocarbon mixtures (chromatographic profiles resembling the respective hydrocarbon mixture); gasoline in ICS-P30-SO-10-120914, and diesel fuel/fuel oil and motor oil lubricant in both ICS-P29-SO-7-121014 and ICS-P30-SO-10-120914. These specific results are highlighted in bold-type in the attached results Table.

Sample results reported here are determined to be in general compliance with method and SAP requirements, with the exceptions noted above. All reported data (attached) with the associated qualifiers, with the exception of archived-sample VOC and TPH-G results, are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperaage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Lead 7439-92-1 mg/kg, dry	Total Petroleum Hydrocarbons **		
							Gasoline-range mg/kg, dry	Diesel-range mg/kg, dry	Lube-range mg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	73		8.3 U		
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)	72				
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)	48				
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	68				
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	77		57		
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)	77				
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)	65				
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	66				
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)	91		51		
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	90				
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	80				
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(J)	80				
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)	84				
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	85				
TPH-G results suspect due to holding time and condition issues.									
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A	90				
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B	75			6.1 U	12 U
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C	73				
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D	79				
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E	87				
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F	82	56.1			
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G	76				
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H	79		6.3 U		13 U
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I	75				
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J	74				
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K	83				
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L	71	4.0			
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M	71				
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N	73				
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O	76				
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P	78				
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q	83				
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R	72				
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S	74				
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A	77	13.3			
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B	72				
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C	78				
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D	81				
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E	73				
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F	74				
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G	85				
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H	72				
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I	79				
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J	75			100	260
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K	79				
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L	81				
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M	78				
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N	76				

Blue-highlighted data validated from non-archived sample analyses.

** bold-typed values resemble corresponding
[weathered] petroleum hydrocarbon mixture.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloro- methane 74-87-3 µg/kg, dry	Bromo- methane 74-83-9 µg/kg, dry	Vinyl chloride 75-01-4 µg/kg, dry	Chloro- ethane 75-00-3 µg/kg, dry	Methylene chloride 75-09-2 µg/kg, dry	Acetone 67-64-1 µg/kg, dry	Carbon disulfide 75-15-0 µg/kg, dry	1,1-Dichloro- ethene 75-35-4 µg/kg, dry	1,1-Dichloro- ethane 75-34-3 µg/kg, dry	trans -1,2- Dichloroethene 156-60-5 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.7 U	1.7 U	0.9 J	2.7	150	240	14	1.7 U	39	1.7 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)	1.3 U	1.3 U	1.3 U	1.3 U	1.6 J	160	1.6	1.3 U	18	0.6 J
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)	2.0 U	2.0 U	2.0 U	2.0 U	2.4 J	1200	29	2.0 U	2.0 U	2.0 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	1.8 U	1.8 U	1.8 U	1.8 U	6.4 J_B	150	4.3	1.8 U	2.7	1.4 J
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	89 U	39 J	89 U	89 U	290	450 U	89 U	89 U	89 U	89 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)	70 U	29 J	70 U	70 U	140 U	350 U	70 U	70 U	70 U	70 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)	98 U	32 J	98 U	98 U	75 J	890	98 U	98 U	98 U	98 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	2.0 U	1.1 J	2.0 U	2.0 U	4.4	89	3.0	2.0 U	3.4	1.8 J
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)	56 U	56 U	56 U	56 U	50 J	280 U	56 U	56 U	56 U	56 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	1.0 U	1.0 U	1.0 U	1.0 U	3.4 J_B	120	5.7 J_Q	1.0 U	1.0 U	1.0 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.1 J	1.3 U	1.3 U	1.3 U	63	330	120	1.3 U	0.9 J	1.3 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)	1.1 U	1.1 U	1.1 U	1.1 U	4.1	83	3.9	1.1 U	1.1 U	1.1 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)	61 U	20 J	61 U	61 U	42 J	300 U	61 U	61 U	61 U	61 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.5 J_Q	1.0 U	1.0 U	1.0 U
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

J_B = estimate; associated value is likely biased high due to contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	cis -1,2- Dichloroethene 156-59-2 µg/kg, dry	Chloroform 67-66-3 µg/kg, dry	1,2-Dichloro- ethane 107-06-2 µg/kg, dry	2-Butanone 78-93-3 µg/kg, dry	1,1,1-Tri- chloroethane 71-55-6 µg/kg, dry	Carbon tetrachloride 56-23-5 µg/kg, dry	Bromo- dichloromethane 75-27-4 µg/kg, dry	1,2-Dichloro- propane 78-87-5 µg/kg, dry	cis -1,3-Dichloro- propene 10061-01-5 µg/kg, dry	Trichloro- ethene 79-01-6 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.9	1.7 U	1.7 U	28	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)	0.8 J	1.3 U	1.3 U	33	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)	2.0 U	2.0 U	2.0 U	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	30	1.8 U	1.8 U	29	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	4.0
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	89 U	89 U	89 U	450 U	89 U	89 U	89 U	89 U	89 U	120
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)	70 U	70 U	70 U	350 U	70 U	70 U	70 U	70 U	70 U	70 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)	98 U	98 U	98 U	490 U	98 U	98 U	98 U	98 U	98 U	98 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	2.0 U	2.0 U	2.0 U	17	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)	56 U	56 U	56 U	280 U	56 U	56 U	56 U	56 U	56 U	56 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.3 U	1.3 U	1.3 U	23	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(J)	1.1 U	1.1 U	1.1 U	6.0	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)	61 U	61 U	61 U	300 U	61 U	61 U	61 U	61 U	61 U	61 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Dibromo- chloromethane 124-48-1 µg/kg, dry	1,1,2-Trichloro- ethane 79-00-5 µg/kg, dry	Benzene 71-43-2 µg/kg, dry	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/kg, dry	Bromo-form 75-25-2 µg/kg, dry	4-Methyl-2- pentanone 108-10-1 µg/kg, dry	2-Hexanone 591-78-6 µg/kg, dry	Tetrachloro- ethene 127-18-4 µg/kg, dry	1,1,2,2-Tetra- chloroethane 79-34-5 µg/kg, dry	Toluene 108-88-3 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.7 U	1.7 U	2.6	1.7 U	1.7 U	8.4 U	8.4 U	1.7 U	1.7 U	8.1
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)	1.3 U	1.3 U	0.9 J	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U	1.3 U	3.3
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	2.0 U	2.0 U	1.1 J
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	1.8 U	1.8 U	2.4	1.8 U	1.8 U	8.9 U	8.9 U	1.7 J	1.8 U	73
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	89 U	89 U	89 U	89 U	89 U	450 U	450 U	89 U	89 U	89 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)	70 U	70 U	70 U	70 U	70 U	350 U	350 U	70 U	70 U	70 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)	98 U	98 U	98 U	98 U	98 U	490 U	490 U	98 U	98 U	98 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	2.0 U	2.0 U	15	2.0 U	2.0 U	10 U	10 U	2.0 U	2.0 U	19
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)	56 U	56 U	56 U	56 U	56 U	280 U	280 U	56 U	56 U	45 J
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	1.0 U	1.0 U	4.1	1.0 U	1.0 U	5.0 U	5.0 U	0.8 J	1.0 U	390
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.3 U	1.3 U	18	1.3 U	1.3 U	6.6 U	6.6 U	1.3 U	1.3 U	2.1
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)	1.1 U	1.1 U	3.1	1.1 U	1.1 U	5.6 U	5.6 U	1.1 U	1.1 U	1.0 J
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)	61 U	61 U	32 J	61 U	61 U	300 U	300 U	61 U	61 U	220
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	1.0 U	1.0 U	21	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	4.0
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloro- benzene 108-90-7 µg/kg, dry	Ethyl- benzene 100-41-4 µg/kg, dry	Styrene 100-42-5 µg/kg, dry	Trichloro- fluoromethane 75-69-4 µg/kg, dry	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/kg, dry	m - & p - Xylenes 179601-23-1 µg/kg, dry	o -Xylene 95-47-6 µg/kg, dry	1,2-Dichloro- benzene 95-50-1 µg/kg, dry	1,3-Dichloro- benzene 541-73-1 µg/kg, dry	1,4-Dichloro- benzene 106-46-7 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.7 U	32	1.7 U	1.7 U	3.3 U	43	7.4	1.7 U	1.7 U	1.7 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)	1.3 U	23	1.3 U	1.3 U	2.6 U	32	12	0.5 J	1.3 U	1.3 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)	2.0 U	10	2.0 U	2.0 U	4.0 U	42	21	1.4 J	1.1 J	2.7
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	1.8 U	50	1.8 U	1.8 U	3.6 U	110	30	1.8 U	1.8 U	1.8 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	98	89 U	89 U	89 U	180 U	89 U	89 U	140	2000	3800
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)	70 U	70 U	70 U	70 U	140 U	70 U	70 U	33 J	1000	1200
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)	110	85 J	98 U	98 U	200 U	130	47 J	120	970	2400
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	18	13	2.0 U	2.0 U	4.1 U	19	7.8	2.0 U	2.0 U	2.0 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)	56 U	600	56 U	56 U	110 U	190	170	65	56 U	56 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	1.0 U	2700	87	1.0 U	2.0 U	730	510	140	1.0 U	6.0
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.3 U	0.6 J	1.3 U	1.3 U	2.6 U	4.3	0.9 J	1.3 U	1.3 U	1.3 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(J)	1.1 U	0.4 J	1.1 U	1.1 U	2.2 U	2.6	0.6 J	0.5 J	1.1 U	1.1 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)	61 U	210	78	61 U	120 U	920	500	61 U	61 U	61 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	1.0 U	2.0	0.7 J	1.0 U	2.0 U	5.3	2.2	1.0 U	1.0 U	1.0 U
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Acrolein 107-02-8 µg/kg, dry	Bromoethane 74-96-4 µg/kg, dry	1,1-Dichloro- propene 563-58-6 µg/kg, dry	Dibromo- methane 74-95-3 µg/kg, dry	1,1,1,2-Tetra- chloroethane 630-20-6 µg/kg, dry	1,2,3-Trichloro- propane 96-18-4 µg/kg, dry	trans-1,4-Dichloro-2- butene 110-57-6 µg/kg, dry	1,3,5-Trimethyl- benzene 108-67-8 µg/kg, dry	1,2,4-Trimethyl- benzene 95-63-6 µg/kg, dry	Hexachlorobutadiene 87-68-3 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	84 U	3.3 U	1.7 U	1.7 U	1.7 U	3.3 U	8.4 U	8.7	23	8.4 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)	66 U	2.6 U	1.3 U	1.3 U	1.3 U	2.6 U	6.6 U	9.4	27	6.6 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)	100 U	4.0 U	2.0 U	2.0 U	2.0 U	4.0 U	10 U	8.2	40	10 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	89 U	3.6 U	1.8 U	1.8 U	1.8 U	3.6 U	8.9 U	1.8 U	1.8 U	(see M.8081B result)
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	4500 U	180 U	89 U	89 U	89 U	180 U	450 U	89 U	89 U	450 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)	3500 U	140 U	70 U	70 U	70 U	140 U	350 U	70 U	70 U	350 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)	4900 U	200 U	98 U	98 U	98 U	200 U	490 U	37 J	160	490 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	100 U	4.1 U	2.0 U	2.0 U	2.0 U	4.1 U	10 U	2.0 U	2.7	10 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)	2800 U	110 U	56 U	56 U	56 U	110 U	280 U	240	880	280 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	50 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	250	1700	(see M.8081B result)
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	66 U	2.6 U	1.3 U	1.3 U	1.3 U	2.6 U	6.6 U	1.3	1.4	6.6 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(J)	56 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U	5.6 U	0.8 J	1.0 J	5.6 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)	3000 U	120 U	61 U	61 U	61 U	120 U	300 U	910	2700	300 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	50 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.3	3.5	(see M.8081B result)
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	1,2-Dibromo-ethane 106-93-4 µg/kg, dry	Bromochloro-methane 74-97-5 µg/kg, dry	2,2-Dichloro-propane 294-20-7 µg/kg, dry	1,3-Dichloro-propane 142-28-9 µg/kg, dry	Isopropyl-benzene 98-82-8 µg/kg, dry	n-Propyl-benzene 103-65-1 µg/kg, dry	Bromo-benzene 108-86-1 µg/kg, dry	2-Chloro-toluene 95-49-8 µg/kg, dry	4-Chloro-toluene 106-43-4 µg/kg, dry	tert-Butyl-benzene 98-06-6 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.7 U	1.7 U	1.7 U	1.7 U	1.8	2.5	1.7 U	1.7 U	1.7 U	1.7 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)	1.3 U	1.3 U	1.3 U	1.3 U	1.2 J	2.7	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)	2.0 U	2.0 U	2.0 U	2.0 U	0.8 J	2.2	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	89 U	89 U	89 U	89 U	200	120	89 U	89 U	89 U	89 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U	70 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)	98 U	98 U	98 U	98 U	57 J	98 U	98 U	98 U	98 U	98 U
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	2.0 U	2.0 U	2.0 U	2.0 U	1.8 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)	56 U	56 U	56 U	56 U	58	120	56 U	56 U	56 U	56 U
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A	1.0 U	1.0 U	1.0 U	1.0 U	140	270	1.0 U	1.0 U	1.0 U	1.0 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.3 U	1.3 U	1.3 U	1.3 U	1.7	0.8 J	1.3 U	1.3 U	1.3 U	1.3 U
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)	1.1 U	1.1 U	1.1 U	1.1 U	2.0	1.1 J	1.1 U	1.1 U	1.1 U	0.5 J
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)	61 U	61 U	61 U	61 U	72	360	61 U	61 U	61 U	61 U
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B	1.0 U	1.0 U	1.0 U	1.0 U	0.9 J	0.8 J	1.0 U	1.0 U	1.0 U	1.0 U
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E										
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	sec -Butyl- benzene 135-98-8 µg/kg, dry	4-Isopropyl- toluene 99-87-6 µg/kg, dry	n-Butyl- benzene 104-51-8 µg/kg, dry	1,2,4-Trichloro- benzene 120-82-1 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	1,2,3-Trichloro- benzene 87-61-6 µg/kg, dry	Naphthalene 91-20-3 µg/kg, dry	2-Methyl- naphthalene 91-57-6 µg/kg, dry	1-Methyl- naphthalene 90-12-0 µg/kg, dry	Acenaph- thylene 208-96-8 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)	1.4 J	4.8	1.3 J	8.4 U	2.5 J _B	8.4 U				
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archv'd soil)	1513682(9)-AJZ1E(L)	1.9	8.1	2.6	6.6 U	4.2 J _B	6.6 U				
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archv'd soil)	1513681(8)-AJZ1D(K)	2.0 U	4.9	2.0 U	10 U	6.4 J _B	10 U				
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E	1.8 U	1.8 U	1.8 U	(see M.8270D results)		8.9 U				
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)	89 U	89 U	55 J	230 J _B	450 U	450 U				
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archv'd soil)	1513684(91)-AJZ1G(N)	70 U	70 U	70 U	1900	350 U	350 U				
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archv'd soil)	1513683(90)-AJZ1F(M)	98 U	98 U	98 U	150 J _B	110 J _B	490 U				
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B	2.0 U	2.0 U	2.0 U	(see M.8270D results)		10 U				
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archv'd soil)	1513678(85)-AJZ1A(H)	59	79	150	30 J _B	470 J _B	280 U				
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-Z001A	1.0 U	100	150	(see M.8270D results)		5.0 U				
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)	1.0 J	1.3 U	1.3 U	6.6 U	1.9 J _B	6.6 U				
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archv'd soil)	1513680(7)-AJZ1C(J)	1.6	0.5 J	0.6 J	5.6 U	1.1 J _B	5.6 U				
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archv'd soil)	1513679(86)-AJZ1B(I)	61 U	78	300	300 U	320 J _B	300 U				
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-Z001B	1.3	0.7 J	1.0 U	(see M.8270D results)		5.0 U				
Black-faced VOC results suspect due to holding time and condition issues.														
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archv'd soil)	1513766-AKB5A										
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archv'd soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archv'd soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archv'd soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archv'd soil)	1513770-AKB5E							3100	1600	1600	24 J
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archv'd soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archv'd soil)	1513772-AKB5G										
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archv'd soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archv'd soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archv'd soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archv'd soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archv'd soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archv'd soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archv'd soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archv'd soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archv'd soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archv'd soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archv'd soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archv'd soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archv'd soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archv'd soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archv'd soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archv'd soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archv'd soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archv'd soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archv'd soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archv'd soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archv'd soil)	1513793-AKB6I							550	140	80	24
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archv'd soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archv'd soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archv'd soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archv'd soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archv'd soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely biased high due to contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Acenaphthene 83-32-9 µg/kg, dry	Dibenzo-furan 132-64-9 µg/kg, dry	Fluorene 86-73-7 µg/kg, dry	Pentachloro- phenol 87-86-5 µg/kg, dry	Phenanthrene 85-01-8 µg/kg, dry	Anthracene 120-12-7 µg/kg, dry	Fluoranthene 206-44-0 µg/kg, dry	Pyrene 129-00-0 µg/kg, dry	Benzo(a)- anthracene 56-55-3 µg/kg, dry	Chrysene 218-01-9 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(I)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B										
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A				3.5 J						
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B										
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E	370	180	240		870	80	380	330	89	130
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G				8.0 U						
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I										
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M										
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S										
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B										
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E										
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G										
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I	27	54	67		660	120	530	490	160	220
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	total Benzo- fluoranthenes	Benzo(a)- pyrene	Indeno(1,2,3- cd)pyrene	Dibenz(a,h)- anthracene	Benzo(g,h,i)- perylene	LPAH	HPAH
					ug/kg, dry	ug/kg, dry	ug/kg, dry	ug/kg, dry	ug/kg, dry	ug/kg, dry	ug/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)							
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513682(9)-AJZ1E(L)							
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvd soil)	1513681(8)-AJZ1D(K)							
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E							
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)							
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513684(91)-AJZ1G(N)							
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvd soil)	1513683(90)-AJZ1F(M)							
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B							
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvd soil)	1513678(85)-AJZ1A(H)							
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A							
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)							
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513680(7)-AJZ1C(I)							
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvd soil)	1513679(86)-AJZ1B(I)							
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B							
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513766-AKB5A							
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvd soil)	1513767-AKB5B							
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvd soil)	1513768-AKB5C							
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvd soil)	1513769-AKB5D							
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvd soil)	1513770-AKB5E	140	71	48	19 U	62	4684	1250
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513771-AKB5F							
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513772-AKB5G							
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvd soil)	1513773-AKB5H							
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvd soil)	1513774-AKB5I							
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvd soil)	1513775-AKB5J							
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvd soil)	1513776-AKB5K							
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvd soil)	1513777-AKB5L							
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513778-AKB5M							
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvd soil)	1513779-AKB5N							
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvd soil)	1513780-AKB5O							
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513781-AKB5P							
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvd soil)	1513782-AKB5Q							
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513783-AKB5R							
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvd soil)	1513784-AKB5S							
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513785-AKB6A							
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvd soil)	1513786-AKB6B							
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvd soil)	1513787-AKB6C							
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvd soil)	1513788-AKB6D							
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvd soil)	1513789-AKB6E							
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvd soil)	1513790-AKB6F							
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513791-AKB6G							
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvd soil)	1513792-AKB6H							
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvd soil)	1513793-AKB6I	260	130	80	29	92	1448	1991
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvd soil)	1513794-AKB6J							
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvd soil)	1513795-AKB6K							
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvd soil)	1513796-AKB6L							
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513797-AKB6M							
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvd soil)	1513798-AKB6N							

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	alpha-BHC 319-84-6 µg/kg, dry	beta-BHC 319-85-7 µg/kg, dry	delta-BHC 319-86-8 µg/kg, dry	gamma-BHC (Lindane) 58-89-9 µg/kg, dry	Heptachlor 76-44-8 µg/kg, dry	Aldrin 309-00-2 µg/kg, dry	Heptachlor epoxide 1024-57-3 µg/kg, dry	Endosulfan I 959-98-8 µg/kg, dry	Dieldrin 60-57-1 µg/kg, dry	4,4'-DDE 72-55-9 µg/kg, dry	Endrin 72-20-8 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)											
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)											
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)											
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E											
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)											
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)											
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)											
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B											
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)											
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A											
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)											
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)											
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)											
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B											
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C											
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D											
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E	0.48 U	0.85 U	0.48 U	0.48 U	0.69 U	0.48 U	19 U	0.48 U	7.8 U	14 U	4.0 U
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F											
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	1.6 U	0.48 U	0.96 U	2.9	0.96 U
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H											
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J											
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K											
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L											
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N											
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O											
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P											
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q											
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R											
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A											
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B	0.62 U	3.5 U	0.48 U	1.7 U	5.4 U	7.1 U	9.6 U	0.48 U	4.8 U	220	9.6 U
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C											
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D											
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.95 U	0.47 U	0.95 U	0.95 U	0.95 U
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F											
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G	0.49 U	12 U	0.49 U	3.9	1.2 U	0.49 U	8.1 U	0.49 U	0.98 U	8.2 U	18 U
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H											
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I											
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J											
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K											
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L											
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M											
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N											

Blue-highlighted data validated from non-archived sample analyses.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Endosulfan II 33213-65-9 µg/kg, dry	4,4'-DDD 72-54-8 µg/kg, dry	Endosulfan sulfate 1031-07-8 µg/kg, dry	4,4'-DDT 50-29-3 µg/kg, dry	Methoxychlor 72-43-5 µg/kg, dry	Endrin ketone 53494-70-5 µg/kg, dry	Endrin aldehyde 7421-93-4 µg/kg, dry	trans- Chlordane 5103-74-2 µg/kg, dry	cis- Chlordane 5103-71-9 µg/kg, dry	Toxaphene 8001-35-2 µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B										
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U	0.99 U	0.50 U	0.50 U	25 U
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	25 U
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C										
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D										
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E	7.4 U	20 U	2.0 U	29 U	4.8 U	6.9 U	3.6 U	3.6 U	13 U	24 U
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G	0.96 U	0.96 U	0.96 U	2.6 U	4.8 U	0.96 U	0.96 U	0.48 U	0.48 U	24 U
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H										
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J										
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K										
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	0.49 U	0.49 U	24 U
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O										
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P										
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q										
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R										
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	0.50 U	0.50 U	25 U
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B	5.6 U	0.96 U	5.6 U	16 U	48 U	9.3 U	0.96 U	7.7 U	2.4 U	24 U
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C										
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D										
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	0.47 U	0.47 U	24 U
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F										
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G	4.2 U	15 U	0.98 U	15 U	4.9 U	14 U	9.4 U	8.9 U	8.9 U	24 U
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J										
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K										
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L										
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N										

Blue-highlighted data validated from non-archived sample analyses.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Archived Subsurface Soils from Push-Probe Sampling, November - December 2014

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Hexachloro- benzene 118-74-1 µg/kg, dry	Hexachloro- butadiene 87-68-3 µg/kg, dry	Aroclor 1016 12674-11-2 µg/kg, dry	Aroclor 1242 53469-21-9 µg/kg, dry	Aroclor 1248 12672-29-6 µg/kg, dry	Aroclor 1254 11097-69-1 µg/kg, dry	Aroclor 1260 11096-82-5 µg/kg, dry	Aroclor 1221 11104-28-2 µg/kg, dry	Aroclor 1232 11141-16-5 µg/kg, dry	total PCBs µg/kg, dry
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (pres. vial)	1513662(5)-AJZ0B(E)										
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513682(9)-AJZ1E(L)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (archvld soil)	1513681(8)-AJZ1D(K)										
ICS-P15-SO-10-111414	soil-pushprobe	11/14/2014	8.5 - 10' (pres. vial)	1424896-ZK50E										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (pres. vial)	1513663(6)-AJZ0C(F)										
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513684(91)-AJZ1G(N)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (archvld soil)	1513683(90)-AJZ1F(M)										
ICS-P17-SO-10-111214	soil-pushprobe	11/12/2014	9 - 11' (pres. vial)	1424620-ZK10B										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (archvld soil)	1513678(85)-AJZ1A(H)										
ICS-P30-SO-7-120914	soil-pushprobe	12/9/2014	6 - 7' (pres. vial)	1426754-ZO01A										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (pres. vial)	1513661(4)-AJZ0A(D)										
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513680(7)-AJZ1C(J)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (archvld soil)	1513679(86)-AJZ1B(I)										
ICS-P30-SO-13-120914	soil-pushprobe	12/9/2014	12.5 - 13.5' (pres. vial)	1426755-ZO01B										
ICS-P13-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513766-AKB5A	0.99 U	0.99 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P24-SO-13-111314	soil-pushprobe	11/13/2014	12 - 14' (archvld soil)	1513767-AKB5B	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P26-SO-7-111314	soil-pushprobe	11/13/2014	6 - 8' (archvld soil)	1513768-AKB5C			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P12-SO-7-111714	soil-pushprobe	11/17/2014	6 - 8' (archvld soil)	1513769-AKB5D			4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P18-SO-7-121614	soil-pushprobe	12/16/2014	6 - 8' (archvld soil)	1513770-AKB5E	0.96 U	15 U								
ICS-P18-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513771-AKB5F										
ICS-P18-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513772-AKB5G	0.96 U	0.96 U	3.8 U	3.8 U	43	43	27	3.8 U	3.8 U	113
ICS-P18-SO-42-121614	soil-pushprobe	12/16/2014	41 - 43' (archvld soil)	1513773-AKB5H			4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P19-SO-13-121614	soil-pushprobe	12/16/2014	12 - 14' (archvld soil)	1513774-AKB5I	0.98 U	0.98 U								
ICS-P19-SO-22-121614	soil-pushprobe	12/16/2014	21 - 23' (archvld soil)	1513775-AKB5J			4.0 U	4.0 U	9.9 U	12	26	4.0 U	4.0 U	38
ICS-P28-SO-22-121514	soil-pushprobe	12/15/2014	21 - 23' (archvld soil)	1513776-AKB5K			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P27-SO-7-111114	soil-pushprobe	11/11/2014	6 - 8' (archvld soil)	1513777-AKB5L										
ICS-P27-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513778-AKB5M	0.98 U	0.98 U								
ICS-P25-SO-13-111114	soil-pushprobe	11/11/2014	12 - 14' (archvld soil)	1513779-AKB5N			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P17-SO-7-111214	soil-pushprobe	11/12/2014	6.7 - 8' (archvld soil)	1513780-AKB5O			130 U	130 U	650 U	2900	5500	130 U	130 U	8400
ICS-P17-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513781-AKB5P			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P17-SO-22-111214	soil-pushprobe	11/12/2014	21 - 23' (archvld soil)	1513782-AKB5Q			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P20-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513783-AKB5R			3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P23-SO-13-111214	soil-pushprobe	11/12/2014	12 - 14' (archvld soil)	1513784-AKB5S	1.0 U	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P29-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513785-AKB6A										
ICS-P29-SO-22-121014	soil-pushprobe	12/10/2014	21 - 23' (archvld soil)	1513786-AKB6B	0.96 U	0.96 U	19 U	19 U	530	600	140	19 U	19 U	1270
ICS-P29-SO-42-121014	soil-pushprobe	12/10/2014	41 - 43' (archvld soil)	1513787-AKB6C			3.8 U	3.8 U	6.4	5.0	3.0 J	3.8 U	3.8 U	14.4
ICS-P29-SO-50-121014	soil-pushprobe	12/10/2014	49 - 50' (archvld soil)	1513788-AKB6D			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P16-SO-7-121014	soil-pushprobe	12/10/2014	6 - 8' (archvld soil)	1513789-AKB6E	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P21-SO-22-120814	soil-pushprobe	12/8/2014	21 - 23' (archvld soil)	1513790-AKB6F			4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
ICS-P22-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513791-AKB6G	2.6 U	2.8 U	20 U	20 U	370	540	240	20 U	20 U	1150
ICS-P22-SO-13-111414	soil-pushprobe	11/14/2014	12 - 14' (archvld soil)	1513792-AKB6H			3.9 U	3.9 U	3.9 U	4.1	2.5 J	3.9 U	3.9 U	6.6
ICS-P30-SO-10-120914	soil-pushprobe	12/9/2014	9 - 10' (archvld soil)	1513793-AKB6I										
ICS-P30-SO-42-120914	soil-pushprobe	12/9/2014	41 - 43' (archvld soil)	1513794-AKB6J			3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P30-SO-50-120914	soil-pushprobe	12/9/2014	49 - 50' (archvld soil)	1513795-AKB6K			3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-P30-SO-22-120914	soil-pushprobe	12/9/2014	21 - 23' (archvld soil)	1513796-AKB6L			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P14-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513797-AKB6M			3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-P15-SO-7-111414	soil-pushprobe	11/14/2014	6 - 8' (archvld soil)	1513798-AKB6N			3.8 U	3.8 U	5.8 U	5.2	2.3 J	3.8 U	3.8 U	7.5

Blue-highlighted data validated from non-archived sample analyses.

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

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MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: January 19, 2016 (*revision of 11/19/15 report*)

SUBJECT: Data Evaluation/Assessment for 14 Subsurface Push-Probe Soils, 2 Stormwaters and 2 Estuarine/Embayment Waters Collected during September-October 2015 from the ICS / [former] NW Cooperage Site, Seattle, WA (**revised**)

Fourteen subsurface soil composites, two stormwater samples, and two estuarine/surfacewater samples were collected and submitted for chemical characterization by Dalton, Olmsted & Fuglevand (DOF) staff during September and October, 2015. All samples were delivered in three separate delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 4 hours of collection for the water samples and 4 days for the soils. Samples were received on ice at temperatures between 0.4 and 5.7 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Two trip/transport blanks were submitted and analyzed for selected parameters.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Tables SAP-4 and SAP-6 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. phenols in H ₂ O	SW846-M.8041	SVOC's (PAH's in H ₂ O & selected analytes in soils)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. pesticides	SW846-M.8081B
metals in H ₂ O (excl Hg)	SW846-M.6010C & EPA 200.8	Hg (low-level H ₂ O)	SW846-M.7470A
metals in soils (excl Hg)	SW846-M.6020	Hg (soils)	SW846-M.7471A
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0

Semivolatile organic compound (SVOC's) analyses were performed by SW846-M.8270D in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same extract, in the case of stormwaters) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. Method 8270-SIM was also performed on separate soil extracts to improve lower reporting limits for dichlorobenzenes, 1,2,4-trichlorobenzene, butylbenzylphthalate, 2-methylphenol, 2,4-dimethylphenol, N-nitrosodiphenylamine, benzyl alcohol and pentachlorophenol. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C) for both waters and soils. The attached results table reports only the results for the dichloro- and trichloro-benzenes in water from the VOC's analyses due to lower reporting limits. Soils dichlorobenzenes and 1,2,4-trichlorobenzene were reported from the SVOC's analyses (M.8270-SIM) due to greater recoveries. Naphthalene in water results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC's (M.8270-SIM). Naphthalene in soils by SW846-M.8260C (VOC's) was not reported due to greater recoveries exhibited by the SVOC's method (M.8270D). Hexachlorobutadiene (HCBD) and hexachlorobenzene (HCB) in water were analyzed by both M.8270D and M.8081B; however, only the results from M.8081B are reported here due to lower reporting limits. While HCBD was analyzed by M.8260C in soils and water, the HCBD results from the analyses by M.8081B are reported here due to lower reporting limits. Chlorinated pesticides (including HCBD and HCB by M.8081B) analyses in soils were supplemented with extract cleanup by GPC (gel permeation chromatography). The lower reporting limit for chlorinated phenols in water (2,4,6-trichlorophenol and pentachlorophenol in H₂O) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and strong-acid digestion cleanup steps. NWTPH-G was analyzed by purge & trap and GC/MS. PCB's (by M.8082) was determined by including the extract cleanup options of elemental sulfur (S_x) removal, strong-acid digestion, and silica gel chromatography prior to instrumental analyses.

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. ICS-Ju-4-SO-100715 exhibited elevated reporting limits for all chlorinated pesticides and application of the "J_p" qualifier code for cis-Chlordane due to variability in the dual column confirmation analyses (> 40RPD [relative percent difference] in dual-column quantitative confirmation for PCB mixtures) consequent to interferences associated with high PCB's levels. Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range are qualified as estimated with the "J" qualifier code. *This evaluation includes revised lower reporting limits (LOQ's) for chlorinated pesticides, hexachlorobutadiene, and hexachlorobenzene (M.8081B analytes) in water; generally a reduction by a factor of 4. This is*

consequent to a previous and corrected error in the original laboratory report for M.8081B analytes in water only.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of *bis*(2-ethylhexyl)phthalate at 14 $\mu\text{g/L}$ and chloride at 0.1 mg/L in waters, and the following VOC parameters in solids – 1,2-dichlorobenzene (0.5 $\mu\text{g/kg}$), 1,4-dichlorobenzene (0.6 $\mu\text{g/kg}$), HCBd (1.0 & 0.5 $\mu\text{g/kg}$), n-butylbenzene (0.6 $\mu\text{g/kg}$), 1,2,4-trichlorobenzene (1.5 & 0.8 $\mu\text{g/kg}$), naphthalene (1.1 & 1.8 $\mu\text{g/kg}$), and 1,2,3-trichlorobenzene (1.0 & 1.5 $\mu\text{g/kg}$). Any associated parameter detections would require qualification of results with the “J_B” qualifier code, however, none of the reported results are [adversely] affected. No results required qualification due to method blanks performance.

Two **trip/transport blanks** were generated and submitted for analysis and determination of potential contamination during handling of stormwater and soil VOC's and TPH-G. Results of these analyses are reported in the attached table. Only methylene chloride and carbon disulfide were detected at 0.6 and 0.2 $\mu\text{g/L}$, respectively, in the blank associated with the soils. The detected levels were sufficiently low to not adversely affect sample results. No sample results required qualification due to blank or background contamination.

Laboratory control samples (**LCS/LCSD**) were analyzed for all sample matrices and parameter groups, and recoveries were within specified ranges for most analytes. Recoveries for parameters outside specification are noted for the VOC LCS/LCSD associated with the stormwater samples. Recoveries for out-of-specification parameters ranged from 51% to 255%. All associated parameters are reported as nondetected in project samples. Matrix spike and matrix spike duplicate (**MS/MSD**) analyses were performed for SVOC's, chlorinated pesticides, PCB's, TPH-Dx, TPH-G, and metals in soils. All MS/MSD recoveries are within specification, with the exception of benzyl alcohol in ICS-Fl-21-SO-100815 and antimony (Sb) in ICS-Ap-10-SO-100515. Benzyl alcohol matrix spike and matrix spike duplicate recoveries in soil measured by SW846-M.8270D and SW846-M.8270-SIM in ICS-Fl-21-SO-100815 are 0%. LCS benzyl alcohol recovery in soil is determined to be acceptable at 88%. Consequently, soil benzyl alcohol result for ICS-Fl-21-SO-100815 (nondetected at 20 $\mu\text{g/kg}$) is determined to be unusable and rejected with the “R” qualifier code. Results for benzyl alcohol in the other soil samples and water are acceptable and do not require qualification. Soil antimony matrix spike recovery in ICS-Ap-10-SO-100515 is reported lower-than-specified at 0.6%. The associated LCS recovery for antimony in solids is reported at 101%. This behavior for Sb is typical due to formation of Sb-SiO₄ complexes in the presence of soil minerals; however, no detections for Sb are reported and no qualification of results is required for antimony in soils.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d_4 -1,2-dichloroethane, d_8 -toluene, bromofluorobenzene and d_4 -1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated

pesticides and PCB's analytical performance; *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses, and trifluorotoluene and bromobenzene used for evaluating TPH-G analytical performance. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Selected organic parameters by GC/MS-SIM (M.8270D-SIM) utilized the two surrogate compounds 2-fluorophenol and d₁₄-*p*-terphenyl. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate compound recoveries are determined to be within specified limits, with the exception of a slightly high recovery (130-133%) for d₄-1,2-dichloroethane in VOC's analyses for the LCS and the two project stormwater samples. All other associated surrogate compound recoveries for these samples were acceptable; thus, no associated VOC results required qualification. No qualification of results was required due to surrogate compounds performance.

Continuing calibration verification (CCV or CCAL) checks revealed acceptable responses (CCV RPD compared to initial calibration responses < 20). Initial calibration verifications (ICV's) revealed out-of-specification responses for vinyl chloride, chloroethane, trichlorofluoromethane, acetone, methylene chloride, chloroform, 1,2,3-trichloropropane, acrolein, 1,2,4-trichlorobenzene, naphthalene and 1,2,3-trichlorobenzene for VOC's analyses in stormwater samples. All positive hits/detections for these analytes in associated samples were qualified as estimates with the "J_Q" qualifier code. Acetone reported in ICS-OUTF-SW-092215 at 7.6 µg/L is qualified with the "J_Q" qualifier code.

TPH-Dx and TPH-G analyses indicate presence of relatively little, if any, detectable gasoline or diesel fuel in stormwater and soil samples analyzed. Three soils showed presence of lubricant-range hydrocarbons resembling mineral oil.

Sample results reported here are determined to be in general compliance with method and SAP requirements, with the exceptions noted above. All reported data (attached) with the associated qualifiers are considered usable for the intended purposes of the project. *The attached sample results table includes corrected and revised lower reporting limits (LOQ's) for chlorinated pesticides, hexachlorobutadiene, and hexachlorobenzene in water.*

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	% solids	Chloride	Sulfate	Antimony 7440-36-0	Arsenic 7440-38-2	Beryllium 7440-41-7	Cadmium 7440-43-9		
					%	mg/L	mg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-OUTF-SW-092215	stormwater	9/22/15	nonfiltered	1516888-AMW5A	-	7340	963		2	2 U		2 U	1 U
ICS-OUTF-SW-092215	stormwater	9/22/15	nonfiltered	1517733-ANM3A	-								
ICS-OUTF-SW-092215	stormwater	9/22/15	field-filtered, 0.45 µm	1516890-AMW5C	-			3	2 U		2 U		1 U
ICS-OUTF-SW-092215	stormwater	9/22/15	field-filtered, 0.45 µm	1517735-ANM3C	-								
ICS-MH1-SW-092215	stormwater	9/22/15	nonfiltered	1516889-AMW5B	-	4640	542		5	2 U		2 U	1 U
ICS-MH1-SW-092215	stormwater	9/22/15	nonfiltered	1517734-ANM3B	-								
ICS-MH1-SW-092215	stormwater	9/22/15	field-filtered, 0.45 µm	1516891-AMW5D	-			5	2 U		2 U		1 U
ICS-MH1-SW-092215	stormwater	9/22/15	field-filtered, 0.45 µm	1517736-ANM3D	-								
Trip Blank	water	9/22/15	trip/transport blank	1516892-AMW5E	-								
ICS-UPPER-DR-101415	estuarine, 2' below surface	10/14/15	nonfiltered	1519121-AOO8A	-	3640	509						
ICS-LOWER-DR-101415	estuarine, 2' above mudline	10/14/15	nonfiltered	1519122-AOO8B	-	9020	1220						
								mg/kg, dry	mg/kg, dry	mg/kg, dry	mg/kg, dry		
ICS-Ap-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518552-AOE4A	71			0.3 U	2.6	0.3 U	0.1 U		
ICS-Ap-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518567-AOE4P	71								
ICS-Bp-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518553-AOE4B	79			0.2 U	3.9	0.02 U	0.1 U		
ICS-Bp-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518568-AOE4Q	79								
ICS-Cp-10-SO-100715	soil-pushprobe	10/7/15	9 - 10'	1518554-AOE4C	69			0.3 U	5.0	0.3 U	0.1 U		
ICS-Cp-10-SO-100715	soil-pushprobe	10/7/15	9 - 10'	1518569-AOE4R	69								
ICS-Du-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518555-AOE4D	76			0.3 U	2.4	0.3 U	0.1 U		
ICS-Du-10-SO-100515	soil-pushprobe	10/5/15	9 - 10'	1518570-AOE4S	76								
ICS-Du-16-SO-100515	soil-pushprobe	10/5/15	15 - 17'	1518556-AOE4E	82			0.2 U	1.1	0.2 U	0.1 U		
ICS-Du-16-SO-100515	soil-pushprobe	10/5/15	15 - 17'	1518571-AOE4T	82								
ICS-Fl-4-SO-100815	soil-pushprobe	10/8/15	3 - 5'	1518557-AOE4F	95			0.2 U	2.2	0.2 U	0.1 U		
ICS-Fl-4-SO-100815	soil-pushprobe	10/8/15	3 - 5'	1518572-AOE4U	95								
ICS-Fl-7-SO-100815	soil-pushprobe	10/8/15	6 - 8'	1518558-AOE4G	81			0.2 U	3.3	0.2 U	0.1 U		
ICS-Fl-7-SO-100815	soil-pushprobe	10/8/15	6 - 8'	1518573-AOE4V	81								
ICS-Fl-10-SO-100815	soil-pushprobe	10/8/15	9 - 10'	1518559-AOE4H	84			0.2 U	4.0	0.2 U	0.1 U		
ICS-Fl-10-SO-100815	soil-pushprobe	10/8/15	9 - 10'	1518574-AOE4W	84								
ICS-Fl-13-SO-100815	soil-pushprobe	10/8/15	12 - 14'	1518560-AOE4I	77			0.2 U	2.9	0.2 U	0.1 U		
ICS-Fl-13-SO-100815	soil-pushprobe	10/8/15	12 - 14'	1518575-AOE4X	77								
ICS-Fl-16-SO-100815	soil-pushprobe	10/8/15	15.5 - 17'	1518561-AOE4J	81			0.2 U	1.3	0.2 U	0.1 U		
ICS-Fl-16-SO-100815	soil-pushprobe	10/8/15	15.5 - 17'	1518576-AOE4Y	81								
ICS-Fl-21-SO-100815	soil-pushprobe	10/8/15	20 - 22'	1518562-AOE4K	78			0.3 U	4.7	0.3 U	0.1 U		
ICS-Fl-21-SO-100815	soil-pushprobe	10/8/15	20 - 22'	1518577-AOE4Z	78								
ICS-Ju-4-SO-100715	soil-pushprobe	10/7/15	3 - 4'	1518563-AOE4L	85			0.2 U	4.5	0.2	0.2		
ICS-Ju-4-SO-100715	soil-pushprobe	10/7/15	3 - 4'	1518578-AOE4AA	85								
ICS-Ju-10-SO-100715	soil-pushprobe	10/7/15	10 - 11'	1518564-AOE4M	73			0.2 U	12.0	0.2 U	0.9		
ICS-Ju-10-SO-100715	soil-pushprobe	10/7/15	10 - 11'	1518579-AOE4AB	73								
ICS-Ju-15-SO-100715	soil-pushprobe	10/7/15	15 - 16'	1518565-AOE4N	74			0.3 U	2.4	0.3 U	0.1 U		
ICS-Ju-15-SO-100715	soil-pushprobe	10/7/15	15 - 16'	1518580-AOE4AC	74								
Trip Blank	water; units = µg/L	10/9/15	-	1518566-AOE4O	-								
Trip Blank	water; units = mg/L	10/9/15	-	1518581-AOE4AD	-								

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	Calcium 7440-70-2	Chromium 7440-47-3		Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-OUTF-SW-092215	174,000		1.5		5 U		1 U	484,000		20.0 U		5 U		2 U			40 U	2420
ICS-OUTF-SW-092215																		
ICS-OUTF-SW-092215		5 U		5 U		1 U					5 U		2 U			40 U		
ICS-OUTF-SW-092215									20.0 U									
ICS-MH1-SW-092215	91,500		5 U		6		1 U	266,000			5 U		2 U			40 U		1320
ICS-MH1-SW-092215									20.0 U									
ICS-MH1-SW-092215		5 U		5 U		1 U					5 U		2 U			40 U		
ICS-MH1-SW-092215									20.0 U									
Trip Blank																		
ICS-UPPER-DR-101415	86,400							248,000							2,250,000			1230
ICS-LOWER-DR-101415	181,000							554,000							5,110,000			2720
		mg/kg, dry		mg/kg, dry		mg/kg, dry			mg/kg, dry		mg/kg, dry		mg/kg, dry			mg/kg, dry		
ICS-Ap-10-SO-100515			12.3		16.4		2.5		0.03 U		8.6		0.3 U			21		
ICS-Ap-10-SO-100515																		
ICS-Bp-10-SO-100515			10.5		14.3		2.2		0.02 U		11.2		0.2 U			24		
ICS-Bp-10-SO-100515																		
ICS-Cp-10-SO-100715			14.4		20.7		4.1		0.03		9.5		0.3 U			25		
ICS-Cp-10-SO-100715																		
ICS-Du-10-SO-100515			12.8		18.5		3.0		0.03		8.6		0.3 U			22		
ICS-Du-10-SO-100515																		
ICS-Du-16-SO-100515			9.1		7.9		1.1		0.02 U		5.7		0.2 U			19		
ICS-Du-16-SO-100515																		
ICS-Fl-4-SO-100815			8.1		7.7		1.3		0.02 U		7.0		0.2 U			20		
ICS-Fl-4-SO-100815																		
ICS-Fl-7-SO-100815			10.5		15.1		2.1		0.03 U		10.8		0.2 U			25		
ICS-Fl-7-SO-100815																		
ICS-Fl-10-SO-100815			12.9		12.0		1.8		0.03 U		9.1		0.2 U			25		
ICS-Fl-10-SO-100815																		
ICS-Fl-13-SO-100815			11.6		15.3		1.9		0.03 U		12.4		0.2 U			25		
ICS-Fl-13-SO-100815																		
ICS-Fl-16-SO-100815			9.9		9.2		1.3		0.03 U		8.0		0.2 U			23		
ICS-Fl-16-SO-100815																		
ICS-Fl-21-SO-100815			14.2		11.0		1.5		0.03 U		10.7		0.3 U			23		
ICS-Fl-21-SO-100815																		
ICS-Ju-4-SO-100715			23.4		23.7		48.6		0.10		22.2		0.2 U			66		
ICS-Ju-4-SO-100715																		
ICS-Ju-10-SO-100715			40.2		161		401		0.07		16.4		0.4			193		
ICS-Ju-10-SO-100715																		
ICS-Ju-15-SO-100715			15.2		13.6		2.3		0.03 U		14.7		0.3 U			29		
ICS-Ju-15-SO-100715																		
Trip Blank																		
Trip Blank																		

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3	Bromo- methane 74-83-9	Vinyl chloride 75-01-4	Chloro- ethane 75-00-3	Methylene chloride 75-09-2	Acetone 67-64-1	Carbon disulfide 75-15-0	1,1-Dichloro- ethene 75-35-4	1,1-Dichloro- ethane 75-34-3	<i>trans</i> -1,2- Dichloroethene 156-60-5	<i>cis</i> -1,2- Dichloroethene 156-59-2	Chloroform 67-66-3
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ICS-OUTF-SW-092215	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	7.6 J_Q	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank	0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	mg/kg, dry	mg/kg, dry	mg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515		7.0 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	83	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ap-10-SO-100515	12 U														
ICS-Bp-10-SO-100515		6.3 U	13 U	1.2 U	0.5 J	1.2 U	1.2 U	2.5 U	94	2.4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO-100515	5.9 U														
ICS-Cp-10-SO-100715		11	25	3.2	2.1	2.0 U	2.0 U	4.0 U	57	7.8	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-Cp-10-SO-100715	12 U														
ICS-Du-10-SO-100515		16	32	1.6 U	0.6 J	1.6 U	1.6 U	3.1 U	76	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-Du-10-SO-100515	10														
ICS-Du-16-SO-100515		6.1 U	12 U	1.1 U	1.1 U	1.1 U	1.1 U	2.3 U	42	13	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-Du-16-SO-100515	4.6 J														
ICS-Fl-4-SO-100815		5.3 U	10 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	16	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-4-SO-100815	4.2 J														
ICS-Fl-7-SO-100815		6.2 U	12 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	52	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-Fl-7-SO-100815	6.4 J														
ICS-Fl-10-SO-100815		6.0 U	12 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	30	10	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-10-SO-100815	6.3 U														
ICS-Fl-13-SO-100815		6.5 U	13 U	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	14	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-13-SO-100815	8.5 U														
ICS-Fl-16-SO-100815		6.1 U	12 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	24	3.8	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-Fl-16-SO-100815	7.8 U														
ICS-Fl-21-SO-100815		6.4 U	13 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	6.0 U	2.9	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Fl-21-SO-100815	9.1 U														
ICS-Ju-4-SO-100715		14,000	32,000	2.1 U	2.1 U	2.1 U	2.1 U	4.3 U	220	11	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ICS-Ju-4-SO-100715	28														
ICS-Ju-10-SO-100715		79	150	6.2	2.4 U	2.4 U	2.4 U	4.7 U	120	9.9	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
ICS-Ju-10-SO-100715	92														
ICS-Ju-15-SO-100715		6.7 U	13 U	1.0 J	1.2 U	1.2 U	1.2 U	2.5 U	28	9.1	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ju-15-SO-100715	8.9 U														
Trip Blank				1.0 U	1.0 U	1.0 U	1.0 U	0.6 J	10 U	0.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trip Blank	0.10 U														

** bold-typed values resemble corresponding [weathered] petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant ICV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-OUTF-SW-092215	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	1.2 U	17	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.7 J	1.2 U	1.2 U	6.0 U	6.0 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	1.2 U	9.7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	6.2 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	2.0 U	11	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	1.6 U	17	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	7.8 U	7.8 U
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	1.1 U	6.7	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.7 U	5.7 U
ICS-Du-16-SO-100515															
ICS-Fl-4-SO-100815	1.5 U	7.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	7.4 U
ICS-Fl-4-SO-100815															
ICS-Fl-7-SO-100815	1.8 U	9.1 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	9.1 U	9.1 U
ICS-Fl-7-SO-100815															
ICS-Fl-10-SO-100815	1.5 U	4.1 J	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.6 U	7.6 U
ICS-Fl-10-SO-100815															
ICS-Fl-13-SO-100815	1.5 U	7.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.7 U	7.7 U
ICS-Fl-13-SO-100815															
ICS-Fl-16-SO-100815	1.3 U	6.7 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.0 J	1.3 U	1.3 U	6.7 U	6.7 U
ICS-Fl-16-SO-100815															
ICS-Fl-21-SO-100815	1.2 U	6.0 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.5	1.2 U	1.2 U	6.0 U	6.0 U
ICS-Fl-21-SO-100815															
ICS-Ju-4-SO-100715	2.1 U	18	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	3.9	2.1 U	2.1 U	11 U	11 U
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	2.4 U	25	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.1	2.4 U	2.4 U	12 U	12 U
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	1.2 U	3.6 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6.1 U	6.1 U
ICS-Ju-15-SO-100715															
Trip Blank	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Trip Blank															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-OUTF-SW-092215	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-MH1-SW-092215	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-UPPER-DR-101415																
ICS-LOWER-DR-101415																
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	1.2 U	1.2 U	1.1 J	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	0.8 J	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	60 U	2.4 U	1.2 U
ICS-Ap-10-SO-100515																
ICS-Bp-10-SO-100515	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	62 U	2.5 U	1.2 U
ICS-Bp-10-SO-100515																
ICS-Cp-10-SO-100715	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	100 U	4.0 U	2.0 U
ICS-Cp-10-SO-100715																
ICS-Du-10-SO-100515	1.6 U	1.6 U	1.3 J	1.6 U	1.6 U	1.6 U	1.6 U	3.1 U	1.6 U	1.6 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	78 U	3.1 U	1.6 U
ICS-Du-10-SO-100515																
ICS-Du-16-SO-100515	1.1 U	1.1 U	0.7 J	1.1 U	1.1 U	1.1 U	1.1 U	2.3 U	1.1 U	1.1 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	57 U	2.3 U	1.1 U
ICS-Du-16-SO-100515																
ICS-Fi-4-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	74 U	3.0 U	1.5 U
ICS-Fi-4-SO-100815																
ICS-Fi-7-SO-100815	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	1.8 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	91 U	3.6 U	1.8 U
ICS-Fi-7-SO-100815																
ICS-Fi-10-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	76 U	3.0 U	1.5 U
ICS-Fi-10-SO-100815																
ICS-Fi-13-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.1 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	77 U	3.1 U	1.5 U
ICS-Fi-13-SO-100815																
ICS-Fi-16-SO-100815	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 U	1.3 U	1.3 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	67 U	2.7 U	1.3 U
ICS-Fi-16-SO-100815																
ICS-Fi-21-SO-100815	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	60 U	2.4 U	1.2 U
ICS-Fi-21-SO-100815																
ICS-Ju-4-SO-100715	2.1 U	2.1 U	5.8	2.1 U	9.6	2.1 U	2.1 U	4.3 U	11	2.9	(see SVOC's)	(see SVOC's)	(see SVOC's)	110 U	4.3 U	2.1 U
ICS-Ju-4-SO-100715																
ICS-Ju-10-SO-100715	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	1.3 J	(see SVOC's)	(see SVOC's)	(see SVOC's)	120 U	4.7 U	2.4 U
ICS-Ju-10-SO-100715																
ICS-Ju-15-SO-100715	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	(see SVOC's)	61 U	2.5 U	1.2 U
ICS-Ju-15-SO-100715																
Trip Blank	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	2.0 U	1.0 U
Trip Blank																

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	Hexachloro- butadiene 87-68-3 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-OUTF-SW-092215	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	(see Cl pest.)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-MH1-SW-092215	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	(see Cl pest.)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.50 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-UPPER-DR-101415																
ICS-LOWER-DR-101415																
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ap-10-SO-100515																
ICS-Bp-10-SO-100515	1.2 U	1.2 U	2.5 U	6.2 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Bp-10-SO-100515																
ICS-Cp-10-SO-100715	2.0 U	2.0 U	4.0 U	10 U	2.0 U	2.0 U	(see Cl pest.)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
ICS-Cp-10-SO-100715																
ICS-Du-10-SO-100515	1.6 U	1.6 U	3.1 U	7.8 U	1.6 U	1.6 U	(see Cl pest.)	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
ICS-Du-10-SO-100515																
ICS-Du-16-SO-100515	1.1 U	1.1 U	2.3 U	5.7 U	1.1 U	1.1 U	(see Cl pest.)	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
ICS-Du-16-SO-100515																
ICS-Fl-4-SO-100815	1.5 U	1.5 U	3.0 U	7.4 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-4-SO-100815																
ICS-Fl-7-SO-100815	1.8 U	1.8 U	3.6 U	9.1 U	1.8 U	1.8 U	(see Cl pest.)	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
ICS-Fl-7-SO-100815																
ICS-Fl-10-SO-100815	1.5 U	1.5 U	3.0 U	7.6 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-10-SO-100815																
ICS-Fl-13-SO-100815	1.5 U	1.5 U	3.1 U	7.7 U	1.5 U	1.5 U	(see Cl pest.)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ICS-Fl-13-SO-100815																
ICS-Fl-16-SO-100815	1.3 U	1.3 U	2.7 U	6.7 U	1.3 U	1.3 U	(see Cl pest.)	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
ICS-Fl-16-SO-100815																
ICS-Fl-21-SO-100815	1.2 U	1.2 U	2.4 U	6.0 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Fl-21-SO-100815																
ICS-Ju-4-SO-100715	2.1 U	2.1 U	4.3 U	11 U	2.1 U	5.8	(see Cl pest.)	2.1 U	2.1 U	2.1 U	2.1 U	2.3	1.7 J	2.1 U	2.1 U	2.1 U
ICS-Ju-4-SO-100715																
ICS-Ju-10-SO-100715	2.4 U	2.4 U	4.7 U	12 U	2.4 U	3.0	(see Cl pest.)	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.2 J	2.4 U	2.4 U	2.4 U
ICS-Ju-10-SO-100715																
ICS-Ju-15-SO-100715	1.2 U	1.2 U	2.5 U	6.1 U	1.2 U	1.2 U	(see Cl pest.)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
ICS-Ju-15-SO-100715																
Trip Blank	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trip Blank																

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	Naphthalene 91-20-3 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Benzyl alcohol 100-51-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L
ICS-OUTF-SW-092215	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	(see SVOC's)	0.50 U	1.0 U	1.0 U	(see VOC's)	(see VOC's)	2.0 U	(see VOC's)	1.0 U	2.0 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	(see SVOC's)	0.50 U	1.0 U	1.0 U	(see VOC's)	(see VOC's)	2.0 U	(see VOC's)	1.0 U	2.0 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U								
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	1.2 U	1.2 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	6.0 U	13 J	19 U	8.3	26	19 U	3.8 J	3.1 J	19 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	1.2 U	1.2 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	6.2 U	12 J	20 U	4.9 U	4.9 U	20 U	4.9 U	4.9 U	20 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	2.0 U	2.0 U	2.0 U	2.0 U	(see SVOC's)	(see SVOC's)	10 U	38	19 U	4.8 U	4.8 U	66	4.8 U	4.8	32
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	1.6 U	1.6 U	1.6 U	1.6 U	(see SVOC's)	(see SVOC's)	7.8 U	16 J	19 U	4.0 J	11	19 U	4.7 U	4.7 U	19 U
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	1.1 U	1.1 U	1.1 U	1.1 U	(see SVOC's)	(see SVOC's)	5.7 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U
ICS-Du-16-SO-100515															
ICS-FI-4-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	7.4 U	19 U	19 U	4.8 U	4.8 U	19 U	4.8 U	4.8 U	19 U
ICS-FI-4-SO-100815															
ICS-FI-7-SO-100815	1.8 U	1.8 U	1.8 U	1.8 U	(see SVOC's)	(see SVOC's)	9.1 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U
ICS-FI-7-SO-100815															
ICS-FI-10-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	7.6 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U
ICS-FI-10-SO-100815															
ICS-FI-13-SO-100815	1.5 U	1.5 U	1.5 U	1.5 U	(see SVOC's)	(see SVOC's)	7.7 U	20 U	20 U	5.0 U	5.0 U	20 U	5.0 U	5.0 U	20 U
ICS-FI-13-SO-100815															
ICS-FI-16-SO-100815	1.3 U	1.3 U	1.3 U	1.3 U	(see SVOC's)	(see SVOC's)	6.7 U	19 U	19 U	4.7 U	4.7 U	19 U	4.7 U	4.7 U	19 U
ICS-FI-16-SO-100815															
ICS-FI-21-SO-100815	1.2 U	1.2 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	6.0 U	20 U	20 U	4.9 U	4.9 U	R	4.9 U	4.9 U	20 U
ICS-FI-21-SO-100815															
ICS-Ju-4-SO-100715	2.1 U	2.1 U	4.4	2.1 U	(see SVOC's)	(see SVOC's)	11 U	1500	120 U	32	150	120 U	950	1000	7700
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	2.4 U	3.1	1.5 J	2.9	(see SVOC's)	(see SVOC's)	12 U	28	20 U	2.9 J	5.8 J	20 U	5.8 J	4.9 U	67
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	1.2 U	1.2 U	1.2 U	1.2 U	(see SVOC's)	(see SVOC's)	6.1 U	8.7 J	19 U	4.8 U	4.8 J	19 U	2.9 J	4.8 U	19 U
ICS-Ju-15-SO-100715															
Trip Blank	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U								
Trip Blank															

J = estimate associated with value less than the verifiable lower quantitation limit.

R = result rejected due to low MS recovery.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	N-Nitroso-di-n-propylamine 621-64-7 µg/L	Hexachloroethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl-phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro-phenol 120-83-2 µg/L	1,2,4-Trichloro-benzene 120-82-1 µg/L	Naphthalene 91-20-3 µg/L	Hexachloro-butadiene 87-68-3 µg/L	4-Chloro-3-methylphenol 59-50-7 µg/L	2-Methyl-naphthalene 91-57-6 µg/L	2,4,6-Trichloro-phenol 88-06-2 µg/L	2,4,5-Trichloro-phenol 95-95-4 µg/L	2-Chloro-naphthalene 91-58-7 µg/L
ICS-OUTF-SW-092215	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.10 U	(see Cl pest.)	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U	20 U	3.0 U	(see VOC's)	0.10 U	(see Cl pest.)	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank															
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	19 U	19 U	19 U	19 U	23 U	220	94 U	4.7 U	5.6 J		94 U	5.6 J	94 U	94 U	19 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	20 U	20 U	20 U	20 U	24 U	200 U	97 U	4.9 U	20 U		97 U	7.8 J	97 U	97 U	20 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	19 U	19 U	19 U	19 U	24 U	390	96 U	4.8 U	36		96 U	16 J	96 U	96 U	19 U
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	19 U	19 U	19 U	19 U	11 J	99 J	94 U	4.7 U	19 U		94 U	19 U	94 U	94 U	19 U
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	19 U	19 U	19 U	19 U	23 U	190 U	94 U	4.7 U	19 U		94 U	19 U	94 U	94 U	19 U
ICS-Du-16-SO-100515															
ICS-Fl-4-SO-100815	19 U	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	19 U		96 U	19 U	96 U	96 U	19 U
ICS-Fl-4-SO-100815															
ICS-Fl-7-SO-100815	19 U	19 U	19 U	19 U	24 U	190 U	95 U	4.7 U	19 U		95 U	19 U	95 U	95 U	19 U
ICS-Fl-7-SO-100815															
ICS-Fl-10-SO-100815	20 U	20 U	20 U	20 U	25 U	200 U	100 U	5.0 U	14 J		100 U	16 J	100 U	100 U	20 U
ICS-Fl-10-SO-100815															
ICS-Fl-13-SO-100815	20 U	20 U	20 U	20 U	25 U	200 U	100 U	5.0 U	20 U		100 U	20 U	100 U	100 U	20 U
ICS-Fl-13-SO-100815															
ICS-Fl-16-SO-100815	19 U	19 U	19 U	19 U	24 U	190 U	94 U	4.7 U	19 U		94 U	19 U	94 U	94 U	19 U
ICS-Fl-16-SO-100815															
ICS-Fl-21-SO-100815	20 U	20 U	20 U	20 U	25 U	200 U	98 U	4.9 U	20 U		98 U	20 U	98 U	98 U	20 U
ICS-Fl-21-SO-100815															
ICS-Ju-4-SO-100715	120 U	120 U	120 U	120 U	830	1200 U	1100	430	4400		590 U	4900	590 U	590 U	120 U
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	20 U	20 U	20 U	20 U	24 U	140 J	97 U	2.4 J	55		97 U	32	97 U	97 U	20 U
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	19 U	19 U	19 U	19 U	24 U	190 U	96 U	4.8 U	7.7 J		96 U	7.7 J	96 U	96 U	19 U
ICS-Ju-15-SO-100715															
Trip Blank															
Trip Blank															

J = estimate associated with value less than the verifiable lower quantitation limit.

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Hexachloro- benzene 118-74-1 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L
ICS-OUTF-SW-092215	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	190	1.0 U	0.10 U	1.0 U	(see <i>Cl pest.</i>)	0.25 U	0.10 U	1.0 U	0.10 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	(see <i>Cl pest.</i>)	0.25 U	0.10 U	1.0 U	0.10 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank															
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U	19 U	4.7 U		17 J	10 J	19 U	19 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	20 U	20 U	20 U	4.9 J	97 U	97 U	20 U	20 U	20 U	4.9 U		20 U	20	20 U	20 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	19 U	19 U	17 J	17 J	96 U	96 U	19 U	19 U	33	4.8 U		19 U	66	19 U	16 J
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U	4.7 J	4.7 U		19 U	24	19 U	19 U
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U	19 U	4.7 U		19 U	19 U	19 U	19 U
ICS-Du-16-SO-100515															
ICS-Fl-4-SO-100815	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U	19 U	4.8 U		19 U	19 U	19 U	19 U
ICS-Fl-4-SO-100815															
ICS-Fl-7-SO-100815	19 U	19 U	19 U	19 U	95 U	95 U	19 U	19 U	19 U	4.7 U		19 U	19 U	19 U	19 U
ICS-Fl-7-SO-100815															
ICS-Fl-10-SO-100815	20 U	20 U	20 U	20 U	100 U	100 U	20 U	20 U	20 U	5.0 U		20 U	20 U	20 U	20 U
ICS-Fl-10-SO-100815															
ICS-Fl-13-SO-100815	20 U	20 U	20 U	20 U	100 U	100 U	20 U	20 U	20 U	5.0 U		20 U	20 U	20 U	20 U
ICS-Fl-13-SO-100815															
ICS-Fl-16-SO-100815	19 U	19 U	19 U	19 U	94 U	94 U	19 U	19 U	19 U	4.7 U		19 U	19 U	19 U	19 U
ICS-Fl-16-SO-100815															
ICS-Fl-21-SO-100815	20 U	20 U	20 U	20 U	98 U	98 U	20 U	20 U	20 U	4.9 U		20 U	20 U	20 U	20 U
ICS-Fl-21-SO-100815															
ICS-Ju-4-SO-100715	120 U	120 U	510	580	590 U	590 U	120 U	120 U	1400	29 U		1800	7600	420	590 J
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	20 U	21	21	20	97 U	97 U	20 U	20 U	41	6.8		43	82	16 J	26
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	19 U	19 U	19 U	19 U	96 U	96 U	19 U	19 U	5.8 J	2.9 J		11 J	45	19 U	14 J
ICS-Ju-15-SO-100715															
Trip Blank															
Trip Blank															

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-OUTF-SW-092215	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank															
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	19 U	5.6 J	6.6 J	6.1	19 U	47 U	7.5 J	19 U	38 U	19 U	19 U	19 U	11 J	19 U	38 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	20 U	13 J	12 J	6.1	5.8 J	49 U	6.8 J	20 U	39 U	20 U	20 U	20 U	20 U	20	39 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	19 U	74	60	6.5	21	48 U	27	19 U	33 J	19 U	15 J	19 U	21	168	251
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	19 U	26	24	4.7 U	19 U	47 U	13 J	19 U	16 J	19 U	19 U	19 U	19 U	28.7	79
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	19 U	19 U	19 U	4.7 U	19 U	47 U	19 U	19 U	37 U	19 U	19 U	19 U	19 U	19 U	37 U
ICS-Du-16-SO-100515															
ICS-Fl-4-SO-100815	19 U	19 U	19 U	4.8 U	19 U	48 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U
ICS-Fl-4-SO-100815															
ICS-Fl-7-SO-100815	19 U	19 U	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U
ICS-Fl-7-SO-100815															
ICS-Fl-10-SO-100815	20 U	20 U	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U
ICS-Fl-10-SO-100815															
ICS-Fl-13-SO-100815	20 U	20 U	20 U	5.0 U	20 U	50 U	20 U	20 U	40 U	20 U	20 U	20 U	20 U	20 U	40 U
ICS-Fl-13-SO-100815															
ICS-Fl-16-SO-100815	19 U	19 U	19 U	4.7 U	19 U	47 U	19 U	19 U	38 U	19 U	19 U	19 U	19 U	19 U	38 U
ICS-Fl-16-SO-100815															
ICS-Fl-21-SO-100815	20 U	20 U	20 U	4.9 U	20 U	49 U	20 U	20 U	39 U	20 U	20 U	20 U	20 U	20 U	39 U
ICS-Fl-21-SO-100815															
ICS-Ju-4-SO-100715	2100	3000	3700	6900	1100	44,000	1100	2200	1800	1400	180	120 U	210	14,500	12,490
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	20 U	130	140	11	43	59	49	20 U	71	30	21	20 U	30	246	514
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	19 U	69	62	4.5 J	29	35 J	32	19 U	36 J	14 J	19 U	19 U	19 U	72.5	242
ICS-Ju-15-SO-100715															
Trip Blank															
Trip Blank															

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Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-OUTF-SW-092215	0.00062 U	0.00088 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.016 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-OUTF-SW-092215																
ICS-MH1-SW-092215	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
ICS-MH1-SW-092215																
Trip Blank																
ICS-UPPER-DR-101415																
ICS-LOWER-DR-101415																
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U
ICS-Ap-10-SO-100515																
ICS-Bp-10-SO-100515	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.99 U	0.49 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U
ICS-Bp-10-SO-100515																
ICS-Cp-10-SO-100715	0.48 U	0.96 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U
ICS-Cp-10-SO-100715																
ICS-Du-10-SO-100515	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.49 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U
ICS-Du-10-SO-100515																
ICS-Du-16-SO-100515	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.48 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U
ICS-Du-16-SO-100515																
ICS-Fl-4-SO-100815	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U
ICS-Fl-4-SO-100815																
ICS-Fl-7-SO-100815	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.97 U	0.48 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U
ICS-Fl-7-SO-100815																
ICS-Fl-10-SO-100815	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
ICS-Fl-10-SO-100815																
ICS-Fl-13-SO-100815	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U
ICS-Fl-13-SO-100815																
ICS-Fl-16-SO-100815	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.48 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U
ICS-Fl-16-SO-100815																
ICS-Fl-21-SO-100815	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.94 U	0.47 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U
ICS-Fl-21-SO-100815																
ICS-Ju-4-SO-100715	29 U	130 U	29 U	29 U	130 U	29 U	58 U	29 U	58 U	400 U	77 U	380 U	370 U	140 U	720 U	400 U
ICS-Ju-4-SO-100715																
ICS-Ju-10-SO-100715	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	1.6 U	0.47 U	0.95 U	3.8	0.95 U	0.95 U	4.4	0.95 U	3.4 U	4.7 U
ICS-Ju-10-SO-100715																
ICS-Ju-15-SO-100715	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.99 U	0.50 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U
ICS-Ju-15-SO-100715																
Trip Blank																
Trip Blank																

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Stormwater and Subsurface Soils from Push-Probe Sampling, September - October 2015

Field ID	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans-Chlordane 5103-74-2 µg/L	cis-Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro-benzene 118-74-1 µg/L	Hexachloro-butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-OUTF-SW-092215	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020 U	0.030 U	0.010 U	0.010 U	0.010 U	0.030 U
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-OUTF-SW-092215															
ICS-MH1-SW-092215	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
ICS-MH1-SW-092215															
Trip Blank															
ICS-UPPER-DR-101415															
ICS-LOWER-DR-101415															
	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry	µg/kg, dry
ICS-Ap-10-SO-100515	0.98 U	0.98 U	0.49 U	0.49 U	24 U	0.98 U	0.98 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Ap-10-SO-100515															
ICS-Bp-10-SO-100515	0.99 U	0.99 U	0.49 U	0.49 U	25 U	0.99 U	0.99 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Bp-10-SO-100515															
ICS-Cp-10-SO-100715	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-Cp-10-SO-100715															
ICS-Du-10-SO-100515	0.97 U	0.97 U	0.49 U	0.49 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-Du-10-SO-100515															
ICS-Du-16-SO-100515	0.95 U	0.95 U	0.48 U	0.48 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-Du-16-SO-100515															
ICS-FI-4-SO-100815	0.94 U	0.94 U	0.47 U	0.47 U	23 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FI-4-SO-100815															
ICS-FI-7-SO-100815	0.97 U	0.97 U	0.48 U	0.48 U	24 U	0.97 U	0.97 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
ICS-FI-7-SO-100815															
ICS-FI-10-SO-100815	1.0 U	1.0 U	0.50 U	0.50 U	25 U	1.0 U	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.9 J	4.0 U	4.0 U	4.0 U
ICS-FI-10-SO-100815															
ICS-FI-13-SO-100815	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FI-13-SO-100815															
ICS-FI-16-SO-100815	0.96 U	0.96 U	0.48 U	0.48 U	24 U	0.96 U	0.96 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FI-16-SO-100815															
ICS-FI-21-SO-100815	0.94 U	0.94 U	0.47 U	0.47 U	24 U	0.94 U	0.94 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
ICS-FI-21-SO-100815															
ICS-Ju-4-SO-100715	410 U	220 U	460	500 J_p	1400 U	110 U	98 U	120 U	120 U	19,000	15,000	5800	120 U	120 U	39,800
ICS-Ju-4-SO-100715															
ICS-Ju-10-SO-100715	2.4 U	0.95 U	0.47 U	0.47 U	24 U	0.95 U	0.95 U	3.8 U	3.8 U	40	48	19	3.8 U	3.8 U	107
ICS-Ju-10-SO-100715															
ICS-Ju-15-SO-100715	0.99 U	0.99 U	0.50 U	0.50 U	25 U	0.99 U	0.99 U	4.0 U	4.0 U	6.2	5.8	1.4 J	4.0 U	4.0 U	13.4
ICS-Ju-15-SO-100715															
Trip Blank															
Trip Blank															

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8082).

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: January 12, 2016

SUBJECT: Data Evaluation/Assessment for 33 Groundwaters Collected from Monitoring Wells during November 2015 from the ICS / [former] NW Cooperage Site, Seattle, WA

Thirty-three well water samples were collected by Dalton, Olmsted & Fuglevand (DOF) staff during November, 2015 for chemical characterization. All samples were delivered in six delivery groups to Analytical Resources Inc. (ARI) of Tukwila, Washington within 51.5 hours of collection. Samples were received on ice at temperatures between 0.4 and 4.2 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Six trip/transport blanks were also submitted and analyzed for TPH-G and VOC's for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081B	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (excl Hg)	SW846-M.6010C	Hg (low-level)	SW846-M.7470A
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G	Cl & SO ₄	EPA 300.0

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed (on the same extract) and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. PAH results were preferentially reported from the full-scan analyses or from the method yielding non-qualified results for detected analytes. Lower reporting limits for nondetected PAH's are reported from the SIM method. In all cases, with one exception, detected

PAH's exhibited good agreement between the two methods. Naphthalene in ICS-DUPL2-GW-112415 reported 1.9 µg/L via full-scan analysis and 8.7 µg/L by the SIM method; with both results as non-qualified and in order to minimize any reported bias, the mean of the two values (5.3 µg/L) is reported in the attached table of results. This value compares well with the field duplicate value for naphthalene at 4.1 µg/L in ICS-DMCMTWA-GW-112415. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). A comparison of results from the two methods shows a detection of 1,4-dichlorobenzene at 13 µg/L by M.8260C and 9.3 µg/L by M.8270D, 1,3-dichlorobenzene at 4.7 µg/L by M.8260C and 3.2 µg/L by M.8270D, and 1,2-dichlorobenzene at 7.2 µg/L by M.8260C and 5.3 µg/L by M.8270D for ICS-SAMW1-GW-112315; thus reporting results are comparable. The attached results table reports only the results for the dichloro- and trichloro-benzenes from the VOC's analyses due to lower reporting limits. Naphthalene and hexachlorobutadiene (HCB) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081B, while only the results generated by M.8081B are retained here due to significantly reduced reporting limits. The lower reporting limit for chlorinated phenols (2,4,6-trichlorophenol and pentachlorophenol) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Total metals (Ca, Mg & Na) were analyzed by ICP-AES (M.6010C). Dissolved metals were determined by the application of ICP-MS (U.S. EPA 200.8) UCTTM (universal cell technology) operated in the kinetic energy dissociation (KED) mode tuned for optimum selectivity of arsenic, copper, nickel and zinc. This allows increased discrimination from interferences in saline and brackish waters (samples typically require dilution to yield TDS < 1000-2000 ppm). Dissolved chromium and lead are analyzed by ICP-MS in the "standard mode".

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Some Aroclors (commercial PCB mixtures) were reported with slightly elevated reporting limits or nondetects due to elevated or busy baselines; for example, for samples ICS-HCB2R-GW-111115, ICS-Dp-GW-111815, ICS-Du-GW-111815, ICS-HI-GW-111015, ICS-II-GW-112015, and ICS-MW6-GW-111915. Several samples, such as ICS-SAMW1-GW-112315 and ICS-DMCMTWA-GW-112415, exhibited elevated pesticide reporting limits due to interferences associated with the presence of PCB's. Other samples, such as ICS-DMCMTWB-GW-112415, ICS-Eu-GW-111915, ICS-HI-GW-111015 and ICS-II-GW-112015, exhibited background interferences and elevated chromatographic baselines during the analyses of the chlorinated pesticides resulting in elevated

reporting limits. This also resulted in the qualification of selected results (4,4'-DDD, 4,4'-DDE and *cis*-Chlordane) with the “J_p” qualifier code due to variability in the dual column confirmation analyses (>40RPD [relative percent difference] in dual-column quantitative confirmation for pesticide analytes). Multi-parametric analyte results, such as for Aroclors (1248 and 1254), were occasionally “J_p” qualified due to deviations in relative peak contributions compared to reference mixtures. Analyte concentrations reported at less than the [specified] lower reporting limit or the established linear concentration range for all parameter groups are qualified as estimated with the “J” qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

Analyte	Analysis date	Conc. (µg/L)
TPH-G	11-19-15 (AQN9)	0.03 mg/L J
	11-20-15 (AQN9)	0.04 mg/L J
Toluene (VOC's)	11-20-15 (AQN9)	0.18 J
m,p-Xylenes (VOC's)	11-20-15 (AQN9)	0.12 J
1,2,4-Trimethylbenzene (VOC's)	11-20-15 (AQN9)	0.14 J
	11-27-15 (ARD6)	0.12 J
	12-1-15 (ARF9)	0.05 J
	12-1-15 (ARH0)	0.05 J
1,3,5-Trimethylbenzene (VOC's)	12-1-15 (ARF9)	0.03 J
1,2-Dichlorobenzene (VOC's)	12-1-15 (ARF9)	0.04 J
1,2,4-Trichlorobenzene (VOC's)	12-1-15 (ARF9)	0.12 J
	12-1-15 (ARH0)	0.12 J
1,2,3-Trichlorobenzene (VOC's)	12-1-15 (ARF9)	0.22
	12-1-15 (ARH0)	0.22
n-Butylbenzene (VOC's)	12-1-15 (ARF9)	0.03 J
	12-1-15 (ARH0)	0.04 J
Diethylphthalate (SVOC's)	11-24-15 (ARD6)	0.7 J
Hexachlorobenzene (pest.)	11-30-15 (ARK8)	0.0016
Calcium (ICP-AES)	11-18-15 (AQN9)	4.8
Lead (ICP-MS)	11-19-15 (AQN9)	0.01 J
Zinc (ICP-MS)	11-30-15 (ARK8)	0.4 J
Mercury (total)	11-20-15 (AQS8)	2.8 ng/L J

Sample results that are likely affected by background contributions are qualified with the “J_B” qualifier code indicating potential positive bias. With the exception of a few samples exhibiting some low levels (detectable but less than the LOQ's [identified at 2x the MB result]) of TPH-G, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, mercury (total), and lead (dissolved), few results required qualification due to method blanks performance.

No field equipment **rinsate blanks** were generated nor submitted for determination of potential bias associated with field activities. Six **trip/transport blanks** were generated and submitted for analysis and determination of potential contamination during handling of VOC's and TPH-G samples. Results of these analyses are reported in the attached table. Trip/transport blanks reported chloromethane at 0.13 µg/L (J), *m,p*-xylenes at 0.06 µg/L (J), and TPH-G at 0.03 mg/L (J_B). No chloromethane was reported as detected in other project samples, *m,p*-xylenes were

reported at significantly greater levels in associated samples than that reported in the method blank, and potentially affected TPH-G values have already been qualified with the “J_B” code as likely associated with sampling/analytical background. No results required further qualification due to trip/transport blanks performance.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. LCS/LCSD runs were performed for all analytical groups, however, MS/MSD runs were performed occasionally, dependent on sample volumes. LCS and LCSD recoveries for methylene chloride were reported slightly low at 41-43% during 11-19-15 and 11-20-15, however no methylene chloride was detected in any project samples. Similarly, trichlorofluoromethane showed slightly low (LCSD only [LCS recovery was acceptable]) recovery on 12-3-15 at 42.9%, however, no trichlorofluoromethane was detected in any project samples during this monitoring event. Some SVOC analytes reported high LCS/LCSD recoveries, however no detections of associated analytes are reported in project samples. Chlorinated phenols (by M.8041) exhibited slightly low recoveries (37.2 – 50.0%) on 11-25-15 (SDG ARD6), however surrogate compound recoveries performance for all samples were within acceptable range. Endrin aldehyde recovery in an LCS run performed on 11-27-15 (SDG ARF9) showed a slightly lower-than-specified recovery, whereas the LCSD recovery was determined to be within the acceptance range. No endrin aldehyde is reported as detected in project samples for this event. Matrix spike recovery performance for PCB's in sample ICS-FI-GW-111015 (SDG AQN9) was slightly low at 25.5-50.7%, while the associated LCS performance was determined to be acceptable. MS/MSD recovery performance in ICS-DUPL1-GW-112315 was reported as high (190% & 164%) for Aroclor 1016 and acceptable (74% & 70%) for Aroclor 1260. The elevated recoveries for Aroclor 1016 is due to overlapping response and interference from the native Aroclor 1242 in the sample. Associated surrogate compound recoveries are determined to be within specified ranges. No associated PCB results required qualification. No results required qualification due to noncompliant LCS/LCSD and MS/MSD recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols. Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d₄-1,2-dichloroethane, d₈-toluene, 4-bromofluorobenzene and d₄-1,2-dichlorobenzene) and TPH-G (d₅-chlorobenzene, d₈-toluene, 4-bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate. All surrogate recoveries were within specification, with the following exceptions: d₅-nitrobenzene at 25.4% (specified range = 27-120%), 2-fluorobiphenyl at 29.7% (specified range = 33-120%), d₅-phenol at 30.4% (specified range = 38-120%), 2-fluorophenol at 32.8% (specified range = 33-120%), and d₄-2-chlorophenol at 34.4% (specified range = 41-120%) in ICS-MW8-GW-112015 by M.8270D; d₁₀-fluoranthene at 44% (specified range = 46-121%) in ICS-MW3-GW-112015

by M.8270-SIM; d₅-phenol at 36.8% (specified range = 38-120%) and d₄-2-chlorophenol at 39.5% (specified range = 41-120%) in ICS-HCB1-GW-111915 by M.8270D; DCBP at 24.6% (specified range = 30-160%) in ICS-MW4-GW-111115 by M.8081B; DCBP at 29% (specified range = 30-160%) in ICS-MW3-GW-112015 by M.8081B; DCBP at 28% (specified range = 29-120%) and TCMX at 31.8% (specified range = 32-120%) in ICS-MW2-GW-111115 by M.8082; DCBP at 27.2% (specified range = 29-120%) and TCMX at 30.0% (specified range = 32-120%) in ICS-MW4-GW-111115 by M.8082; and TCMX at 31.0% (specified range = 32-120%) in ICS-FI-GW-111015 by M.8082. All deviations are marginally outside the specified ranges and associated with analytes reported as nondetected. No qualification of results was performed due to surrogate compounds performance.

Initial calibration verification (ICV) checks revealed occasional [minor] noncompliant responses (ICV RPD compared to initial calibration responses > 20) for methylene chloride, acetone, acrolein, 2-butanone, naphthalene, 1,2,4-trichlorobenzene, and 1,2,3-trichlorobenzene by M.8260C; benzyl alcohol, N-nitrosodi-n-propylamine, benzoic acid, isophorone, and carbazole by M.8270D; and benzo(g,h,i)perylene by M.8270-SIM. Potentially affected sample results are required to be qualified with the “J_Q” code (detections are determined to be estimates based on calibration deviations). No results required qualification due to non-compliant ICV performances.

Low mass spectral matches are observed for a few analytes reported by M.8260C in two samples. These analytes (*cis*-1,2-dichloroethene, chlorobenzene, 2-chlorotoluene and n-butylbenzene) are confirmed to be present (by the analyst) and “J_M” qualified as estimated concentrations in ICS-MW7-GW-112315 and ICS-SAMW1-GW-112315.

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in samples from ICS-SAMW1-GW-112315, ICS-DMCMWA-GW-112415, ICS-DUPL2-GW-112415 and ICS-DMCMWB-GW-112415; mineral spirits in ICS-Eu-GW-111915 and ICS-SAMW1-GW-112315; and weathered diesel fuel and motor oil lube in ICS-DMCMWA-GW-112415, ICS-DUPL2-GW-112415 and ICS-DMCMWB-GW-112415. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; as summarized above.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for ground water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride mg/L	Sulfate mg/L	Arsenic 7440-38-2 diss. µg/L	Calcium 7440-70-2 total µg/L	Chromium 7440-47-3 diss. µg/L	Copper 7440-50-8 diss. µg/L	Lead 7439-92-1 diss. µg/L	Magnesium 7439-95-4 total µg/L	Mercury 7439-97-6 diss. ng/L	total ng/L
ICS-MW1-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521709-AQN9A	3670	434		135,000				284,000		
ICS-MW1-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521761-AQS8A										77
ICS-MW1-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521720-AQN9L			4		5	1.1 J	1			
ICS-MW1-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521771-AQS8K									9.5 J	
ICS-MW2-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521710-AQN9B	198	0.5		14,100				20,300		
ICS-MW2-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521762-AQS8B										15 J
ICS-MW2-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521721-AQN9M			3.9		66.9	14.7	1.0			
ICS-MW2-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521772-AQS8L									14 J	
ICS-MW4-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521711-AQN9C	118	0.4		13,900				20,400		
ICS-MW4-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521763-AQS8C										14 J
ICS-MW4-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521722-AQN9N			2.9		48.8	14.7	1.0			
ICS-MW4-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521773-AQS8M									12 J	
ICS-HCB2R-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521718-AQN9J				63,700				7910		
ICS-HCB2R-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521764-AQS8D										3.1 J _B
ICS-HCB2R-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521729-AQN9U			2.7		0.5 J	0.4 J	0.03 J			
ICS-HCB2R-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521774-AQS8N									20.0 U	
ICS-Fu-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521712-AQN9D	78.4	59.7		136,000				24,100		
ICS-Fu-GW-111115	GW-mon. well	11/11/15	nonfiltered	1521765-AQS8E										20.0 U
ICS-Fu-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521723-AQN9O			0.7		0.25 J	2.2	0.01 J _B			
ICS-Fu-GW-111115	GW-mon. well	11/11/15	field-filtered, 0.45 µm	1521775-AQS8O									5.0 J	
ICS-Fl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521713-AQN9E	1490	21.6		54,700				103,000		
ICS-Fl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521766-AQS8F										6.4 J
ICS-Fl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521724-AQN9P			1.0		19	0.8	0.09 J			
ICS-Fl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521776-AQS8P									2.7 J	
ICS-Gu-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521714-AQN9F	192	15.6		61,900				98,400		
ICS-Gu-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521767-AQS8G										5.9 J
ICS-Gu-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521725-AQN9Q			0.8		1.2	0.17 J	0.07 J			
ICS-Gu-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521777-AQS8Q									20.0 U	
ICS-Gl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521715-AQN9G	3690	273		107,000				231,000		
ICS-Gl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521768-AQS8H										2.7 J _B
ICS-Gl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521726-AQN9R			0.6		1.4	0.18 J	0.03 J			
ICS-Gl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521778-AQS8R									20.0 U	
ICS-Ku-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521716-AQN9H	17.4	11.1		33,200				9330		
ICS-Ku-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521769-AQS8I										20.0 U
ICS-Ku-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521727-AQN9S			0.4		0.42 J	3.0	0.02 J _B			
ICS-Ku-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521779-AQS8S									20.0 U	
ICS-Kl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521717-AQN9I	1180	85.2		43,600				112,000		
ICS-Kl-GW-111015	GW-mon. well	11/10/15	nonfiltered	1521770-AQS8J										5.8 J
ICS-Kl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521728-AQN9T			0.3		3	0.7	0.6			
ICS-Kl-GW-111015	GW-mon. well	11/10/15	field-filtered, 0.45 µm	1521780-AQS8T									3.6 J	
Trip Blank	water	11/12/15	trip/transport blank	1521719-AQN9K										
ICS-Ap-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522417-ARD6A										
ICS-Bp-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522418-ARD6B										
ICS-Cp-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522419-ARD6C										
ICS-Dp-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522420-ARD6D										
ICS-Du-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522421-ARD6E	116	4.7		15,500				13,000		
ICS-Du-GW-111815	GW-mon. well	11/18/15	nonfiltered	1522431-ARD8A										6.6 J
ICS-Du-GW-111815	GW-mon. well	11/18/15	field-filtered, 0.45 µm	1522424-ARD6H			1.4		8.3	3.1	0.7			
ICS-Du-GW-111815	GW-mon. well	11/18/15	field-filtered, 0.45 µm	1522433-ARD8C									5.9 J	

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride mg/L	Sulfate mg/L	Arsenic 7440-38-2 diss. µg/L	Calcium 7440-70-2 total µg/L	Chromium 7440-47-3 diss. µg/L	Copper 7440-50-8 diss. µg/L	Lead 7439-92-1 diss. µg/L	Magnesium 7439-95-4 total µg/L	Mercury 7439-97-6 diss. ng/L	total ng/L
ICS-HI-GW-111015	GW-mon. well	11/18/15	nonfiltered	1522422-ARD6F	2310	230		72,900				130,000		
ICS-HI-GW-111015	GW-mon. well	11/18/15	nonfiltered	1522432-ARD8B										6.7 J
ICS-HI-GW-111015	GW-mon. well	11/18/15	field-filtered, 0.45 µm	1522425-ARD6I			0.25 J		2	0.35 J	1.0			
ICS-HI-GW-111015	GW-mon. well	11/18/15	field-filtered, 0.45 µm	1522434-ARD8D									7.0 J	
Trip Blank	water	11/19/15	trip/transport blank	1522423-ARD6G										
ICS-MW3-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522558-ARF9A	270	0.4		23,600				56,300		
ICS-MW3-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522583-ARG3A										14 J
ICS-MW3-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522565-ARF9H			5.3		62	9	0.7			
ICS-MW3-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522589-ARG3G									13 J	
ICS-MW5-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522559-ARF9B	207	0.3		10,800				17,800		
ICS-MW5-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522584-ARG3B										3.6 J
ICS-MW5-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522566-ARF9I			0.5		8.9	2.7	0.2			
ICS-MW5-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522590-ARG3H									20.0 U	
ICS-MW8-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522560-ARF9C	39.7	0.5		28,300				30,300		
ICS-MW8-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522585-ARG3C										15 J
ICS-MW8-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522567-ARF9J			8.8		1.7	0.26 J	0.2			
ICS-MW8-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522591-ARG3I									20.0 U	
ICS-Ju-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522561-ARF9D	666	80.5		45,000				42,100		
ICS-Ju-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522586-ARG3D										13 J
ICS-Ju-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522568-ARF9K			2.0		2.5	1.2	2.4			
ICS-Ju-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522592-ARG3J									15 J	
ICS-II-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522562-ARF9E	2950	31.2		139,000				220,000		
ICS-II-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522587-ARG3E										5.1 J
ICS-II-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522569-ARF9L			0.4 J		3	0.4 J	0.1 J			
ICS-II-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522575-ARG3K									20.0 U	
ICS-SAMW2-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522563-ARF9F	3110	132		117,000				189,000		
ICS-SAMW2-GW-112015	GW-mon. well	11/20/15	nonfiltered	1522588-ARG3F										4.1 J
ICS-SAMW2-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522570-ARF9M			1		3	0.4 J	0.1 J			
ICS-SAMW2-GW-112015	GW-mon. well	11/20/15	field-filtered, 0.45 µm	1522576-ARG3L									20.0 U	
Trip Blank	water	11/20/15	trip/transport blank	1522564-ARF9G										
ICS-HCB1-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522618-ARH0A	3770	4.8		134,000				230,000		
ICS-HCB1-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522685-ARH1A										20.0 U
ICS-HCB1-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522623-ARH0F			0.45 J		2.8	0.3 J	0.06 J			
ICS-HCB1-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522689-ARH1E									20.0 U	
ICS-MW6-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522619-ARH0B	270	5.5		21,500				23,600		
ICS-MW6-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522686-ARH1B										3.8 J
ICS-MW6-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522624-ARH0G			0.6		7.6	1.9	0.1			
ICS-MW6-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522690-ARH1F									3.3 J	
ICS-Eu-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522620-ARH0C	4850	564		241,000				370,000		
ICS-Eu-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522687-ARH1C										48.7
ICS-Eu-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522625-ARH0H			2		1.6	0.5 J	1.0			
ICS-Eu-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522691-ARH1G									4.4 J	
ICS-SAMW3-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522621-ARH0D	2220	334		46,700				103,000		
ICS-SAMW3-GW-111915	GW-mon. well	11/19/15	nonfiltered	1522688-ARH1D										7.3 J
ICS-SAMW3-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522684-ARH0I			0.3		0.7	4.3	0.01 J			
ICS-SAMW3-GW-111915	GW-mon. well	11/19/15	field-filtered, 0.45 µm	1522692-ARH1H									6.8 J	
Trip Blank	water	11/19/15	trip/transport blank	1522622-ARH0E										

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Chloride mg/L	Sulfate mg/L	Arsenic 7440-38-2 diss. µg/L	Calcium 7440-70-2 total µg/L	Chromium 7440-47-3 diss. µg/L	Copper 7440-50-8 diss. µg/L	Lead 7439-92-1 diss. µg/L	Magnesium 7439-95-4 total µg/L	Mercury 7439-97-6 diss. ng/L	total ng/L
ICS-MW7-GW-112315	GW-mon. well	11/23/15	nonfiltered	1522885-ARK8A	378	0.1		15,900				4070		
ICS-MW7-GW-112315	GW-mon. well	11/23/15	nonfiltered	1522892-ARK9A										4.5 J
ICS-MW7-GW-112315	GW-mon. well	11/23/15	field-filtered, 0.45 µm	1522889-ARK8E			1.0		6.1	0.25 J	0.1			
ICS-MW7-GW-112315	GW-mon. well	11/23/15	field-filtered, 0.45 µm	1522895-ARK9D									20.0 U	
ICS-SAMW1-GW-112315	GW-mon. well	11/23/15	nonfiltered	1522886-ARK8B	554	19.3		37,400				31,700		
ICS-SAMW1-GW-112315	GW-mon. well	11/23/15	nonfiltered	1522893-ARK9B										51.5
ICS-SAMW1-GW-112315	GW-mon. well	11/23/15	field-filtered, 0.45 µm	1522890-ARK8F			3.6		13.5	1.8	1.0			
ICS-SAMW1-GW-112315	GW-mon. well	11/23/15	field-filtered, 0.45 µm	1522896-ARK9E									16.6 J	
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/15	nonfiltered	1522887-ARK8C	381	1.5		16,100				4130		
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/15	nonfiltered	1522894-ARK9C										4.0 J
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/15	field-filtered, 0.45 µm	1522891-ARK8G			1.0		6.4	0.26 J	0.04 J			
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/15	field-filtered, 0.45 µm	1522897-ARK9F									20.0 U	
Trip Blank	water	11/23/15	trip/transport blank	1522888-ARK8D										
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/15	nonfiltered	1522999-ARN0A	635	8.3		40,200				63,900		
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/15	nonfiltered	1523008-ARN1A										187
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523004-ARN0F			3.0		4.4	2.6	19.2			
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523012-ARN1E									16.5 J	
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/15	nonfiltered	1523000-ARN0B	2250	14.5		132,000				154,000		
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/15	nonfiltered	1523009-ARN1B										32.7
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523005-ARN0G			7.3		8	2	14.4			
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523013-ARN1F									15.3 J	
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/15	nonfiltered	1523001-ARN0C	3900	413		250,000				333,000		
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/15	nonfiltered	1523010-ARN1C										13.6 J
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523006-ARN0H			2		1.8 J	2.4 J	2.0			
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/15	field-filtered, 0.45 µm	1523014-ARN1G									16.4 J	
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/15	nonfiltered	1523002-ARN0D	625	7.8		41,100				65,000		
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/15	nonfiltered	1523011-ARN1D										212
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/15	field-filtered, 0.45 µm	1523007-ARN0I			3.2		6.0	4.1	30.5			
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/15	field-filtered, 0.45 µm	1523015-ARN1H									20.0	
Trip Blank	water	11/24/15	trip/transport blank	1523003-ARN0E										

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Nickel 7440-02-0 <u>diss. µg/L</u>	Sodium 7440-23-5 <u>total µg/L</u>	Zinc 7440-66-6 <u>diss. µg/L</u>	Hardness <u>mg-CaCO₃/L</u>	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3 <u>µg/L</u>	Bromo- methane 74-83-9 <u>µg/L</u>	Vinyl chloride 75-01-4 <u>µg/L</u>	Chloro- ethane 75-00-3 <u>µg/L</u>	Methylene chloride 75-09-2 <u>µg/L</u>	Acetone 67-64-1 <u>µg/L</u>	Carbon disulfide 75-15-0 <u>µg/L</u>
					Gasoline-range <u>mg/L</u>	Diesel-range <u>mg/L</u>	Lube-range <u>mg/L</u>							
ICS-MW1-GW-111115		2,030,000		1500	0.04 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-MW1-GW-111115														
ICS-MW1-GW-111115	2		4.5 J											
ICS-MW1-GW-111115														
ICS-MW2-GW-111115		484,000		120	0.04 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-MW2-GW-111115														
ICS-MW2-GW-111115	1.5		3.8 J											
ICS-MW2-GW-111115														
ICS-MW4-GW-111115		369,000		120	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-MW4-GW-111115														
ICS-MW4-GW-111115	1.3		3.3 J											
ICS-MW4-GW-111115														
ICS-HCB2R-GW-111115		6900		190	0.03 J _B			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115	2.3		9											
ICS-HCB2R-GW-111115														
ICS-Fu-GW-111115		55,200		440	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Fu-GW-111115														
ICS-Fu-GW-111115	3.0		1.4 J											
ICS-Fu-GW-111115														
ICS-Fl-GW-111015		1,060,000		560	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.15 J	1.0 U	5.0 U	0.20 U
ICS-Fl-GW-111015														
ICS-Fl-GW-111015	1.0		0.96 J											
ICS-Fl-GW-111015														
ICS-Gu-GW-111015		61,300		560	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.27
ICS-Gu-GW-111015														
ICS-Gu-GW-111015	0.7		1.9 J											
ICS-Gu-GW-111015														
ICS-Gl-GW-111015		1,910,000		1200	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Gl-GW-111015														
ICS-Gl-GW-111015	0.52 J		3.1 J											
ICS-Gl-GW-111015														
ICS-Ku-GW-111015		25,300		120	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Ku-GW-111015														
ICS-Ku-GW-111015	3.6		2.7 J											
ICS-Ku-GW-111015														
ICS-Kl-GW-111015		1,060,000		570	0.03 J _B	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Kl-GW-111015														
ICS-Kl-GW-111015	0.6		1.8 J											
ICS-Kl-GW-111015														
Trip Blank					0.03 J _B			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Ap-GW-111815								0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Bp-GW-111815								0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	8.8	0.20 U
ICS-Cp-GW-111815								0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Dp-GW-111815								0.50 U	1.0 U	0.61	0.20 U	1.0 U	2.8 J	0.20 U
ICS-Du-GW-111815		156,000		92	0.04 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.4 J	0.20 U
ICS-Du-GW-111815														
ICS-Du-GW-111815	1.7		5											
ICS-Du-GW-111815														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Nickel 7440-02-0 <u>diss. µg/L</u>	Sodium 7440-23-5 <u>total µg/L</u>	Zinc 7440-66-6 <u>diss. µg/L</u>	Hardness <u>mg-CaCO₃/L</u>	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3 <u>µg/L</u>	Bromo- methane 74-83-9 <u>µg/L</u>	Vinyl chloride 75-01-4 <u>µg/L</u>	Chloro- ethane 75-00-3 <u>µg/L</u>	Methylene chloride 75-09-2 <u>µg/L</u>	Acetone 67-64-1 <u>µg/L</u>	Carbon disulfide 75-15-0 <u>µg/L</u>
					Gasoline-range <u>mg/L</u>	Diesel-range <u>mg/L</u>	Lube-range <u>mg/L</u>							
ICS-HI-GW-111015		1,200,000		720	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-HI-GW-111015														
ICS-HI-GW-111015	0.28 J		2.6 J											
ICS-HI-GW-111015														
Trip Blank								0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-MW3-GW-112015		425,000		290	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.21	0.20 U	1.0 U	3.7 J	0.20 U
ICS-MW3-GW-112015														
ICS-MW3-GW-112015	2		3.3 J											
ICS-MW3-GW-112015														
ICS-MW5-GW-112015		235,000		100	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-MW5-GW-112015														
ICS-MW5-GW-112015	0.47 J		1.1 J											
ICS-MW5-GW-112015														
ICS-MW8-GW-112015		121,000		200	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.86	3.9	1.0 U	3.2 J	0.20 U
ICS-MW8-GW-112015														
ICS-MW8-GW-112015	4.5		0.6 J											
ICS-MW8-GW-112015														
ICS-Ju-GW-112015		460,000		290	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.06 J	0.20 U	1.0 U	5.0 U	0.20 U
ICS-Ju-GW-112015														
ICS-Ju-GW-112015	4.6		2.6 J											
ICS-Ju-GW-112015														
ICS-II-GW-112015		1,720,000		1300	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.05 J
ICS-II-GW-112015														
ICS-II-GW-112015	0.5 J		1.6 J											
ICS-II-GW-112015														
ICS-SAMW2-GW-112015		1,600,000		1100	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.10 J
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015	3		1.6 J											
ICS-SAMW2-GW-112015														
Trip Blank					0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-HCB1-GW-111915		2,080,000		1300	0.03 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915	0.3 J		1.1 J											
ICS-HCB1-GW-111915														
ICS-MW6-GW-111915		241,000		150	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.12 J	0.22	1.0 U	5.0 U	0.20 U
ICS-MW6-GW-111915														
ICS-MW6-GW-111915	0.8		48											
ICS-MW6-GW-111915														
ICS-Eu-GW-111915		2,730,000		2100	0.06 J	0.67	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	3.0 J	0.20 U
ICS-Eu-GW-111915						(mineral spirits)								
ICS-Eu-GW-111915	3		3.4 J											
ICS-Eu-GW-111915														
ICS-SAMW3-GW-111915		1,540,000		540	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915	2.0		7											
ICS-SAMW3-GW-111915														
Trip Blank					0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Nickel 7440-02-0 <u>diss. µg/L</u>	Sodium 7440-23-5 <u>total µg/L</u>	Zinc 7440-66-6 <u>diss. µg/L</u>	Hardness <u>mg-CaCO₃/L</u>	Total Petroleum Hydrocarbons **			Chloro- methane 74-87-3 <u>µg/L</u>	Bromo- methane 74-83-9 <u>µg/L</u>	Vinyl chloride 75-01-4 <u>µg/L</u>	Chloro- ethane 75-00-3 <u>µg/L</u>	Methylene chloride 75-09-2 <u>µg/L</u>	Acetone 67-64-1 <u>µg/L</u>	Carbon disulfide 75-15-0 <u>µg/L</u>
					Gasoline-range <u>mg/L</u>	Diesel-range <u>mg/L</u>	Lube-range <u>mg/L</u>							
ICS-MW7-GW-112315		369,000		57	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.43	3.4	1.0 U	5.0 U	0.20 U
ICS-MW7-GW-112315	1.4		0.96 J											
ICS-MW7-GW-112315														
ICS-SAMW1-GW-112315		751,000		220	1.4	0.47	0.30	0.50 U	1.0 U	2.5	0.96	1.0 U	12	0.13 J
ICS-SAMW1-GW-112315						(mineral spirits)								
ICS-SAMW1-GW-112315	10.0		2.3 J											
ICS-SAMW1-GW-112315														
ICS-DUPL1-GW-112315		376,000		57	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.38	3.4	1.0 U	5.0 U	0.20 U
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315	1.5		1.3 J											
ICS-DUPL1-GW-112315														
Trip Blank					0.25 U			0.13 J	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-DMCMWA-GW-112415		475,000		360	0.35	0.75	1.2	0.50 U	1.0 U	0.13 J	0.20 U	1.0 U	5.0 U	0.20 U
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415	1.4		12											
ICS-DMCMWA-GW-112415														
ICS-DMCMWB-GW-112415		1,170,000		960	0.38	0.46	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415	1.0		10											
ICS-DMCMWB-GW-112415														
ICS-DMCMWC-GW-112415		2,120,000		2000	0.25 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415	1.5 J		5.2 J											
ICS-DMCMWC-GW-112415														
ICS-DUPL2-GW-112415		469,000		370	0.36	0.59	0.94	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415	2.0		18											
ICS-DUPL2-GW-112415														
Trip Blank					0.25 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U

** bold-typed values resemble corresponding petroleum hydrocarbon mixture

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1-Dichloro- ethene 75-35-4 µg/L	1,1-Dichloro- ethane 75-34-3 µg/L	<i>trans</i> -1,2- Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2- Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L
ICS-MW1-GW-111115	0.20 U	0.20 U	0.20 U	0.05 J	0.03 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fl-GW-111015	0.20 U	0.08 J	0.20 U	0.23	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Gu-GW-111015	0.20 U	0.20 U	0.20 U	0.38	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-GI-GW-111015	0.20 U	0.10 J	0.20 U	0.64	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-Ku-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-KI-GW-111015	0.20 U	0.20 U	0.14 J	1.7	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-KI-GW-111015													
ICS-KI-GW-111015													
ICS-KI-GW-111015													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ap-GW-111815	0.20 U	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Bp-GW-111815	0.20 U	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Cp-GW-111815	0.20 U	0.31	0.20 U	0.14 J	0.20 U	0.24	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Dp-GW-111815	0.20 U	0.30	0.25	0.39	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1-Dichloro- ethene 75-35-4 µg/L	1,1-Dichloro- ethane 75-34-3 µg/L	<i>trans</i> -1,2- Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2- Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L
ICS-HI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI-GW-111015													
ICS-HI-GW-111015													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015	0.20 U	0.14 J	0.43	0.45	0.20 U	0.11 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW8-GW-112015													
ICS-MW8-GW-112015	0.20 U	0.07 J	0.20 U	0.32	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J
ICS-Ju-GW-112015													
ICS-Ju-GW-112015	0.20 U	0.12 J	0.20 U	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ju-GW-112015													
ICS-Ju-GW-112015	0.20 U	0.12 J	0.20 U	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-II-GW-112015													
ICS-II-GW-112015	0.20 U	0.07 J	0.20 U	0.11 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.08 J
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW2-GW-112015	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW2-GW-112015													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915	0.20 U	0.64	0.20 U	0.18 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915	0.20 U	0.21	0.20 U	0.19 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1-Dichloro- ethene 75-35-4 µg/L	1,1-Dichloro- ethane 75-34-3 µg/L	<i>trans</i> -1,2- Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2- Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L
ICS-MW7-GW-112315	0.20 U	0.39	0.55	0.22 J_M	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	0.20 U	5.9	4.4	1.5	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.51	0.20 U	0.20 U
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	0.20 U	0.35	0.51	0.25	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-GW-112415	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_M = estimate; noncompliant mass spectral match - analyte presence confirmed by analyst.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L
ICS-MW1-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW2-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW4-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-HCB2R-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.08 J	0.20 U	0.06 J	0.20 U	0.04 J	0.20 U	0.20 U
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-Fu-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-Fl-GW-111015	0.20 U	0.20 U	0.03 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fl-GW-111015														
ICS-Fl-GW-111015														
ICS-Fl-GW-111015														
ICS-Gu-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-GI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.27	0.20 U	0.20 U	0.20 U
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-Ku-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-KI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-KI-GW-111015														
ICS-KI-GW-111015														
ICS-KI-GW-111015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ap-GW-111815	0.20 U	0.20 U	0.61	0.20 U	0.20 U	5.0 U	5.0 U	0.24	0.20 U	0.60	0.76	0.20 U	0.20 U	0.20 U
ICS-Bp-GW-111815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.49	0.20 U	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Cp-GW-111815	0.20 U	0.20 U	0.98	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.75	0.20 U	0.40	0.20 U	0.20 U
ICS-Dp-GW-111815	0.20 U	0.20 U	0.29	0.20 U	0.20 U	5.0 U	5.0 U	0.69	0.20 U	0.59	1.1	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815	0.20 U	0.20 U	0.21	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.14 J	2.5	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815														
ICS-Du-GW-111815														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L
ICS-HI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI-GW-111015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.07 J	0.20 U	0.05 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW5-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW8-GW-112015	0.20 U	0.20 U	70	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.89	1.1	0.20	0.20 U	0.20 U
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-Ju-GW-112015	0.20 U	0.20 U	0.13 J	0.20 U	0.20 U	5.0 U	5.0 U	0.12 J	0.20 U	0.05 J	0.20 U	0.16 J	0.20 U	0.20 U
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-II-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-SAMW2-GW-112015	0.20 U	0.20 U	0.64	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.83	0.20 U	4.8	0.12 J	0.20 U
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915	0.20 U	0.20 U	0.05 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-MW6-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.75	0.20 U	0.20 U	0.20 U
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-Eu-GW-111915	0.20 U	0.20 U	2.4	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32	0.20 U	0.43	0.20 U	0.20 U
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-SAMW3-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L
ICS-MW7-GW-112315	0.20 U	0.20 U	2.4	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.53	0.20 U	0.20 U
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-SAMW1-GW-112315	0.20 U	0.20 U	6.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	54	2.3 J _M	240	2.6	0.20 U
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-DUPL1-GW-112315	0.20 U	0.20 U	2.3	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.77	0.20 U	0.20 U
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-GW-112415	0.20 U	0.20 U	31	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.26	0.20 U	0.99	0.20 U	0.20 U
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWB-GW-112415	0.20 U	0.20 U	0.27	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.28	0.20 U	2.0	0.20 U	0.20 U
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWC-GW-112415	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DUPL2-GW-112415	0.20 U	0.20 U	32	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.27	0.20 U	0.96	0.20 U	0.20 U
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_M = estimate; noncompliant mass spectral match - analyte presence confirmed by analyst.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1,2-Trichloro-1,2,2-trifluoroethane 76-13-1 µg/L	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/L	<i>o</i> -Xylene 95-47-6 µg/L	1,2-Dichloro-benzene 95-50-1 µg/L	1,3-Dichloro-benzene 541-73-1 µg/L	1,4-Dichloro-benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro-propene 563-58-6 µg/L	Dibromo-methane 74-95-3 µg/L	1,1,1,2-Tetra-chloroethane 630-20-6 µg/L	1,2,3-Trichloro-propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2-butene 110-57-6 µg/L
ICS-MW1-GW-111115	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.21	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115	0.20 U	0.12 J	0.05 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-FI-GW-111015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-Gu-GW-111015	0.20 U	0.06 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-GI-GW-111015	0.20 U	0.07 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-Ku-GW-111015	0.20 U	0.07 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-KI-GW-111015	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-KI-GW-111015													
ICS-KI-GW-111015													
ICS-KI-GW-111015													
Trip Blank	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Ap-GW-111815	0.20 U	0.81	0.67	0.11 J	0.22	0.69	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Bp-GW-111815	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Cp-GW-111815	0.20 U	0.64	0.41	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Dp-GW-111815	0.20 U	0.12 J	0.20 U	0.13 J	0.25	0.83	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Du-GW-111815	0.20 U	0.20 J	0.14 J	0.17 J	0.65	2.6	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1,2-Trichloro-1,2,2-trifluoroethane 76-13-1 µg/L	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/L	<i>o</i> -Xylene 95-47-6 µg/L	1,2-Dichloro-benzene 95-50-1 µg/L	1,3-Dichloro-benzene 541-73-1 µg/L	1,4-Dichloro-benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro-propene 563-58-6 µg/L	Dibromo-methane 74-95-3 µg/L	1,1,1,2-Tetra-chloroethane 630-20-6 µg/L	1,2,3-Trichloro-propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2-butene 110-57-6 µg/L
ICS-HI-GW-111015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-HI-GW-111015													
Trip Blank	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW3-GW-112015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW5-GW-112015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW8-GW-112015	0.20 U	2.8	0.70	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-Ju-GW-112015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-II-GW-112015	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-SAMW2-GW-112015	0.20 U	3.4	4.3	0.45	0.20 U	0.05 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
Trip Blank	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-HCB1-GW-111915	0.20 U	0.40 U	0.20 U	0.05 J	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-MW6-GW-111915	0.20 U	0.40 U	0.20 U	0.20 U	0.12 J	0.37	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-Eu-GW-111915	0.20 U	0.41	0.24	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-SAMW3-GW-111915	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
Trip Blank	0.20 U	0.06 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,1,2-Trichloro-1,2,2-trifluoroethane 76-13-1 µg/L	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/L	<i>o</i> -Xylene 95-47-6 µg/L	1,2-Dichloro-benzene 95-50-1 µg/L	1,3-Dichloro-benzene 541-73-1 µg/L	1,4-Dichloro-benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro-propene 563-58-6 µg/L	Dibromo-methane 74-95-3 µg/L	1,1,1,2-Tetra-chloroethane 630-20-6 µg/L	1,2,3-Trichloro-propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2-butene 110-57-6 µg/L
ICS-MW7-GW-112315	0.20 U	4.6	0.90	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	0.20 U	110	44	7.2	4.7	13	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	0.20 U	4.7	0.93	0.18 J	0.05 J	0.11 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DMCMWA-GW-112415	0.20 U	0.84	0.83	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	0.20 U	2.7	0.12 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	0.20 U	0.86	0.82	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	1.0 U

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L
ICS-MW1-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW2-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J	0.08 J	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J	0.20 U
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW4-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-HCB2R-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-Fu-GW-111115	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-FI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-FI-GW-111015														
ICS-FI-GW-111015														
ICS-FI-GW-111015														
ICS-Gu-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-GI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-Ku-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-KI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-KI-GW-111015														
ICS-KI-GW-111015														
ICS-KI-GW-111015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ap-GW-111815	0.19 J_B	0.18 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Bp-GW-111815	0.20 U	0.14 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Cp-GW-111815	0.20 U	0.26 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Dp-GW-111815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Du-GW-111815														
ICS-Du-GW-111815														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L
ICS-HI-GW-111015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI-GW-111015														
ICS-HI-GW-111015														
ICS-HI-GW-111015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW5-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW8-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.56	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-Ju-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.05 J
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-II-GW-112015	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-SAMW2-GW-112015	0.69	3.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.18 J
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915	0.20 U	0.03 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-MW6-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-Eu-GW-111915	0.20 U	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U	0.29	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.11 J	0.20
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-SAMW3-GW-111915	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L
ICS-MW7-GW-112315	0.52	0.73	0.20 U	0.20 U	0.20 U	0.20 U	0.48	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.13 J
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-SAMW1-GW-112315	7.5	48	0.20 U	0.20 U	0.20 U	0.20 U	4.3	7.4	0.20 U	0.86 J _M	0.20 U	0.12 J	1.4	1.9
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-DUPL1-GW-112315	0.57	0.96	0.20 U	0.20 U	0.20 U	0.20 U	0.47	0.14 J	0.20 U	0.20 U	0.20 U	0.03 J	0.07 J	0.14 J
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-GW-112415	0.20 U	0.82	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.96	0.20 U	0.20 U	0.20 U	0.20 U	0.63	0.60
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWB-GW-112415	4.0	7.6	0.20 U	0.20 U	0.20 U	0.20 U	3.2	1.8	0.20 U	0.20 U	0.20 U	0.06 J	0.69	1.1
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415	0.06 J	0.84	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.96	0.20 U	0.20 U	0.20 U	0.09 J	0.65	0.66
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

J_M = estimate; noncompliant mass spectral match - analyte presence confirmed by analyst.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L
ICS-MW1-GW-111115	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	0.03 J	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115	0.20 U	0.50 U	0.50 U										
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-FI-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-Gu-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-GI-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-Ku-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-KI-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-KI-GW-111015													
ICS-KI-GW-111015													
ICS-KI-GW-111015													
Trip Blank	0.20 U	0.50 U	0.50 U										
ICS-Ap-GW-111815	0.20 U	0.50 U	0.50 U										
ICS-Bp-GW-111815	0.20 U	0.50 U	0.50 U										
ICS-Cp-GW-111815	0.20 U	0.50 U	0.50 U										
ICS-Dp-GW-111815	0.20 U	0.50 U	0.50 U										
ICS-Du-GW-111815	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L
ICS-HI-GW-111015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-HI-GW-111015													
ICS-HI-GW-111015													
Trip Blank	0.20 U	0.50 U	0.50 U										
ICS-MW3-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW5-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW8-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-Ju-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-II-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-SAMW2-GW-112015	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
Trip Blank	0.20 U	0.50 U	0.50 U										
ICS-HCB1-GW-111915	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-MW6-GW-111915	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-Eu-GW-111915	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	0.8 J	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-SAMW3-GW-111915	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
Trip Blank	0.20 U	0.50 U	0.50 U										

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L
ICS-MW7-GW-112315	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	1.1 J_M	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.8 J
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank	0.20 U	0.50 U	0.50 U										
ICS-DMCMWA-GW-112415	0.59	0.50 U	0.50 U	1.6	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	0.63	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	0.20 U	0.50 U	0.50 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	0.60	0.50 U	0.50 U	1.1	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	3.0 U
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank	0.20 U	0.50 U	0.50 U										

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field ID.	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L
ICS-MW1-GW-111115	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-FI-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-FI-GW-111015													
ICS-Gu-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-GI-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-GI-GW-111015													
ICS-Ku-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-KI-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-KI-GW-111015													
ICS-KI-GW-111015													
ICS-KI-GW-111015													
Trip Blank													
ICS-Ap-GW-111815						0.25 U							
ICS-Bp-GW-111815						0.25 U							
ICS-Cp-GW-111815						0.25 U							
ICS-Dp-GW-111815						0.25 U							
ICS-Du-GW-111815	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	2.3	0.10 U	3.0 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field ID.	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L
ICS-HI-GW-111015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-HI-GW-111015													
ICS-HI-GW-111015													
Trip Blank													
ICS-MW3-GW-112015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW5-GW-112015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW8-GW-112015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-Ju-GW-112015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-II-GW-112015	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-SAMW2-GW-112015	20 U	3.0 U	0.61	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.11	0.06 J	3.0 U
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
Trip Blank													
ICS-HCB1-GW-111915	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-MW6-GW-111915	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-Eu-GW-111915	20 U	3.0 U	1.6	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.07 J	0.10 U	3.0 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-SAMW3-GW-111915	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
Trip Blank													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field ID.	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L
ICS-MW7-GW-112315	20 U	3.0 U	2.8	3.0 U	3.7	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.17	0.10 U	3.0 U
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	20 U	1.4 J	23	3.0 U	80	0.43	5.0 U	1.0 U	1.0 U	0.09 J	1.0	0.42	3.0 U
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	20 U	3.0 U	2.4	3.0 U	3.2	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.19	0.10 U	3.0 U
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank													
ICS-DMCMWA-GW-112415	20 U	3.0 U	4.1	3.0 U	5.1	0.25 U	5.0 U	1.0 U	1.0 U	0.23	4.0	0.49	3.0 U
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	20 U	3.0 U	4.1	3.0 U	7.8	0.25 U	5.0 U	1.0 U	1.0 U	0.05 J	3.0	0.16	3.0 U
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	20 U	3.0 U	0.10 U	3.0 U	1.0 U	0.25 U	5.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.10 U	3.0 U
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	20 U	3.0 U	5.3	3.0 U	3.1	0.25 U	5.0 U	1.0 U	1.0 U	0.16	3.2	0.60	3.0 U
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank													

*J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.*

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L
ICS-MW1-GW-111115	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW2-GW-111115	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW4-GW-111115	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-Fu-GW-111115	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-Fu-GW-111115														
ICS-FI-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-FI-GW-111015														
ICS-FI-GW-111015														
ICS-FI-GW-111015														
ICS-Gu-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-Gu-GW-111015														
ICS-GI-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-GI-GW-111015														
ICS-Ku-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-Ku-GW-111015														
ICS-KI-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-KI-GW-111015														
ICS-KI-GW-111015														
ICS-KI-GW-111015														
Trip Blank														
ICS-Ap-GW-111815						0.25 U								
ICS-Bp-GW-111815						0.25 U								
ICS-Cp-GW-111815						0.18 J								
ICS-Dp-GW-111815						0.25 U								
ICS-Du-GW-111815	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-Du-GW-111815														
ICS-Du-GW-111815														
ICS-Du-GW-111815														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L
ICS-HI-GW-111015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-HI-GW-111015														
ICS-HI-GW-111015														
ICS-HI-GW-111015														
Trip Blank														
ICS-MW3-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW5-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW8-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-Ju-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-Ju-GW-112015														
ICS-II-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-II-GW-112015														
ICS-SAMW2-GW-112015	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.16 J	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
Trip Blank														
ICS-HCB1-GW-111915	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-MW6-GW-111915	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-Eu-GW-111915	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.09 J	1.0 U	0.10 U	1.0 U	0.05 J	0.10 U	1.0 U	0.10 U
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-Eu-GW-111915														
ICS-SAMW3-GW-111915	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
Trip Blank														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L
ICS-MW7-GW-112315	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-SAMW1-GW-112315	3.0 U	1.0 U	1.0 U	1.0	1.9	0.25 U	1.4	1.0 U	0.10 J	1.0 U	0.11	0.09 J	1.0 U	0.10 U
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-DUPL1-GW-112315	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
Trip Blank														
ICS-DMCMWA-GW-112415	3.0 U	1.0 U	1.0 U	1.1	1.2	0.25 U	1.1	1.0	0.59	1.0 U	0.33	0.38	1.0 U	0.08 J
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DMCMWB-GW-112415	3.0 U	1.0 U	1.0 U	1.0	1.0 U	0.25 U	0.30	1.0	0.10 U	1.0 U	0.08 J	0.10 U	1.0 U	0.10 U
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-DMCMWC-GW-112415	3.0 U	1.0 U	1.0 U	0.10 U	1.0 U	0.25 U	0.10 U	1.0 U	0.10 U	1.0 U	0.10 U	0.10 U	1.0 U	0.10 U
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-DUPL2-GW-112415	3.0 U	1.0 U	1.0 U	1.6	1.0 U	0.25 U	2.2	0.8 J	0.72	1.0 U	0.36	0.56	1.0 U	0.10
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
Trip Blank														

J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L
ICS-MW1-GW-111115	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.0016 U	0.00062 U
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fl-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Gu-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.0016 U	0.00062 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gl-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-Gl-GW-111015													
ICS-Gl-GW-111015													
ICS-Gl-GW-111015													
ICS-Ku-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Kl-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-Kl-GW-111015													
ICS-Kl-GW-111015													
ICS-Kl-GW-111015													
Trip Blank													
ICS-Ap-GW-111815													
ICS-Bp-GW-111815													
ICS-Cp-GW-111815													
ICS-Dp-GW-111815													
ICS-Du-GW-111815	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.3	0.10 U	0.0013 U	0.00079 U	0.00062 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L
ICS-HI-GW-111015	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-HI-GW-111015													
ICS-HI-GW-111015													
Trip Blank													
ICS-MW3-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW5-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW8-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-Ju-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-II-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.00062 U	0.00062 U	0.00062 U
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-SAMW2-GW-112015	3.0 U	0.10 U	1.0 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.72	0.20 U	0.0014 U	0.0034 U	0.00062 U
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
Trip Blank													
ICS-HCB1-GW-111915	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-MW6-GW-111915	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.0017 U	0.00062 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-Eu-GW-111915	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.76	0.10 U	0.00073 U	0.0045 U	0.00062 U
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-SAMW3-GW-111915	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.00062 U	0.00062 U	0.00062 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
Trip Blank													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L
ICS-MW7-GW-112315	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.97	0.10 U	0.0016 U	0.00062 U	0.00062 U
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	26.6	0.20	0.0013 U	0.011 U	0.0085 U
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	2.59	0.10 U	0.0017 U	0.00062 U	0.00062 U
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank													
ICS-DMCMWA-GW-112415	4.0	0.10 J	1.0 U	0.04 J	0.07 J	0.10 U	0.10 U	0.10 U	11.1	1.0	0.0038 U	0.0036 U	0.0031 U
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	8.45	0.10 U	0.0019 U	0.0023 U	0.00062 U
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	3.0 U	0.10 U	1.0 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.0022 U	0.0012 U	0.0012 U
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	3.0 U	0.16	1.0 U	0.12	0.07 J	0.10 U	0.10 U	0.10 U	16.6	1.37	0.0080 U	0.0031 U	0.0031 U
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank													

*J = estimate associated with value less than the verifiable lower quantitation limit.
U = nondetected at the associated lower reporting limit.*

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field ID	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L
ICS-MW1-GW-111115	0.00062 U	0.00062 U	0.00086 U	0.0017 U	0.00062 U	0.0018 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0022 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW2-GW-111115	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW4-GW-111115	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-Fu-GW-111115	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-Fu-GW-111115															
ICS-Fu-GW-111115															
ICS-Fu-GW-111115															
ICS-FI-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-FI-GW-111015															
ICS-FI-GW-111015															
ICS-FI-GW-111015															
ICS-Gu-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-Gu-GW-111015															
ICS-Gu-GW-111015															
ICS-Gu-GW-111015															
ICS-GI-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-GI-GW-111015															
ICS-GI-GW-111015															
ICS-GI-GW-111015															
ICS-Ku-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-Ku-GW-111015															
ICS-Ku-GW-111015															
ICS-Ku-GW-111015															
ICS-KI-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-KI-GW-111015															
ICS-KI-GW-111015															
ICS-KI-GW-111015															
Trip Blank															
ICS-Ap-GW-111815															
ICS-Bp-GW-111815															
ICS-Cp-GW-111815															
ICS-Dp-GW-111815															
ICS-Du-GW-111815	0.00062 U	0.00062 U	0.00062 U	0.00066 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0012 U	0.0012 U
ICS-Du-GW-111815															
ICS-Du-GW-111815															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L
ICS-HI-GW-111015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0015 U	0.0062 U	0.0012 U	0.0012 U
ICS-HI-GW-111015															
ICS-HI-GW-111015															
ICS-HI-GW-111015															
Trip Blank															
ICS-MW3-GW-112015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW5-GW-112015	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW8-GW-112015	0.0011 U	0.00062 U	0.00082 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-Ju-GW-112015	0.00062 U	0.00062 U	0.00074 U	0.0017 U	0.00062 U	0.0020 U	0.0020 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0015 U	0.0012 U
ICS-Ju-GW-112015															
ICS-Ju-GW-112015															
ICS-Ju-GW-112015															
ICS-II-GW-112015	0.00062 U	0.00062 U	0.00062 U	0.00079 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-II-GW-112015															
ICS-II-GW-112015															
ICS-II-GW-112015															
ICS-SAMW2-GW-112015	0.0017 U	0.0012 U	0.0012 U	0.0033 U	0.00062 U	0.0012 U	0.0014 U	0.0012 U	0.0018 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0018 U	0.0012 U
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
Trip Blank															
ICS-HCB1-GW-111915	0.00071 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-MW6-GW-111915	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0062 U	0.0012 U	0.0012 U
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-Eu-GW-111915	0.00082 U	0.0015 U	0.00062 U	0.0040 U	0.00070 U	0.0012 U	0.013 J_p	0.0026 U	0.0012 U	0.0012 U	0.0012 U	0.022 U	0.0062 U	0.0012 U	0.0012 U
ICS-Eu-GW-111915															
ICS-Eu-GW-111915															
ICS-Eu-GW-111915															
ICS-SAMW3-GW-111915	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U	0.0012 U	0.0012 U
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
Trip Blank															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L
ICS-MW7-GW-112315	0.0070 U	0.00062 U	0.00076 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0035 U	0.0012 U	0.0014 U	0.0044 U	0.0062 U	0.0042 U	0.0012 U
ICS-MW7-GW-112315															
ICS-MW7-GW-112315															
ICS-SAMW1-GW-112315	0.017 U	0.00062 U	0.0050 U	0.013 U	0.00062 U	0.0012 U	0.011 U	0.0036 U	0.034 U	0.0021 U	0.013 U	0.024 U	0.16 U	0.0089 U	0.0064 U
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-DUPL1-GW-112315	0.0070 U	0.00062 U	0.00088 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0040 U	0.0062 U	0.0012 U	0.0012 U
ICS-DUPL1-GW-112315															
ICS-DUPL1-GW-112315															
Trip Blank															
ICS-DMCMWA-GW-112415	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0062 U	0.039	0.0062 U	0.0076 U	0.14	0.0062 U	0.0076 U	0.031 U	0.0062 U	0.0062 U
ICS-DMCMWA-GW-112415															
ICS-DMCMWA-GW-112415															
ICS-DMCMWB-GW-112415	0.00062 U	0.00064 U	0.00062 U	0.00062 U	0.00062 U	0.0016 U	0.0031	0.0012 U	0.0012 U	0.0077 J_p	0.0012 U	0.0017 U	0.0062 U	0.0012 U	0.0012 U
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-DMCMWC-GW-112415	0.0012 U	0.0012 U	0.0012 U	0.0015 U	0.0012 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.012 U	0.0025 U	0.0025 U
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-DUPL2-GW-112415	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0062 U	0.034	0.0062 U	0.0062 U	0.14	0.0062 U	0.0072 U	0.031 U	0.0062 U	0.0062 U
ICS-DUPL2-GW-112415															
ICS-DUPL2-GW-112415															
Trip Blank															

J_p = estimated value due to high variability exhibited between dual column responses or multi-parametric deviations on GC/ECD.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-MW1-GW-111115	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.084	0.18	0.23	0.010 U	0.010 U	0.494
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW2-GW-111115	0.00072 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW4-GW-111115	0.00064 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-HCB2R-GW-111115						0.010 U	0.010 U	0.015 U	0.015 U	0.010 U	0.010 U	0.010 U	0.015 U
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-Fu-GW-111115	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fu-GW-111115													
ICS-Fl-GW-111015	0.00068 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Fl-GW-111015													
ICS-Gu-GW-111015	0.00094 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gu-GW-111015													
ICS-Gl-GW-111015	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Gl-GW-111015													
ICS-Gl-GW-111015													
ICS-Gl-GW-111015													
ICS-Ku-GW-111015	0.00083 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Ku-GW-111015													
ICS-Kl-GW-111015	0.00080 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Kl-GW-111015													
ICS-Kl-GW-111015													
ICS-Kl-GW-111015													
Trip Blank													
ICS-Ap-GW-111815						0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Bp-GW-111815						0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Cp-GW-111815						0.010 U	0.010 U	0.054 J_p	0.018 J_p	0.010 U	0.010 U	0.010 U	0.072
ICS-Dp-GW-111815						0.010 U	0.010 U	0.010 U	0.025 U	0.010 U	0.010 U	0.010 U	0.025 U
ICS-Du-GW-111815	0.0023	0.0018	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.030 U	0.007 J	0.010 U	0.010 U	0.030 U
ICS-Du-GW-111815													
ICS-Du-GW-111815													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-HI-GW-111015	0.0058	0.0086 J_P	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020 U	0.030 U	0.020	0.010 U	0.010 U	0.030 U
ICS-HI-GW-111015													
Trip Blank													
ICS-MW3-GW-112015	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW5-GW-112015	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW8-GW-112015	0.00062 U	0.00062 U	0.063 U	0.0014 U	0.0012 U	0.010 U	0.010 U	0.013	0.013	0.003 J	0.010 U	0.010 U	0.029
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-Ju-GW-112015	0.0016 U	0.0018 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.12	0.11	0.059	0.010 U	0.010 U	0.289
ICS-Ju-GW-112015													
ICS-Ju-GW-112015													
ICS-II-GW-112015	0.0044	0.0058 J_P	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.015 U	0.006 J	0.010 U	0.010 U	0.015 U
ICS-II-GW-112015													
ICS-II-GW-112015													
ICS-SAMW2-GW-112015	0.00062 U	0.00062 U	0.063 U	0.0029 U	0.0012 U	0.010 U	0.010 U	0.054	0.042	0.011	0.010 U	0.010 U	0.107
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
Trip Blank													
ICS-HCB1-GW-111915	0.0010 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.057	0.046	0.010 U	0.010 U	0.010 U	0.010 U	0.103
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-MW6-GW-111915	0.0046	0.0046	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.030 U	0.025 U	0.008 J	0.010 U	0.010 U	0.030 U
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-Eu-GW-111915	0.00074 U	0.00062 U	0.063 U	0.0016 U	0.0024 U	0.010 U	0.20	0.010 U	0.050 U	0.036	0.010 U	0.010 U	0.236
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-Eu-GW-111915													
ICS-SAMW3-GW-111915	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
Trip Blank													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
(Monitoring Well) Groundwater Analyses, November 2015

Field I.D.	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-MW7-GW-112315	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.043	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.043
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-SAMW1-GW-112315	0.00062 U	0.0034 U	0.063 U	0.0012 U	0.0012 U	0.010 U	4.4	0.010 U	1.8	0.71	0.010 U	0.010 U	6.91
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-DUPL1-GW-112315	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.049	0.010 U	0.019	0.010 U	0.010 U	0.010 U	0.068
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
Trip Blank													
ICS-DMCMWA-GW-112415	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.18	0.29	0.14	0.010 U	0.010 U	0.61
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DMCMWB-GW-112415	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020	0.020	0.009 J	0.010 U	0.010 U	0.049
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-DMCMWC-GW-112415	0.0012 U	0.019 U	0.13 U	0.0025 U	0.0025 U	0.010 U	0.010 U	0.012	0.019 J_p	0.010 U	0.010 U	0.010 U	0.031
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-DUPL2-GW-112415	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.16	0.26	0.13	0.010 U	0.010 U	0.55
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
Trip Blank													

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses or multi-parametric deviations on GC/ECD.

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: June 30, 2016

SUBJECT: Data Evaluation/Assessment for 62 Groundwaters Collected from Monitoring Wells during November 2015 and March 2016 from the ICS / [former] NW Cooperage Site, Seattle, WA (*revision of 5/23/2016 report*)

Sixty-two well water samples were collected by Dalton, Olmsted & Fuglevand (DOF) staff during November, 2015 and March, 2016 for chemical characterization. All samples were delivered in ten sample delivery groups (SDG's) to Analytical Resources Inc. (ARI) of Tukwila, Washington within 50 hours of collection. Samples were received on ice at temperatures between 0.7 and 5.9 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Six trip/transport blanks were submitted and analyzed for TPH-G and VOC's, and two field equipment rinsate blanks were generated and analyzed for quality control purposes. One analytical delivery group (AXI6/AXI7), analyzed for total (nonfiltered) and dissolved (0.45 µm filtration) metals, consisted of samples (held in laboratory archival storage) collected during November, 2015. The holding time of 4 months did not exceed the U.S. EPA maximum recommended holding time of 6 months. Three analytical groups (AZE1, AZE2 and AZH9) taken from laboratory archival storage were analyzed for total (nonfiltered) metals after a 29-day holding time (maximum recommended holding time is 6 months).

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012) and *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081B	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082	chlor. phenols	SW846-M.8041
metals (excl Hg)	SW846-M.6010C	Hg (low-level)	SW846-M.7470A
	& EPA 200.8		
total petroleum HC's	NWTPH-Dx & -G		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed and reported from analyses performed in the (M.8270D) SIM mode to improve/lower the reporting limits. SVOC lower reporting limits were enhanced/improved over previous monitoring events by increasing extraction volumes to one liter utilizing separatory funnel technique. PAH results were preferentially reported from the full-scan analyses (full-scan GC/MS is considered a more reliable method and exhibits minimal bias) or from the method yielding non-qualified results for detected analytes. Lower reporting limits for nondetected PAH's are reported from the SIM method. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). A comparison of results from the two methods shows comparable responses with some slight positive bias from the VOC's method. This is likely due to greater analyte recoveries by the VOC's method and losses during solvent concentration via the SVOC's method. The attached results table reports only the results for the dichloro- and trichloro-benzenes from the SVOC's analyses due to greater analyte and surrogate compound recoveries. Naphthalene and hexachlorobutadiene (HCBd) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081B) methods, respectively. Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081B, while only the results generated by M.8081B are retained here due to significantly reduced reporting limits. The lower reporting limit for pentachlorophenol (PCP) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD option). PCP reporting limits were also improved from previous monitoring events due to increased sample extraction volumes. NWTPH-Dx extract preparation was supplemented with silica gel chromatography and acid cleanup steps.

Major cations (Ca, Mg & Na) were analyzed by ICP-AES (M.6010C). Other metals were determined by the application of ICP-MS (U.S. EPA 200.8) UCTTM (universal cell technology) operated in the kinetic energy dissociation (KED) mode tuned for optimum selectivity of arsenic, cadmium, copper, nickel and zinc. This allows increased discrimination from interferences in saline and brackish waters (samples typically require dilution to yield TDS < 1000-2000 ppm). Chromium, lead and silver are analyzed by ICP-MS in the "standard mode".

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. The maximum recommended holding time of 7 days for PCB's in water was exceeded by 4 days (total of 11 days) for samples ICS-MW7-GW-032516, ICS-DUP1-GW-032516 and ICS-Ap(MW25)-GW-032516. This deviation is a result of extract losses in the laboratory during processing. Due to the relatively short duration of the exceedance and the refractoriness of PCB's, this deviation from specification is considered minor and is not expected to adversely affect sample results and associated data quality. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP. In most cases, the lower of the project GW PQL and the LDW PQL were achieved. Several samples, such as ICS-MWA-GW-033016, ICS-MW1-GW-032216, ICS-SAMW1-GW-032416 and ICS-SAMW2-GW-032916, exhibited elevated pesticide reporting limits due to interferences associated with the presence of PCB's. Selected results (4,4'-DDD and pentachlorophenol) were qualified with the "J_p" qualifier code due to variability in the dual column confirmation analyses in samples ICS-Eu(MW28)-GW-032416, ICS-MWA-GW-033016 (and its blind duplicate, ICS-DUP2-GW-033016), and ICS-HCB2R-GW-032316 (>40RPD [relative percent difference] in dual-column quantitative confirmation). Multi-parametric analyte results, such as for Aroclor 1254 in sample ICS-SAMW2-GW-032916 was "J_p" qualified due to deviations in relative peak contributions compared to the standard reference mixture. Analyte concentrations reported at less than the [specified] lower reporting limit (LOQ) or the established linear concentration range for all parameter groups are qualified as estimated with the "J" qualifier code. Metals results at less than the LOQ are reported in the attached results table with one significant digit or at nominal units.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). All method blanks reported nondetects, with the exception of the following:

Analyte	Analysis date	Conc. (µg/L)
Methylene chloride (VOC's)	3-30-16 (AXZ6, AYB4)	0.65 J
	3-31-16 (AYE9)	0.70 J
	3-31-16 (AYE9)	0.68 J
	4-4-16 (AYI7)	1.2
Carbon disulfide (VOC's)	3-30-16 (AXZ6, AYB4)	0.08 J
	4-8-16 (AYK6)	0.05 J
	4-12-16 (AYM1)	0.04 J
Toluene (VOC's)	3-31-16 (AYE9)	0.05 J
	4-4-16 (AYI7)	0.10 J
	4-12-16 (AYM1)	0.05 J
m,p-Xylenes (VOC's)	3-30-16 (AXZ6, AYB4)	0.06 J
	4-4-16 (AYI7)	0.06 J
	4-12-16 (AYM1)	0.06 J
1,4-Dichlorobenzene (VOC's)	3-30-16 (AXZ6, AYB4)	0.04 J
1,2,4-Trimethylbenzene (VOC's)	3-30-16 (AXZ6, AYB4)	0.04 J
	3-31-16 (AYE9)	0.04 J
	4-4-16 (AYI7)	0.04 J
4-Isopropyltoluene (VOC's)	3-30-16 (AXZ6, AYB4)	0.03 J
n-Butylbenzene (VOC's)	3-30-16 (AXZ6, AYB4)	0.08 J
Diethylphthalate (SVOC's)	4-1-16 (AYG8, AYI7)	0.1 J
bis(2-Ethylhexyl)phthalate (SVOC's)	3-30-16 (AYE9)	0.2 J
Calcium (ICP-AES)	3-31-16 (AXZ6, AYE9)	2.7 J
	3-31-16 (AYB4)	1.9 J
	4-2-16 (AYK6, AYM1)	4.6 J
	4-2-16 (AYG8)	2.7 J
	4-2-16 (AYI7)	4.7 J
Sodium (ICP-AES)	3-31-16 (AXZ6, AYE9)	5.8 J
	3-31-16 (AYB4)	110 J
	4-2-16 (AYK6, AYM1)	16 J
	4-2-16 (AYG8)	36 J

	4-2-16 (AYI7)	8.6 J
Cadmium	4-4-16 (AYK6, AYM1)	0.01 J
Chromium	3-31-16 (AYB4)	0.1 J
	4-4-16 (AYG8)	0.27 J
	4-4-16 (AYI7)	0.22 J
	4-21-16 (AZE1)	0.09 J
	4-21-16 (AZE2)	0.1 J
	4-22-16 (AZH9)	0.18 J
Copper (ICP-MS)	3-31-16 (AXZ6, AYE9)	0.04 J
	4-4-16 (AYG8)	0.06 J
	4-4-16 (AYI7)	0.06 J
	4-21-16 (AZE1)	0.04 J
	4-21-16 (AZE2)	0.12 J
	4-22-16 (AZH9)	0.28 J
Lead (ICP-MS)	3-31-16 (AYB4)	0.02 J
	4-4-16 (AYG8)	0.02 J
	4-4-16 (AYI7)	0.01 J
	4-21-16 (AZE2)	0.01 J
	4-22-16 (AZH9)	0.02 J
Mercury (CVAAS)	4-4-16 (AYI7)	3 ng/L J
Nickel (ICP-MS)	4-4-16 (AYG8)	0.02 J
	4-21-16 (AZE1)	0.02 J
	4-21-16 (AZE2)	0.02 J
	4-28-16 (AZH9)	0.06 J
Zinc (ICP-MS)	3-31-16 (AXZ6, AYE9)	2.5 J
	4-4-16 (AYK6, AYM1)	0.33 J

Sample results that are likely affected by laboratory background contributions are qualified with the “J_B” qualifier code indicating potential positive bias. Positive results (detections) reported at 2x method blank levels in associated data delivery groups, which required qualification with the “J_B” code are found in the attached results table for methylene chloride, toluene, *m,p*-xylenes, 1,2,4-trimethylbenzene, *bis*(2-ethylhexyl)phthalate, cadmium, chromium, copper, lead, mercury, nickel and zinc.

Two field equipment **rinsate blanks** were generated and submitted for determination of potential bias associated with field activities. Six **trip/transport blanks** were also generated and submitted for analysis and determination of potential contamination during handling of VOC’s and TPH-G samples. Results of these analyses are reported in the attached table. Trip/transport blanks reported detects, generally less than the LOQ, for 16 VOC analytes. Trip/transport blanks results are treated similarly to method blanks – data qualification and limitations are associated with samples within each delivery group. Chloromethane is the only additional analyte requiring data qualification with the “J_B” qualifier code due to potential positive bias from laboratory and/or field background and handling. Chloromethane was not reported in laboratory method blanks, but was found in half of the trip/transport blanks at less than the LOQ of 0.50 µg/L (0.15 J, 0.20 J and 0.24 µg/L J). With the exception of chloromethane, no additional results required further qualification due to trip/transport blanks performance. Field equipment rinsate blanks exhibited low level metals (generally less than the LOQ), chloromethane, other VOC analytes typically found in method blanks, and *bis*(2-ethylhexyl)phthalate (at 1.6 µg/L). No additional data qualification of project sample results was made based on field equipment rinsate blanks performance.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. LCS/LCSD runs were performed for all analytical groups, however, MS/MSD runs were occasionally not performed. **LCS** and **LCSD** recoveries for methylene chloride were reported slightly high at 126 and 132% during 3-30-16, between 134 and 139% on 3-31-16 and 4-1-16, and 138 and 148% on 4-4-16, however no methylene chloride was detected in any site samples. 1,1-Dichloroethene reported slightly higher than specified recoveries at 119 and 126% for LCS/LCSD on 4-4-16 for SDG AYI7. This analyte was detected only once in site samples; in ICS-SAMW1-GW-032416 associated with SDG AYE9. Benzoic acid reported a slightly low LCS recovery on 3-29-16 at 28% (lower limit specification = 30%), which is comparable to the d₅-phenol surrogate compound of 24%; thus, showing good correlation with the appropriate surrogate compound. A slightly lower than specification recovery of 27% was also reported on 4-4-16 (for SDG AYK6 and AYM1). SIM PAH analytes reported high LCS recoveries, up to 250%, on 3-28-16 for sample delivery group AXZ6 and AYB4. The associated MS/MSD performance for PAH's in sample ICS-KI-GW-032216 is well within specification, and a second and associated LCS (4-2-16) for the group reported acceptable recovery performance for all PAH analytes. Hexachlorobutadiene (HCBd) recovery reported by M.8081B in LCS 4-2-16 associated with SDG AYM1 was slightly low at 28% (lower limit specification = 30%). No HCBd has been reported as detected in any site groundwater or soil samples. No sample results require qualification due to LCS/LCSD recovery performance.

Matrix spike recovery performance was generally within specification for almost all analytes. Phenolic and acidic analytes showed generally lower recoveries than the neutral organic compounds and occasionally less than the specified lower advisory limit. MS/MSD recovery for benzoic acid was 28 and 30% in ICS-Ku(M34)-GW-032216 and 30% in ICS-Du(MW22)-GW-032816. ICS-Ku(M34)-GW-032216 also showed an MS/MSD phenol recovery of 28 and 28%, and a d₅-phenol (surrogate compound) recovery of 24 and 22%, indicating that the surrogate compound, benzoic acid and phenol recoveries generally correlated well, as expected. The LCS (4-1-16) associated with ICS-Du(MW22)-GW-032816 (SDG AYI7) showed an acceptable benzoic acid recovery of 41%. MS/MSD recovery performance for endrin aldehyde in ICS-HI(MW24)-GW-032916 (SDG AYK6) was reported slightly low at 15 and 25% while the associated LCS (4-2-16) was acceptable at 34%. MS recoveries for endrin aldehyde and HCBd were slightly low at 28% and 25%, respectively, for ICS-MW3-GW-032416 while the associated MSD recoveries (all in the range of 32-75%) were within specified limits (30-160%). MS/MSD diesel fuel recoveries in sample ICS-MW4-GW-032916 (SDG AYK6) are reported at 56 and 72%, while the associated LCS/LCSD (4-4-16) recoveries are acceptable at 77% (for both). PCB's and major cation MS/MSD recovery measurements exhibited nonevaluable results due to high native levels in ICS-Eu(MW28)-GW-032416 (SDG AYE9) and ICS-MW4-GW-032916 (SDG AYK6), respectively. No results required qualification due to noncompliant LCS/LCSD and MS/MSD recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd] and hexachlorobenzene [HCB]), PCB's, and chlorinated phenols (PCP). Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d₄-1,2-dichloroethane, d₈-

toluene, 4-bromofluorobenzene and d₄-1,2-dichlorobenzene) and TPH-G (d₅-chlorobenzene, d₈-toluene, 4-bromofluorobenzene and d₄-1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d₁₀-2-methylnaphthalene, d₁₀-fluoranthene and d₁₄-dibenz(a,h)anthracene. Chlorinated phenols by M.8041 utilized 2,4,6-tribromophenol as the recovery surrogate compound. All surrogate recoveries were within specification, with the following exceptions: TCMX (chlor. pesticides) at 27% and 26% (specified range = 30-160%) in ICS-MW2-GW-032216 and Method Blank (4-1-16 for SDG AYG8), respectively, by M.8081B; *o*-terphenyl (TPH-Dx) at 45% (specified range = 50-150%) in ICS-MW1-GW-032216 by NWTPH-Dx; DCBP (chlor. pesticides) at 26% and 21% (specified range = 30-160%) in ICS-MW3-GW-032416 and ICS-SAMW1-GW-032416, respectively, by M.8081B; d₄-1,2-dichloroethane (VOC's) at 62% (specified range = 80-129%) in ICS-SAMW2-GW-032916 by M.8260C; and DCBP (PCB's) at 26% (specified range = 29-120%) and TCMX at 28% (specified range = 32-120%) in ICS-MW4-GW-032916 by M.8082. All of the above deviations are marginally outside the specified ranges and/or associated with analytes reported as nondetected. Other associated measures of recovery performance for analytes are in compliance with specified acceptance ranges.

Four phenolic surrogate compounds were employed for evaluation of phenolic and acidic analytes by M.8270D. M.8270D as applied for these analyses and specifically to this project due to specific reporting requirements is an enhanced method for improvement of lower reporting limits of all method analytes. These enhancements include increased sample extraction volumes utilizing separatory funnel technique. This method includes a default pH extraction range of 5.0 to 9.0 for extraction of acidic, neutral and basic compounds. This pH range is considered a compromise range to include all three classes of compounds. However, for this site, no basic compounds are included in the project compounds of concern. As a consequence, low-level phenolic/acidic compounds are expected to suffer some increased losses in recovery due to near-neutral pH extraction conditions. Optimum pH for extraction recovery of acidic compounds is near pH 2, as applied in M.8041 for the selective and efficient extraction of phenolic organic compounds. The laboratory applied their default advisory range for surrogate compound recoveries for SVOC analytes, including phenolic/acidic compounds, of 30-160%. As expected, and consistent with the observed recoveries of acidic compounds during LCS/LCSD and MS/MSD analyses by M.8270D, phenolic surrogate compounds exhibited some of the lowest recoveries of the eight surrogate compounds employed. All seven SDG's analyzed for SVOC's exhibited relatively low recoveries for d₅-phenol. The other three phenolic surrogate compounds exhibited recoveries within the default advisory range of 30-160% (with a couple of minor exceptions). The d₅-phenol recoveries ranged from 18-31%; for comparison, the recommended acceptance range for phenolic surrogate compound recoveries by M.8041 (a phenolic compound method) is 10-181%. It is determined that the recoveries exhibited by phenolic/acidic surrogate compounds analyzed by M.8270D (enhanced for low-level reporting limits) are reasonable and acceptable. Method 8270D recovery performance for this monitoring event is considered acceptable. No qualification of results was performed due to surrogate compounds performance.

Initial and continuing calibration verification (ICV/CCV) checks revealed occasional [minor] noncompliant responses (ICV/CCV RPD compared to initial calibration responses > 20) for methylene chloride, chloroethane, bromomethane, styrene, n-butylbenzene, 1,2,4-trichlorobenzene, carbon tetrachloride, trans-1,3-dichloropropene, bromoform, 4-methylphenol, acenaphthene, 2,4-dichlorophenol, benzoic acid, carbazole, 4-chlorophenylphenylether, butylbenzylphthalate, chrysene, pyrene, di-n-octylphthalate, benzo(g,h,i)perylene and dibenz(a,h)anthracene. Potentially affected sample results are required to be qualified with the “J_Q” code (detections are determined to be estimates based on calibration deviations). Results for chloroethane (6 samples), n-butylbenzene (3 samples), carbazole (3 samples), acenaphthene (3 samples) and pyrene (4 samples) required qualification due to non-compliant ICV/CCV performances.

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in samples from ICS-MWA-GW-033016, ICS-DUP2-GW-033016, ICS-MWB-GW-033016 and ICS-SAMW1-GW-032416; mineral spirits in ICS-SAMW1-GW-032416; weathered diesel fuel and mineral oil (associated with PCB’s) in ICS-MWA-GW-033016 and ICS-DUP2-GW-033016; and motor oil lubricant in ICS-Ju(MW27)-GW-032816. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; as summarized above.

Inspection of results indicated the dissolved (filtered) lead (Pb) and zinc (Zn) values reported for ICS-MW5-GW-032916 to likely be nonrepresentative due to elevated levels at 4.5 and 244 µg/L, respectively. The associated total results for Pb and Zn are 0.2 J and 0.02 J, respectively. A reanalysis of the initial digestates (within the recommended maximum holding time) for these two samples indicate highly biased results for the suspect filtered sample. The initially-reported results for Pb and Zn in the filtered sample are determined to be contaminated, likely by a contaminated [laboratory] instrument sampler tube, and are qualified with the “R” code as rejected or unusable. The results for reanalyses of both filtered and nonfiltered samples for ICS-MW5-GW-032916 are determined to be acceptable and are reported in the attached table as samples associated with delivery group BCL3 (169566-BCL3A and 169567-BCL3B).

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for ground water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Calcium 7440-70-2	Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/2015	nonfiltered	163991-AXI7O		12.0		0.8			40
ICS-DMCMWA-GW-112415	GW-mon. well	11/24/2015	field-filtered, 0.45 µm	163995-AXI7S			0.08 J				
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/2015	nonfiltered	163994-AXI7R		12.4		0.8			41
ICS-DUPL2-GW-112415	DMCMWA dup.	11/24/2015	field-filtered, 0.45 µm	163998-AXI7V			0.08 J				
ICS-MWA-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165264-AYM1A					39,600		
ICS-MWA-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165969-AZE2A		8.6		0.4			30
ICS-MWA-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165279-AYM4A							
ICS-MWA-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165270-AYM1G	2.0		0.1 U			3	
ICS-MWA-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165284-AYM4F							
ICS-DUP2-GW-033016	MWA dup.	3/30/2016	nonfiltered	165267-AYM1D					38,000		
ICS-DUP2-GW-033016	MWA dup.	3/30/2016	nonfiltered	165972-AZE2D		9.5		0.4			32
ICS-DUP2-GW-033016	MWA dup.	3/30/2016	nonfiltered	165282-AYM4D							
ICS-DUP2-GW-033016	MWA dup.	3/30/2016	field-filtered, 0.45 µm	165273-AYM1J	2.0		0.01 J			2	
ICS-DUP2-GW-033016	MWA dup.	3/30/2016	field-filtered, 0.45 µm	165288-AYM4I							
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/2015	nonfiltered	163992-AXI7P		6		0.1 J			9
ICS-DMCMWB-GW-112415	GW-mon. well	11/24/2015	field-filtered, 0.45 µm	163996-AXI7T			0.5 U				
ICS-MWB-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165265-AYM1B					130,000		
ICS-MWB-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165970-AZE2B		5		0.2 J			5
ICS-MWB-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165280-AYM4B							
ICS-MWB-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165271-AYM1H	4.5		0.02 J			4	
ICS-MWB-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165285-AYM4G							
ICS-HCB1-GW-111915	GW-mon. well	11/19/2015	nonfiltered	163977-AXI7A		0.3 J		1 U			3 J
ICS-HCB1-GW-111915	GW-mon. well	11/19/2015	field-filtered, 0.45 µm	163981-AXI7E			0.05 J				
ICS-HCB1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164916-AYE9B					217,000		
ICS-HCB1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165955-AZE1F		0.8 J		0.05 J			6
ICS-HCB1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164999-AYG1B							
ICS-HCB1-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	164922-AYE9H	0.8 J		0.05 J			4	
ICS-HCB1-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	165005-AYG1H							
ICS-HCB2R-GW-111115	GW-mon. well	11/11/2015	nonfiltered	163945-AXI6J		2.6		0.04 J			0.3 J
ICS-HCB2R-GW-111115	GW-mon. well	11/11/2015	field-filtered, 0.45 µm	163955-AXI6T			0.03 J				
ICS-HCB2R-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164915-AYE9A					35,700		
ICS-HCB2R-GW-032316	GW-mon. well	3/23/2016	nonfiltered	165954-AZE1E		0.5		0.1			1.4
ICS-HCB2R-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164998-AYG1A							
ICS-HCB2R-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164921-AYE9G	0.1 J		0.1 J			0.2 J	
ICS-HCB2R-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	165004-AYG1G							
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/2015	nonfiltered	163993-AXI7Q		1		0.5 U			3
ICS-DMCMWC-GW-112415	GW-mon. well	11/24/2015	field-filtered, 0.45 µm	163997-AXI7U			0.2 J				
ICS-MWC-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165266-AYM1C					240,000		
ICS-MWC-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165971-AZE2C		2		0.5 U			4
ICS-MWC-GW-033016	GW-mon. well	3/30/2016	nonfiltered	165281-AYM4C							
ICS-MWC-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165272-AYM1I	1 J		0.5 U			2 J	
ICS-MWC-GW-033016	GW-mon. well	3/30/2016	field-filtered, 0.45 µm	165286-AYM4H							
ICS-MW1-GW-111115	GW-mon. well	11/11/2015	nonfiltered	163936-AXI6A		6		0.2 J			24
ICS-MW1-GW-111115	GW-mon. well	11/11/2015	field-filtered, 0.45 µm	163946-AXI6K			1 U				
ICS-MW1-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164677-AXZ6C					135,000		
ICS-MW1-GW-032216	GW-mon. well	3/22/2016	nonfiltered	165977-AZE2H		9		0.2 J			26
ICS-MW1-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164806-AYC0H							
ICS-MW1-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164683-AXZ6I	4		0.5 U			7	
ICS-MW1-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164811-AYC0H							

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Calcium 7440-70-2	Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L
ICS-SAMW1-GW-112315	GW-mon. well	11/23/2015	nonfiltered	163986-AXI7J							
ICS-SAMW1-GW-112315	GW-mon. well	11/23/2015	field-filtered, 0.45 µm	163989-AXI7M							
ICS-SAMW1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164919-AYE9E					19,300		
ICS-SAMW1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165958-AZE1I		2		0.2 U			15
ICS-SAMW1-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165002-AYG1E							
ICS-SAMW1-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	164925-AYE9K	2.3		0.2 U			13	
ICS-SAMW1-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	165008-AYG1K							
ICS-MW2-GW-111115	GW-mon. well	11/11/2015	nonfiltered	163937-AXI6B		4.2		0.01 J			65.7
ICS-MW2-GW-111115	GW-mon. well	11/11/2015	field-filtered, 0.45 µm	163947-AXI6L			0.01 J				
ICS-MW2-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164678-AXZ6D					12,700		
ICS-MW2-GW-032216	GW-mon. well	3/22/2016	nonfiltered	165978-AZE2I		4		0.01 J			76
ICS-MW2-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164807-AYC0D							
ICS-MW2-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164684-AXZ6J	4.1		0.2 U			69	
ICS-MW2-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164812-AYC0I							
ICS-SAMW2-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163965-AXI6AD		2		0.5 U			3
ICS-SAMW2-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163971-AXI6AJ			0.05 J				
ICS-SAMW2-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165204-AYK6D					46,600		
ICS-SAMW2-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165968-AZE1S		4		0.02 J			6
ICS-SAMW2-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165213-AYK7D							
ICS-SAMW2-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165209-AYK6I	3.7		0.01 J _B			5	
ICS-SAMW2-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165217-AYK7H							
ICS-MW3-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163960-AXI6Y		5.1		0.2 U			75
ICS-MW3-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163966-AXI6AE			0.2 U				
ICS-MW3-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164917-AYE9C					21,400		
ICS-MW3-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165956-AZE1G		6		0.02 J			82
ICS-MW3-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165000-AYG1C							
ICS-MW3-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	164923-AYE9I	6.0		0.04 J			75	
ICS-MW3-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	165006-AYG1I							
ICS-SAMW3-GW-111915	GW-mon. well	11/19/2015	nonfiltered	163980-AXI7D		0.7 J		0.2 J			1 J
ICS-SAMW3-GW-111915	GW-mon. well	11/19/2015	field-filtered, 0.45 µm	163984-AXI7H			0.2 J				
ICS-SAMW3-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165049-AYI7D					9240		
ICS-SAMW3-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165963-AZE1N		0.7		0.04 J			2
ICS-SAMW3-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165102-AYI8D							
ICS-SAMW3-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165054-AYI7I	0.4 J		0.02 J			1	
ICS-SAMW3-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165107-AYI8I							
ICS-MW4-GW-111115	GW-mon. well	11/11/2015	nonfiltered	163938-AXI6C		3.0		0.01 J			46.4
ICS-MW4-GW-111115	GW-mon. well	11/11/2015	field-filtered, 0.45 µm	163948-AXI6M			0.1 U				
ICS-MW4-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165201-AYK6A					12,500		
ICS-MW4-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165965-AZE1P		3		0.01 J			64
ICS-MW4-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165210-AYK7A							
ICS-MW4-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165206-AYK6F	2.8		0.01 J _B			67	
ICS-MW4-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165214-AYK7E							
ICS-MW5-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163961-AXI6Z		0.5		0.1 U			11
ICS-MW5-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163967-AXI6AF			0.1 U				
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165202-AYK6B					12,100		
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165966-AZE1Q		0.6		0.02 J			12
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	nonfiltered	169566-BCL3A							
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165211-AYK7B							
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165207-AYK6G	0.5		0.02 J _B			12	
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	169567-BCL3B							
ICS-MW5-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165215-AYK7F							

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Calcium 7440-70-2	Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MW6-GW-111915	GW-mon. well	11/19/2015	nonfiltered	163978-AXI7B		0.4		0.01 J			9
ICS-MW6-GW-111915	GW-mon. well	11/19/2015	field-filtered, 0.45 µm	163982-AXI7F			0.1 U				
ICS-MW6-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164918-AYE9D					22,100		
ICS-MW6-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165957-AZE1H		0.5		0.02 J			10
ICS-MW6-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165001-AYG1D							
ICS-MW6-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	164924-AYE9J	0.4 J		0.02 J			8	
ICS-MW6-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	165007-AYG1J							
ICS-MW7-GW-112315	GW-mon. well	11/23/2015	nonfiltered	163985-AXI7I		0.9		0.1 U			7
ICS-MW7-GW-112315	GW-mon. well	11/23/2015	field-filtered, 0.45 µm	163988-AXI7L			0.1 U				
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/2015	nonfiltered	163987-AXI7K		0.9		0.1 U			7
ICS-DUPL1-GW-112315	GW-MW7 dup.	11/23/2015	field-filtered, 0.45 µm	163990-AXI7N			0.1 U				
ICS-MW7-GW-032516	GW-mon. well	3/25/2016	nonfiltered	165024-AYG8A					18,200		
ICS-MW7-GW-032516	GW-mon. well	3/25/2016	nonfiltered	166109-AZH9A		1.2		0.1 U			6.3
ICS-MW7-GW-032516	GW-mon. well	3/25/2016	nonfiltered	165032-AYH0A							
ICS-MW7-GW-032516	GW-mon. well	3/25/2016	field-filtered, 0.45 µm	165026-AYG8C	1.1		0.2 U			7	
ICS-MW7-GW-032516	GW-mon. well	3/25/2016	field-filtered, 0.45 µm	165034-AYH0C							
ICS-DUP1-GW-032516	GW-MW7 dup.	3/25/2016	nonfiltered	165025-AYG8B					19,100		
ICS-DUP1-GW-032516	GW-MW7 dup.	3/25/2016	nonfiltered	166110-AZH9B		1.2		0.01 J			5.8
ICS-DUP1-GW-032516	GW-MW7 dup.	3/25/2016	nonfiltered	165033-AYH0B							
ICS-DUP1-GW-032516	GW-MW7 dup.	3/25/2016	field-filtered, 0.45 µm	165027-AYG8D	1.2		0.2 U			7	
ICS-DUP1-GW-032516	GW-MW7 dup.	3/25/2016	field-filtered, 0.45 µm	165035-AYH0D							
ICS-MW8-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163962-AXI6AA		9.9		0.1 U			3
ICS-MW8-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163968-AXI6AG			0.1 U				
ICS-MW8-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164679-AXZ6E					30,300		
ICS-MW8-GW-032216	GW-mon. well	3/22/2016	nonfiltered	165979-AZE2J		9		0.01 J			2.6
ICS-MW8-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164808-AYC0E							
ICS-MW8-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164685-AXZ6K	10.1		0.02 J			4	
ICS-MW8-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164813-AYC0J							
ICS-Cp(MW20)-GW-032516	GW-mon. well	3/25/2016	nonfiltered	165030-AYG8G							
ICS-Du(MW22)-GW-111815	GW-mon. well	11/18/2015	nonfiltered	163956-AXI6U		1.6		0.1 U			10
ICS-Du(MW22)-GW-111815	GW-mon. well	11/18/2015	field-filtered, 0.45 µm	163958-AXI6W			0.01 J				
ICS-Du(MW22)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165047-AYI7B					16,100		
ICS-Du(MW22)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165961-AZE1L		2		0.01 J			13
ICS-Du(MW22)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165100-AYI8B							
ICS-Du(MW22)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165052-AYI7G	1.8		0.02 J			10	
ICS-Du(MW22)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165105-AYI8G							
ICS-Dp(MW23)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165056-AYI7K							
ICS-HI(MW24)-GW-111815	GW-mon. well	11/18/2015	nonfiltered	163957-AXI6V		0.3 J		0.2 U			2 J
ICS-HI(MW24)-GW-111815	GW-mon. well	11/18/2015	field-filtered, 0.45 µm	163959-AXI6X			0.5 U				
ICS-HI(MW24)-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165203-AYK6C					63,200		
ICS-HI(MW24)-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165967-AZE1R		0.4 J		0.5 U			3
ICS-HI(MW24)-GW-032916	GW-mon. well	3/29/2016	nonfiltered	165212-AYK7C							
ICS-HI(MW24)-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165208-AYK6H	0.2 J		0.2 U			2 J	
ICS-HI(MW24)-GW-032916	GW-mon. well	3/29/2016	field-filtered, 0.45 µm	165216-AYK7G							
ICS-Ap(MW25)-GW-032516	GW-mon. well	3/25/2016	nonfiltered	165028-AYG8E							
ICS-Ju(MW27)-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163963-AXI6AB		2.2		0.02 J			3
ICS-Ju(MW27)-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163969-AXI6AH			0.01 J				
ICS-Ju(MW27)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165050-AYI7E					24,600		
ICS-Ju(MW27)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165964-AZE1O		3		0.04 J			2
ICS-Ju(MW27)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165103-AYI8E							
ICS-Ju(MW27)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165055-AYI7J	3.3		0.2 U			2	
ICS-Ju(MW27)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165108-AYI8J							

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Calcium 7440-70-2	Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L
ICS-Eu(MW28)-GW-111915	GW-mon. well	11/19/2015	nonfiltered	163979-AXI7C							
ICS-Eu(MW28)-GW-111915	GW-mon. well	11/19/2015	field-filtered, 0.45 µm	163983-AXI7G			1 U				
ICS-Eu(MW28)-GW-032416	GW-mon. well	3/24/2016	nonfiltered	164920-AYE9F					269,000		
ICS-Eu(MW28)-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165959-AZE1J		3		0.05 J			9
ICS-Eu(MW28)-GW-032416	GW-mon. well	3/24/2016	nonfiltered	165003-AYG1F							
ICS-Eu(MW28)-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	164926-AYE9L	3		0.1 J			4 J	
ICS-Eu(MW28)-GW-032416	GW-mon. well	3/24/2016	field-filtered, 0.45 µm	165009-AYG1L							
ICS-Fu(MW30)-GW-111115	GW-mon. well	11/11/2015	nonfiltered	163939-AXI6D		0.7		0.02 J			0.2 J
ICS-Fu(MW30)-GW-111115	GW-mon. well	11/11/2015	field-filtered, 0.45 µm	163949-AXI6N			0.03 J				
ICS-Fu(MW30)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164779-AYB4A					85,600		
ICS-Fu(MW30)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	165950-AZE1A		0.2 J		0.02 J			0.2 J _B
ICS-Fu(MW30)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164819-AYC2A							
ICS-Fu(MW30)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164784-AYB4F	0.2 J		0.02 J			0.2 J _B	
ICS-Fu(MW30)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164823-AYC2E							
ICS-Fl(MW31)-GW-111015	GW-mon. well	11/10/2015	nonfiltered	163940-AXI6E		1.3		0.01 J			21
ICS-Fl(MW31)-GW-111015	GW-mon. well	11/10/2015	field-filtered, 0.45 µm	163950-AXI6O			0.2 U				
ICS-Fl(MW31)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164780-AYB4B					60,600		
ICS-Fl(MW31)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	165951-AZE1B		1 J		0.05 J			21
ICS-Fl(MW31)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164820-AYC2B							
ICS-Fl(MW31)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164785-AYB4G	0.9 J		0.5 U			20	
ICS-Fl(MW31)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164824-AYC2F							
ICS-Gl(MW32)-GW-111015	GW-mon. well	11/10/2015	nonfiltered	163942-AXI6G		0.7		0.01 J			2
ICS-Gl(MW32)-GW-111015	GW-mon. well	11/10/2015	field-filtered, 0.45 µm	163952-AXI6Q			0.5 U				
ICS-Gl(MW32)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164782-AYB4D					110,000		
ICS-Gl(MW32)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	165953-AZE1D		1 J		0.05 J			4
ICS-Gl(MW32)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164822-AYC2D							
ICS-Gl(MW32)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164787-AYB4I	0.8 J		0.05 J			3	
ICS-Gl(MW32)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164826-AYC2H							
ICS-Gu(MW33)-GW-111015	GW-mon. well	11/10/2015	nonfiltered	163941-AXI6F		0.9		0.01 J			2
ICS-Gu(MW33)-GW-111015	GW-mon. well	11/10/2015	field-filtered, 0.45 µm	163951-AXI6P			0.1 U				
ICS-Gu(MW33)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164781-AYB4C					124,000		
ICS-Gu(MW33)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	165952-AZE1C		1.8		0.01 J			3.3
ICS-Gu(MW33)-GW-032316	GW-mon. well	3/23/2016	nonfiltered	164821-AYC2C							
ICS-Gu(MW33)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164786-AYB4H	1.8		0.2 U			3	
ICS-Gu(MW33)-GW-032316	GW-mon. well	3/23/2016	field-filtered, 0.45 µm	164825-AYC2G							
ICS-Ku(MW34)-GW-111015	GW-mon. well	11/10/2015	nonfiltered	163943-AXI6H		0.5		0.03 J			0.6
ICS-Ku(MW34)-GW-111015	GW-mon. well	11/10/2015	field-filtered, 0.45 µm	163953-AXI6R			0.02 J				
ICS-Ku(MW34)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164675-AXZ6A					36,800		
ICS-Ku(MW34)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	165975-AZE2F		0.7		0.07 J			0.9
ICS-Ku(MW34)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164804-AYC0A							
ICS-Ku(MW34)-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164681-AXZ6G	0.5		0.07 J			0.5 J	
ICS-Ku(MW34)-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164809-AYC0F							
ICS-Kl(MW35)-GW-111015	GW-mon. well	11/10/2015	nonfiltered	163944-AXI6I		0.5		0.01 J			3
ICS-Kl(MW35)-GW-111015	GW-mon. well	11/10/2015	field-filtered, 0.45 µm	163954-AXI6S			0.2 U				
ICS-Kl(MW35)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164676-AXZ6B					43,600		
ICS-Kl(MW35)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	165976-AZE2G		0.3 J		0.05 J			3
ICS-Kl(MW35)-GW-032216	GW-mon. well	3/22/2016	nonfiltered	164805-AYC0B							
ICS-Kl(MW35)-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164682-AXZ6H	0.5 J		0.5 U			3	
ICS-Kl(MW35)-GW-032216	GW-mon. well	3/22/2016	field-filtered, 0.45 µm	164810-AYC0G							

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Calcium 7440-70-2	Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L
ICS-II(MW36)-GW-112015	GW-mon. well	11/20/2015	nonfiltered	163964-AXI6AC							
ICS-II(MW36)-GW-112015	GW-mon. well	11/20/2015	field-filtered, 0.45 µm	163970-AXI6AI			1 U				4
ICS-II(MW36)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165048-AYI7C					83,400		
ICS-II(MW36)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165962-AZE1M							6
ICS-II(MW36)-GW-032816	GW-mon. well	3/28/2016	nonfiltered	165101-AYI8C							
ICS-II(MW36)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165053-AYI7H	0.7 J		0.5 U			5	
ICS-II(MW36)-GW-032816	GW-mon. well	3/28/2016	field-filtered, 0.45 µm	165106-AYI8H							
ICS-Bp(MW38)-GW-032516	GW-mon. well	3/25/2016	nonfiltered	165029-AYG8F							
Trip Blank	blank water	3/22/2016	trip/transport blank	164680-AXZ6F							
Trip Blank	blank water	3/23/2016	trip/transport blank	164783-AYB4E							
Trip Blank	blank water	3/24/2016	trip/transport blank	164927-AYE9M							
ICS-RB1-GW-032716	field equip rinsate	3/27/2016	nonfiltered	165046-AYI7A					38 J		
ICS-RB1-GW-032716	field equip rinsate	3/27/2016	nonfiltered	165960-AZE1K		0.2 U		0.01 J			0.3 J
ICS-RB1-GW-032716	field equip rinsate	3/27/2016	nonfiltered	165099-AYI8A							
ICS-RB1-GW-032716	field equip rinsate	3/27/2016	field-filtered, 0.45 µm	1650516-AYI7F	0.2 U		0.1 U			0.2 J _B	
ICS-RB1-GW-032716	field equip rinsate	3/27/2016	field-filtered, 0.45 µm	165104-AYI8F							
Trip Blank	blank water	3/28/2016	trip/transport blank	165057-AYI7L							
Trip Blank	blank water	3/29/2016	trip/transport blank	165205-AYK6E							
Trip Blank	blank water	3/30/2016	trip/transport blank	165269-AYM1F							
ICS-RB2-GW-033016	field equip rinsate	3/30/2016	nonfiltered	165268-AYM1E					46 J		
ICS-RB2-GW-033016	field equip rinsate	3/30/2016	nonfiltered	165973-AZE2E		0.2 U		0.1 U			0.2 J _B
ICS-RB2-GW-033016	field equip rinsate	3/30/2016	nonfiltered	165283-AYM4E							
ICS-RB2-GW-033016	field equip rinsate	3/30/2016	nonfiltered	165274-AYM1K	0.2 U		0.01 J _B			0.5 U	
ICS-RB2-GW-033016	field equip rinsate	3/30/2016	nonfiltered	165290-AYM4J							

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-DMCMAW-GW-112415		41.4		306					20.2		0.2 J			188	
ICS-DMCMAW-GW-112415										0.02 J					
ICS-DUPL2-GW-112415		44.1		318					21.5		0.2 J			199	
ICS-DUPL2-GW-112415										0.02 J					
ICS-MWA-GW-033016					66,700							473,000			374
ICS-MWA-GW-033016		26		206				12			0.1 J			240	
ICS-MWA-GW-033016						190									
ICS-MWA-GW-033016	0.3 J		0.08 J					0.3 J		0.01 J			4 U		
ICS-MWA-GW-033016					62,900	20 U						439,000			354
ICS-DUP2-GW-033016		30		235				14			0.1 J			160	
ICS-DUP2-GW-033016						157									
ICS-DUP2-GW-033016	0.2 J		0.1					0.3 J		0.01 J			0.4 J		
ICS-DUP2-GW-033016						20 U									
ICS-DMCMWB-GW-112415		4		32.8				2 J			0.05 J			30	
ICS-DMCMWB-GW-112415										0.05 J					
ICS-MWB-GW-033016					148,000							955,000			935
ICS-MWB-GW-033016		2 J		12.6				2 J			1 U			13 J	
ICS-MWB-GW-033016						14 J									
ICS-MWB-GW-033016	0.5 J		0.1 J					0.7 J		0.4 U			3 J		
ICS-MWB-GW-033016						7 J									
ICS-HCB1-GW-111915		5 U		0.04 J				0.3 J			2 U			40 U	
ICS-HCB1-GW-111915										1 U					
ICS-HCB1-GW-032416					366,000							2,660,000			2050
ICS-HCB1-GW-032416		0.5 J		0.3 J				0.4 J			1 U			5 J	
ICS-HCB1-GW-032416						20 U									
ICS-HCB1-GW-032416	0.3 J		0.2 J					0.4 J		1 U			20 U		
ICS-HCB1-GW-032416						3 J									
ICS-HCB2R-GW-111115		0.4 J		0.2				2.3			0.2 U			10	
ICS-HCB2R-GW-111115										0.2 U					
ICS-HCB2R-GW-032316					3100							3520			102
ICS-HCB2R-GW-032316		3.6		5.9				2.5			0.03 J			19	
ICS-HCB2R-GW-032316						20 J									
ICS-HCB2R-GW-032316	2.7		0.02 J					2.3		0.01 J			16		
ICS-HCB2R-GW-032316						3 J									
ICS-DMCMWC-GW-112415		2 J		1.6				0.9 J			1 U			4 J	
ICS-DMCMWC-GW-112415										2 U					
ICS-MWC-GW-033016					319,000							2,290,000			1914
ICS-MWC-GW-033016		3		2.4				1 J			0.05 J			8 J	
ICS-MWC-GW-033016						27									
ICS-MWC-GW-033016	1 J		0.2 J					0.3 J		1 U			15 J		
ICS-MWC-GW-033016						5 J									
ICS-MW1-GW-111115		22		20				12			0.05 J			40	
ICS-MW1-GW-111115										2 U					
ICS-MW1-GW-032216					266,000							2,120,000			1433
ICS-MW1-GW-032216		24		14.8				17			0.1 J			60	
ICS-MW1-GW-032216						58									
ICS-MW1-GW-032216	0.5 J		0.2 J					6		0.05 J			3 J _B		
ICS-MW1-GW-032216						4 J									

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-SAMW1-GW-112315		3.3		2.0					10.4		0.2 J			5	
ICS-SAMW1-GW-112315										0.1 J					
ICS-SAMW1-GW-032416					17,400							828,000			120
ICS-SAMW1-GW-032416		3		1.8				3			0.1 J			5 J	
ICS-SAMW1-GW-032416						15 J									
ICS-SAMW1-GW-032416	1.0 J		0.7					2		0.1 J			4 J _B		
ICS-SAMW1-GW-032416						6 J									
ICS-MW2-GW-111115		15.4		1.0					1.8		0.2 J			5	
ICS-MW2-GW-111115										0.2 J					
ICS-MW2-GW-032216					18,100							454,000			106
ICS-MW2-GW-032216		16		1.2					1.4		0.2 J			3 J	
ICS-MW2-GW-032216						14 J									
ICS-MW2-GW-032216	15		1.1					1		0.2 J			4 J _B		
ICS-MW2-GW-032216						12 J									
ICS-SAMW2-GW-112015	1 J			0.6					4		1 U			2 J	
ICS-SAMW2-GW-112015										2 U					
ICS-SAMW2-GW-032916					31,100							329,000			245
ICS-SAMW2-GW-032916		0.7 J		0.8				3			0.02 J			4 J	
ICS-SAMW2-GW-032916						6 J									
ICS-SAMW2-GW-032916	0.3 J		0.1					2.7		0.01 J			0.6 J _B		
ICS-SAMW2-GW-032916						20 U									
ICS-MW3-GW-112015		10		0.7					2		0.1 J			3 J	
ICS-MW3-GW-112015										0.1 J					
ICS-MW3-GW-032416					51,000							399,000			264
ICS-MW3-GW-032416		11		1.8					2		0.1 J			5 J	
ICS-MW3-GW-032416						15 J									
ICS-MW3-GW-032416	11		0.8					2		0.2 J			4 J _B		
ICS-MW3-GW-032416						15 J									
ICS-SAMW3-GW-111915		5		0.05 J					3		0.05 J			12 J	
ICS-SAMW3-GW-111915										1 U					
ICS-SAMW3-GW-032816					20,900							520,000			109
ICS-SAMW3-GW-032816		5		0.2 J				0.9 J			0.04 J			4 J	
ICS-SAMW3-GW-032816						10 J									
ICS-SAMW3-GW-032816	4		0.08 J					0.8 J		0.02 J			9 J		
ICS-SAMW3-GW-032816						9 J									
ICS-MW4-GW-111115		15.6		0.9					1.3		0.1 J			3 J	
ICS-MW4-GW-111115										0.1 J					
ICS-MW4-GW-032916					18,300							323,000			107
ICS-MW4-GW-032916		16		0.9					1.3		0.1 J			3 J	
ICS-MW4-GW-032916						22									
ICS-MW4-GW-032916	13.7		0.9					1.3		0.1 J			3 J		
ICS-MW4-GW-032916						10 J									
ICS-MW5-GW-112015		3.7		0.2					0.6		0.2 J			1 J	
ICS-MW5-GW-112015										0.02 J					
ICS-MW5-GW-032916					19,500							231,000			111
ICS-MW5-GW-032916		3		0.2 J				0.4 J			0.02 J			2 J	
ICS-MW5-GW-032916				0.2										1 J	
ICS-MW5-GW-032916						20 U									
ICS-MW5-GW-032916	2.8		R					0.5 J		0.03 J			R		
ICS-MW5-GW-032916			0.2										1 J		
ICS-MW5-GW-032916						3 J									

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-MW6-GW-111915		2.5		0.2					0.8		0.01 J			52	
ICS-MW6-GW-111915										0.02 J					
ICS-MW6-GW-032416					27,000							252,000			166
ICS-MW6-GW-032416		3		0.3				1		0.02 J				430	
ICS-MW6-GW-032416						20 U									
ICS-MW6-GW-032416	2		0.1 J					0.9 J		0.02 J			228		
ICS-MW6-GW-032416						20 U									
ICS-MW7-GW-112315		0.3 J		0.02 J					1.5		0.01 J			0.5 J	
ICS-MW7-GW-112315										0.02 J					
ICS-DUPL1-GW-112315		0.3 J		0.03 J					1.5		0.01 J			0.5 J	
ICS-DUPL1-GW-112315										0.01 J					
ICS-MW7-GW-032516					4310							385,000			63
ICS-MW7-GW-032516		0.1 J _B		0.04 J _B				1.4		0.01 J				4 U	
ICS-MW7-GW-032516						20 U									
ICS-MW7-GW-032516	0.1 J _B		0.02 J _B					1		0.02 J			0.6 J		
ICS-MW7-GW-032516						20 U									
ICS-DUP1-GW-032516					4550							403,000			66
ICS-DUP1-GW-032516		0.2 J _B		0.04 J _B				1.3		0.01 J				4 U	
ICS-DUP1-GW-032516						20 U									
ICS-DUP1-GW-032516	0.2 J		0.04 J _B					1		0.02 J			0.7 J		
ICS-DUP1-GW-032516						3 J									
ICS-MW8-GW-112015		1.0		2.8				5.2		0.01 J				3 J	
ICS-MW8-GW-112015										0.01 J					
ICS-MW8-GW-032216					33,000							129,000			212
ICS-MW8-GW-032216		0.8		2.7				5		0.01 J				1 J	
ICS-MW8-GW-032216						11 J									
ICS-MW8-GW-032216	0.2 J		0.04 J					5		0.02 J			1 J _B		
ICS-MW8-GW-032216						20 U									
ICS-Cp(MW20)-GW-032516															
ICS-Du(MW22)-GW-111815		4.0		1.0				2.1		0.02 J				6	
ICS-Du(MW22)-GW-111815										0.02 J					
ICS-Du(MW22)-GW-032816					12,600							153,000			92
ICS-Du(MW22)-GW-032816		4		1.2				1.0		0.03 J				2 J	
ICS-Du(MW22)-GW-032816						17 J									
ICS-Du(MW22)-GW-032816	3		0.3					0.8 J		0.02 J			3 J		
ICS-Du(MW22)-GW-032816						4 J _B									
ICS-Dp(MW23)-GW-032816															
ICS-HI(MW24)-GW-111815		0.4 J		1.1				0.7 J		1 U				3 J	
ICS-HI(MW24)-GW-111815										1 U					
ICS-HI(MW24)-GW-032916					119,000							1,020,000			648
ICS-HI(MW24)-GW-032916		0.7 J		0.3 J				0.4 J		1 U				6 J	
ICS-HI(MW24)-GW-032916						10 J									
ICS-HI(MW24)-GW-032916	0.3 J		0.04 J					0.2 J		0.4 U			3 J		
ICS-HI(MW24)-GW-032916						20 U									
ICS-Ap(MW25)-GW-032516															
ICS-Ju(MW27)-GW-112015		2.0		2.8				5.0		0.01 J				3 J	
ICS-Ju(MW27)-GW-112015										0.5 U					
ICS-Ju(MW27)-GW-032816					22,900							268,000			156
ICS-Ju(MW27)-GW-032816		3		4.4				3		0.02 J				30	
ICS-Ju(MW27)-GW-032816						13 J									
ICS-Ju(MW27)-GW-032816	1 J		1.3					3		0.4 U			19		
ICS-Ju(MW27)-GW-032816						7 J									

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	total µg/L	diss. µg/L	total µg/L	mg-CaCO ₃ /L
ICS-Eu(MW28)-GW-111915		8		23.4					8		0.05 J			27 J	
ICS-Eu(MW28)-GW-111915										2 U					
ICS-Eu(MW28)-GW-032416					531,000							3,360,000			2860
ICS-Eu(MW28)-GW-032416		2 J		9.4					3		0.05 J			16 J	
ICS-Eu(MW28)-GW-032416							15 J								
ICS-Eu(MW28)-GW-032416	0.4 J		0.1 J					2 J		0.1 J			40 U		
ICS-Eu(MW28)-GW-032416						5 J									
ICS-Fu(MW30)-GW-111115		2.2		0.01 J					3.0		0.2 U			2 J	
ICS-Fu(MW30)-GW-111115										0.2 U					
ICS-Fu(MW30)-GW-032316					14,300							20,700			273
ICS-Fu(MW30)-GW-032316		1.9		0.01 J					1.3		0.2 U			0.7 J	
ICS-Fu(MW30)-GW-032316							20 U								
ICS-Fu(MW30)-GW-032316	2.1		0.01 J _B					1.3		0.01 J			1 J		
ICS-Fu(MW30)-GW-032316						20 U									
ICS-Fl(MW31)-GW-111015		2.1		0.4					3.1		0.07 J			2 J	
ICS-Fl(MW31)-GW-111015										0.05 J					
ICS-Fl(MW31)-GW-032316					122,000							1,100,000			654
ICS-Fl(MW31)-GW-032316		4		0.3 J					1 J		0.05 J			7 J	
ICS-Fl(MW31)-GW-032316							5 J								
ICS-Fl(MW31)-GW-032316	0.9 J		0.1 J					1 J		0.05 J			1 J		
ICS-Fl(MW31)-GW-032316						4 J									
ICS-Gl(MW32)-GW-111015		1.0		0.1					0.9		0.01 J			1 J	
ICS-Gl(MW32)-GW-111015										1 U					
ICS-Gl(MW32)-GW-032316					252,000							2,020,000			1313
ICS-Gl(MW32)-GW-032316		0.4 J		0.2 J					0.4 J		1 U			6 J	
ICS-Gl(MW32)-GW-032316							20 U								
ICS-Gl(MW32)-GW-032316	0.3 J		0.05 J					0.4 J		1 U			20 U		
ICS-Gl(MW32)-GW-032316						20 U									
ICS-Gu(MW33)-GW-111015		0.6		0.2					1.8		0.01 J			3 J	
ICS-Gu(MW33)-GW-111015										0.2 U					
ICS-Gu(MW33)-GW-032316					126,000							123,000			829
ICS-Gu(MW33)-GW-032316		1.3		0.5					1.3		0.01 J			2 J	
ICS-Gu(MW33)-GW-032316							20 U								
ICS-Gu(MW33)-GW-032316	0.8 J		0.3					1		0.02 J			1 J		
ICS-Gu(MW33)-GW-032316						3 J									
ICS-Ku(MW34)-GW-111015		3.3		0.05 J					3.6		0.2 U			3 J	
ICS-Ku(MW34)-GW-111015										0.2 U					
ICS-Ku(MW34)-GW-032216					6890							37,000			120
ICS-Ku(MW34)-GW-032216		3		0.2					3		0.2 U			11	
ICS-Ku(MW34)-GW-032216							20 U								
ICS-Ku(MW34)-GW-032216	2.7		0.01 J					3.1		0.2 U			10		
ICS-Ku(MW34)-GW-032216						20 U									
ICS-Kl(MW35)-GW-111015		1.5		0.8					1.0		0.01 J			18	
ICS-Kl(MW35)-GW-111015										0.01 J					
ICS-Kl(MW35)-GW-032216					115,000							1,180,000			583
ICS-Kl(MW35)-GW-032216		0.4 J		0.2 J					0.5 J		1 U			3 J	
ICS-Kl(MW35)-GW-032216							5 J								
ICS-Kl(MW35)-GW-032216	0.2 J		0.05 J					0.5 J		0.05 J			20 U		
ICS-Kl(MW35)-GW-032216						20 U									

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

<u>Field I.D.</u>	Copper 7440-50-8		Lead 7439-92-1		Magnesium 7439-95-4	Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Sodium 7440-23-5	Zinc 7440-66-6		Hardness
	<u>diss. µg/L</u>	<u>total µg/L</u>	<u>diss. µg/L</u>	<u>total µg/L</u>	<u>total µg/L</u>	<u>diss. ng/L</u>	<u>total ng/L</u>	<u>diss. µg/L</u>	<u>total µg/L</u>	<u>diss. µg/L</u>	<u>total µg/L</u>	<u>total µg/L</u>	<u>diss. µg/L</u>	<u>total µg/L</u>	<u>mg-CaCO₃/L</u>
ICS-II(MW36)-GW-112015		0.8 J		0.3 J					0.5 J		1 U			1 J	
ICS-II(MW36)-GW-112015										2 U					
ICS-II(MW36)-GW-032816					122,000							1,110,000			711
ICS-II(MW36)-GW-032816		0.6 J		0.5 J					1 J		1 U			11 J	
ICS-II(MW36)-GW-032816						37									
ICS-II(MW36)-GW-032816	0.3 J		0.1 J					1 J		1 U			11 J		
ICS-II(MW36)-GW-032816						13 J									
ICS-Bp(MW38)-GW-032516															
Trip Blank															
Trip Blank															
Trip Blank															
ICS-RB1-GW-032716					50 U							187 J			0
ICS-RB1-GW-032716		0.4 J		0.02 J				0.04 J_B		0.2 U			11		
ICS-RB1-GW-032716						6 J _B									
ICS-RB1-GW-032716	0.3 J		0.04 J					0.03 J		0.2 U			4 U		
ICS-RB1-GW-032716						4 J _B									
Trip Blank															
Trip Blank															
Trip Blank															
ICS-RB2-GW-033016					14 J							464 J			0
ICS-RB2-GW-033016		0.6		0.1 U				0.5 U		0.2 U			4 U		
ICS-RB2-GW-033016						20 U									
ICS-RB2-GW-033016	0.9		0.01 J					11.3		0.2 U			8		
ICS-RB2-GW-033016						20 U									

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

R = rejected or unusable result.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-DMCMWA-GW-112415															
ICS-DMCMWA-GW-112415															
ICS-DUPL2-GW-112415															
ICS-DUPL2-GW-112415															
ICS-MWA-GW-033016	0.26	0.76	1.1	0.14 J_B	1.0 U	0.13 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U
ICS-MWA-GW-033016			(mineral oil)												
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-DUP2-GW-033016	0.27	0.86	1.2	0.71 J_B	1.0 U	0.15 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U
ICS-DUP2-GW-033016			(mineral oil)												
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-MWB-GW-033016	0.50	0.15	0.20 U	0.33 J_B	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.12 J
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-032416	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.09 J	0.20 U	0.12 J	0.20 U
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-032316	0.10 U	0.10 U	0.20 U	0.10 J	1.0 U	0.20 U	0.20 U	1.0 U	2.1 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-MWC-GW-033016	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW1-GW-032216	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.2 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-032416	2.8	0.81	1.2	0.50 U	1.0 U	19	1.5 J _Q	1.0 U	18	0.09 J	0.24	8.6	27	9.6	0.20 U
ICS-SAMW1-GW-032416		(mineral spirits)													
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-032216	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.08 J	0.20 U	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-032916	0.24	0.15	0.20 U	0.12 J	1.0 U	0.20 U	5.6 J _Q	1.0 U	110	0.18 J	0.20 U	0.07 J	0.20 U	0.49	0.20 U
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW3-GW-032416	0.20 U	0.10 U	0.20 U	1.0 U	2.0 U	0.40 U	0.40 U	2.0 U	7.9 J	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-032816	0.10 U	0.10 U	0.20 U	0.19 J	1.0 U	0.20 U	0.20 U	1.0 U	2.4 J	0.20 U	0.20 U	0.25	0.20 U	0.09 J	0.20 U
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-MW4-GW-032916	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW5-GW-032916	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-MW6-GW-032416	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.36 J _Q	1.0 U	2.8 J	0.20 U	0.20 U	0.24	0.13 J	0.11 J	0.20 U
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW7-GW-112315															
ICS-MW7-GW-112315															
ICS-DUPL1-GW-112315															
ICS-DUPL1-GW-112315															
ICS-MW7-GW-032516	0.09 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	8.4 J _Q	1.0 U	5.0 U	0.04 J	0.20 U	0.39	0.65	0.23	0.20 U
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-DUP1-GW-032516	0.08 J	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	11 J _Q	1.0 U	2.3 J	0.04 J	0.20 U	0.42	0.65	0.24	0.20 U
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-MW8-GW-032216	0.10	0.10 U	0.20 U	0.50 U	1.0 U	0.47	7.1	1.0 U	4.3 J	0.20 U	0.20 U	0.14 J	0.41	0.38	0.20 U
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-Cp(MW20)-GW-032516				0.50 U	1.0 U	0.20 U	0.20	1.0 U	4.9 J	0.11 J	0.20 U	0.42	0.20 U	0.10 J	0.20 U
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-032816	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.35 J _Q	1.0 U	5.0 U	0.20 U	0.20 U	0.18 J	0.05 J	0.21	0.20 U
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Dp(MW23)-GW-032816				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-032916	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-Ap(MW25)-GW-032516				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.5 J	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	0.03 J
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-032816	0.10 U	0.10 U	0.32	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	3.3 J	0.20 U	0.20 U	0.20 U	0.20 U	0.70	0.07 J
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-032416	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	4.8 J	0.10 J	0.20 U	0.12 J	0.20 U	0.21	0.20 U
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-032316	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fi(MW31)-GW-111015															
ICS-Fi(MW31)-GW-111015															
ICS-Fi(MW31)-GW-032316	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.06 J	0.40	1.0 U	2.2 J	0.20 U	0.20 U	0.08 J	0.20 U	0.25	0.20 U
ICS-Fi(MW31)-GW-032316															
ICS-Fi(MW31)-GW-032316															
ICS-Fi(MW31)-GW-032316															
ICS-Fi(MW31)-GW-032316															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-032316	0.10 U	0.10 U	0.20 U	0.11 J_B	1.0 U	0.20 U	0.20 U	1.0 U	2.2 J	0.20 U	0.20 U	0.11 J	0.20 U	0.85	0.20 U
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-032316	0.10 U	0.10 U	0.20 U	0.12 J_B	1.0 U	0.20 U	0.20 U	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.20 U
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-032216	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-032216	0.10 U	0.10 U	0.20 U	0.10 J_B	1.0 U	0.07 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.08 J	0.12 J	4.0	0.20 U
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane	<i>trans</i> -1,2- Dichloroethene	<i>cis</i> -1,2- Dichloroethene	Chloroform
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L	156-60-5 µg/L	156-59-2 µg/L	67-66-3 µg/L
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-032816	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.6 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-Bp(MW38)-GW-032516				0.21 J	1.0 U	0.20 U	0.20 U	1.0 U	3.2 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.04 J
Trip Blank	0.10 U			0.24 J	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.10 U			0.15 J	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	0.85 J_B	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-GW-032716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 J_B	2.3 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.11 J	0.20 U	0.13 J	0.20	0.07 J	0.20 U
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	0.58 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank				0.20 J	1.0 U	0.20 U	0.20 U	0.54 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-GW-033016	0.10 U	0.10 U	0.20 U	0.62	1.0 U	0.20 U	0.20 U	0.99 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															

** bold-typed values resemble corresponding petroleum hydrocarbon mixture [typically, weathered]

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

J_Q = estimate; due to noncompliant ICV/CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	cis -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-DMCMWA-GW-112415															
ICS-DMCMWA-GW-112415															
ICS-DUPL2-GW-112415															
ICS-DUPL2-GW-112415															
ICS-MWA-GW-033016	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	29	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-DUP2-GW-033016	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	33	0.20 U	0.20 U	5.0 U	5.0 U
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-MWB-GW-033016	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.33	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-032416	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-032316	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-MWC-GW-033016	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW1-GW-032216	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	cis -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-032416	0.20 U	2.0 J	0.20 U	0.20 U	0.20 U	0.66	0.20 U	0.93	0.20 U	0.20 U	8.6	0.20 U	0.20 U	2.0 J	5.0 U
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-032216	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-032916	0.20 U	4.9 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.77	0.20 U	0.20 U	27	1.6 J
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW3-GW-032416	0.40 U	10 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	10 U	10 U
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-032816	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 J	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	5.0 U	5.0 U
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-MW4-GW-032916	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW5-GW-032916	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	1,2-Dichloro-ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	cis -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-MW6-GW-032416	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW7-GW-112315															
ICS-MW7-GW-112315															
ICS-DUPL1-GW-112315															
ICS-DUPL1-GW-112315															
ICS-MW7-GW-032516	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-DUP1-GW-032516	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.20 U	0.20 U	5.0 U	5.0 U
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-MW8-GW-032216	0.09 J	5.0 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	68	0.20 U	0.20 U	5.0 U	5.0 U
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-Cp(MW20)-GW-032516	0.44	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	1.8	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-032816	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Dp(MW23)-GW-032816	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	6.2	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Hi(MW24)-GW-111815															
ICS-Hi(MW24)-GW-111815															
ICS-Hi(MW24)-GW-032916	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Hi(MW24)-GW-032916															
ICS-Hi(MW24)-GW-032916															
ICS-Hi(MW24)-GW-032916															
ICS-Hi(MW24)-GW-032916															
ICS-Ap(MW25)-GW-032516	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.25	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-032816	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.35	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	cis -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-032416	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.66	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-032316	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fl(MW31)-GW-111015															
ICS-Fl(MW31)-GW-111015															
ICS-Fl(MW31)-GW-032316	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-032316	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-032316	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-032216	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-032216	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	1,2-Dichloro- ethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri- chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo- dichloromethane 75-27-4 µg/L	1,2-Dichloro- propane 78-87-5 µg/L	cis -1,3-Dichloro- propene 10061-01-5 µg/L	Trichloro- ethene 79-01-6 µg/L	Dibromo- chloromethane 124-48-1 µg/L	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	trans -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-032816	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-Bp(MW38)-GW-032516	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-RB1-GW-032716	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.33	0.20 U	0.20 U	5.0 U	5.0 U
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
Trip Blank	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-RB2-GW-033016	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-DMCMTWA-GW-112415																
ICS-DMCMTWA-GW-112415																
ICS-DUPL2-GW-112415																
ICS-DUPL2-GW-112415																
ICS-MWA-GW-033016	0.20 U	0.20 U	0.25	0.20 U	0.15 J	0.20 U	0.20 U	0.20 U	0.55	0.27	0.20 U	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-DUP2-GW-033016	0.20 U	0.20 U	0.28	0.20 U	0.14 J	0.20 U	0.20 U	0.20 U	0.56	0.28	0.20 U	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DMCMWB-GW-112415																
ICS-DMCMWB-GW-112415																
ICS-MWB-GW-033016	0.20 U	0.20 U	0.58	0.20 U	1.6	0.20 U	0.20 U	0.20 U	6.1	1.7	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-HCB1-GW-111915																
ICS-HCB1-GW-111915																
ICS-HCB1-GW-032416	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.05 J	0.20 U	0.04 J	5.0 U	0.20 U	0.20 U
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB2R-GW-111115																
ICS-HCB2R-GW-111115																
ICS-HCB2R-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.05 J	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-DMCMWC-GW-112415																
ICS-DMCMWC-GW-112415																
ICS-MWC-GW-033016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MW1-GW-111115																
ICS-MW1-GW-111115																
ICS-MW1-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-SAMW1-GW-112315																
ICS-SAMW1-GW-112315																
ICS-SAMW1-GW-032416	0.20 U	0.20 U	480	2.6	360	19	0.20 U	0.20 U	140	64	8.4	5.2	14	5.0 U	0.20 U	0.20 U
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-MW2-GW-111115																
ICS-MW2-GW-111115																
ICS-MW2-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW2-GW-032216																
ICS-MW2-GW-032216																
ICS-MW2-GW-032216																
ICS-MW2-GW-032216																
ICS-SAMW2-GW-112015																
ICS-SAMW2-GW-112015																
ICS-SAMW2-GW-032916	0.20 U	0.20 U	1.1	0.20 U	5.6	0.14 J	0.20 U	0.20 U	4.3	5.2	0.61	0.20 U	0.07 J	5.0 U	0.20 U	0.20 U
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-MW3-GW-112015																
ICS-MW3-GW-112015																
ICS-MW3-GW-032416	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.40 U	10 U	0.40 U	0.40 U
ICS-MW3-GW-032416																
ICS-MW3-GW-032416																
ICS-MW3-GW-032416																
ICS-SAMW3-GW-111915																
ICS-SAMW3-GW-111915																
ICS-SAMW3-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J _B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-MW4-GW-111115																
ICS-MW4-GW-111115																
ICS-MW4-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW4-GW-032916																
ICS-MW4-GW-032916																
ICS-MW4-GW-032916																
ICS-MW4-GW-032916																
ICS-MW5-GW-112015																
ICS-MW5-GW-112015																
ICS-MW5-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-MW6-GW-111915																
ICS-MW6-GW-111915																
ICS-MW6-GW-032416	0.20 U	0.20 U	0.09 J	2.4	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.04 J	0.05 J	0.22	0.43	5.0 U	0.20 U	0.20 U
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW7-GW-112315																
ICS-MW7-GW-112315																
ICS-DUPL1-GW-112315																
ICS-DUPL1-GW-112315																
ICS-MW7-GW-032516	0.20 U	0.20 U	0.63	0.20 U	0.31	0.20 U	0.20 U	0.20 U	2.9	0.66	0.12 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW7-GW-032516																
ICS-MW7-GW-032516																
ICS-MW7-GW-032516																
ICS-MW7-GW-032516																
ICS-DUP1-GW-032516	0.20 U	0.20 U	0.55	0.20 U	0.24	0.20 U	0.20 U	0.20 U	2.7	0.66	0.12 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-MW8-GW-112015																
ICS-MW8-GW-112015																
ICS-MW8-GW-032216	0.20 U	0.20 U	0.84	0.97	0.17 J	0.20 U	0.20 U	0.20 U	2.1	0.61	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-Cp(MW20)-GW-032516	0.20 U	0.20 U	2.0	0.20 U	0.69	0.08 J	0.20 U	0.20 U	1.5	0.77	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Du(MW22)-GW-111815																
ICS-Du(MW22)-GW-111815																
ICS-Du(MW22)-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Dp(MW23)-GW-032816	0.20 U	0.20 U	42	0.20 U	9.3	0.20 U	0.20 U	0.20 U	31	13	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Hl(MW24)-GW-111815																
ICS-Hl(MW24)-GW-111815																
ICS-Hl(MW24)-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Hl(MW24)-GW-032916																
ICS-Hl(MW24)-GW-032916																
ICS-Hl(MW24)-GW-032916																
ICS-Hl(MW24)-GW-032916																
ICS-Hl(MW24)-GW-032916																
ICS-Ap(MW25)-GW-032516	1.4	0.20 U	0.07 J	0.20 U	0.05 J	0.20 U	0.11 J	0.30	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Ju(MW27)-GW-112015																
ICS-Ju(MW27)-GW-112015																
ICS-Ju(MW27)-GW-032816	6.1	0.20 U	0.20 U	0.35	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.06 J	0.27	5.0 U	0.20 U	0.20 U
ICS-Ju(MW27)-GW-032816																
ICS-Ju(MW27)-GW-032816																
ICS-Ju(MW27)-GW-032816																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-Eu(MW28)-GW-111915																
ICS-Eu(MW28)-GW-111915																
ICS-Eu(MW28)-GW-032416	0.20 U	0.20 U	0.47	0.20 U	0.59	0.20 U	0.20 U	0.20 U	0.35 J	0.18 J	0.20	0.20 U	0.07 J	5.0 U	0.20 U	0.20 U
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Fu(MW30)-GW-111115																
ICS-Fu(MW30)-GW-111115																
ICS-Fu(MW30)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Fu(MW30)-GW-032316																
ICS-Fu(MW30)-GW-032316																
ICS-Fu(MW30)-GW-032316																
ICS-Fu(MW30)-GW-032316																
ICS-Fi(MW31)-GW-111015																
ICS-Fi(MW31)-GW-111015																
ICS-Fi(MW31)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Gl(MW32)-GW-111015																
ICS-Gl(MW32)-GW-111015																
ICS-Gl(MW32)-GW-032316	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gu(MW33)-GW-111015																
ICS-Gu(MW33)-GW-111015																
ICS-Gu(MW33)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Ku(MW34)-GW-111015																
ICS-Ku(MW34)-GW-111015																
ICS-Ku(MW34)-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Ku(MW34)-GW-032216																
ICS-Ku(MW34)-GW-032216																
ICS-Ku(MW34)-GW-032216																
ICS-Ku(MW34)-GW-032216																
ICS-Kl(MW35)-GW-111015																
ICS-Kl(MW35)-GW-111015																
ICS-Kl(MW35)-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-Kl(MW35)-GW-032216																
ICS-Kl(MW35)-GW-032216																
ICS-Kl(MW35)-GW-032216																
ICS-Kl(MW35)-GW-032216																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L
ICS-II(MW36)-GW-112015																
ICS-II(MW36)-GW-112015																
ICS-II(MW36)-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-II(MW36)-GW-032816																
ICS-II(MW36)-GW-032816																
ICS-II(MW36)-GW-032816																
ICS-Bp(MW38)-GW-032516	1.9	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-RB1-GW-032716	0.20 U	0.20 U	0.07 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.09 J_B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-RB1-GW-032716																
ICS-RB1-GW-032716																
ICS-RB1-GW-032716																
Trip Blank	0.20 U	0.20 U	0.14 J	7.3	0.20 U	0.20 U	0.20 U	0.20 U	0.17 J	0.09 J	0.22	0.83	3.7	5.0 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-RB2-GW-033016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U
ICS-RB2-GW-033016																
ICS-RB2-GW-033016																
ICS-RB2-GW-033016																

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-DMCMTWA-GW-112415															
ICS-DMCMTWA-GW-112415															
ICS-DUPL2-GW-112415															
ICS-DUPL2-GW-112415															
ICS-MWA-GW-033016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.59	0.20 U	0.20 U	0.20 U	0.20 U	1.7	0.62	0.20 U	0.20 U	0.20 U
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-DUP2-GW-033016	0.20 U	0.20 U	0.50 U	1.0 U	0.08 J	0.61	0.20 U	0.20 U	0.20 U	0.20 U	1.8	0.63	0.20 U	0.20 U	0.20 U
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-MWB-GW-033016	0.20 U	0.20 U	0.50 U	1.0 U	4.8	12	0.20 U	0.20 U	0.20 U	0.20 U	4.1	2.2	0.20 U	0.20 U	0.20 U
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-032416	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-032316	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-MWC-GW-033016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW1-GW-032216	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-032416	0.20 U	0.20 U	0.50 U	1.0 U	7.0	53	0.20 U	0.20 U	0.20 U	0.20 U	4.9	8.6	0.20 U	0.20 U	0.03 J
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-032216	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-032916	0.20 U	0.20 U	0.50 U	1.0 U	1.2	5.5	0.20 U	0.20 U	0.20 U	0.20 U	0.28	0.45	0.20 U	0.20 U	0.20 U
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW3-GW-032416	0.40 U	0.40 U	1.0 U	2.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-032816	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J _B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-MW4-GW-032916	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW5-GW-032916	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-MW6-GW-032416	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW7-GW-112315															
ICS-MW7-GW-112315															
ICS-DUPL1-GW-112315															
ICS-DUPL1-GW-112315															
ICS-MW7-GW-032516	0.20 U	0.20 U	0.50 U	1.0 U	0.48	0.64	0.20 U	0.20 U	0.20 U	0.20 U	0.45	0.14 J	0.20 U	0.20 U	0.20 U
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-DUP1-GW-032516	0.20 U	0.20 U	0.50 U	1.0 U	0.50	0.63	0.20 U	0.20 U	0.20 U	0.20 U	0.45	0.15 J	0.20 U	0.20 U	0.20 U
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-MW8-GW-032216	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.47	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-Cp(MW20)-GW-032516	0.20 U	0.20 U	0.50 U	1.0 U	0.15 J	0.59	0.20 U	0.20 U	0.20 U	0.20 U	0.24	0.14 J	0.20 U	0.20 U	0.20 U
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-032816	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Dp(MW23)-GW-032816	0.20 U	0.20 U	0.50 U	1.0 U	4.8	16	0.20 U	0.20 U	0.20 U	0.20 U	0.92	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-032916	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-Ap(MW25)-GW-032516	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-032816	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-032416	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.10 J	0.20 U	0.20 U	0.20 U
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-032316	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fl(MW31)-GW-111015															
ICS-Fl(MW31)-GW-111015															
ICS-Fl(MW31)-GW-032316	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Fl(MW31)-GW-032316															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-032316	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-032316	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-032216	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-032216	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L	4-Chloro- toluene 106-43-4 µg/L
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-032816	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-Bp(MW38)-GW-032516	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.05 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-GW-032716	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.03 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-GW-033016	0.20 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-DMCMWA-GW-112415													
ICS-DMCMWA-GW-112415													
ICS-DUPL2-GW-112415													
ICS-DUPL2-GW-112415													
ICS-MWA-GW-033016	0.07 J	0.41	0.22	0.37 J _Q	0.50 U	0.50 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWA-GW-033016													
ICS-MWA-GW-033016													
ICS-MWA-GW-033016													
ICS-MWA-GW-033016													
ICS-DUP2-GW-033016	0.07 J	0.42	0.20 U	0.36 J _Q	0.50 U	0.50 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DUP2-GW-033016													
ICS-DUP2-GW-033016													
ICS-DUP2-GW-033016													
ICS-DUP2-GW-033016													
ICS-DMCMWB-GW-112415													
ICS-DMCMWB-GW-112415													
ICS-MWB-GW-033016	0.10 J	0.80	1.3	0.74 J _Q	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWB-GW-033016													
ICS-MWB-GW-033016													
ICS-MWB-GW-033016													
ICS-MWB-GW-033016													
ICS-HCB1-GW-111915													
ICS-HCB1-GW-111915													
ICS-HCB1-GW-032416	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-HCB1-GW-032416													
ICS-HCB1-GW-032416													
ICS-HCB1-GW-032416													
ICS-HCB1-GW-032416													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-111115													
ICS-HCB2R-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-HCB2R-GW-032316													
ICS-HCB2R-GW-032316													
ICS-HCB2R-GW-032316													
ICS-HCB2R-GW-032316													
ICS-DMCMWC-GW-112415													
ICS-DMCMWC-GW-112415													
ICS-MWC-GW-033016	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWC-GW-033016													
ICS-MWC-GW-033016													
ICS-MWC-GW-033016													
ICS-MWC-GW-033016													
ICS-MW1-GW-111115													
ICS-MW1-GW-111115													
ICS-MW1-GW-032216	0.06 J	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW1-GW-032216													
ICS-MW1-GW-032216													
ICS-MW1-GW-032216													
ICS-MW1-GW-032216													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	tert -Butyl- benzene 98-06-6 µg/L	sec -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-112315													
ICS-SAMW1-GW-032416	0.12 J	1.7	2.0	1.3	0.33 J	0.50 U	0.2 U	0.2 U	0.2 U	0.6	0.6	0.2 U	0.2 U
ICS-SAMW1-GW-032416													
ICS-SAMW1-GW-032416													
ICS-SAMW1-GW-032416													
ICS-SAMW1-GW-032416													
ICS-MW2-GW-111115													
ICS-MW2-GW-111115													
ICS-MW2-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW2-GW-032216													
ICS-MW2-GW-032216													
ICS-MW2-GW-032216													
ICS-MW2-GW-032216													
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-112015													
ICS-SAMW2-GW-032916	0.20 U	0.20 U	0.39	0.20 U	0.50 U	0.50 U	16	0.2 U	0.2 U	1.1	4.0	0.2 U	0.2 U
ICS-SAMW2-GW-032916													
ICS-SAMW2-GW-032916													
ICS-SAMW2-GW-032916													
ICS-SAMW2-GW-032916													
ICS-MW3-GW-112015													
ICS-MW3-GW-112015													
ICS-MW3-GW-032416	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW3-GW-032416													
ICS-MW3-GW-032416													
ICS-MW3-GW-032416													
ICS-MW3-GW-032416													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-111915													
ICS-SAMW3-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-SAMW3-GW-032816													
ICS-SAMW3-GW-032816													
ICS-SAMW3-GW-032816													
ICS-SAMW3-GW-032816													
ICS-MW4-GW-111115													
ICS-MW4-GW-111115													
ICS-MW4-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW4-GW-032916													
ICS-MW4-GW-032916													
ICS-MW4-GW-032916													
ICS-MW4-GW-032916													
ICS-MW5-GW-112015													
ICS-MW5-GW-112015													
ICS-MW5-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW5-GW-032916													
ICS-MW5-GW-032916													
ICS-MW5-GW-032916													
ICS-MW5-GW-032916													
ICS-MW5-GW-032916													
ICS-MW5-GW-032916													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-MW6-GW-111915													
ICS-MW6-GW-111915													
ICS-MW6-GW-032416	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW6-GW-032416													
ICS-MW6-GW-032416													
ICS-MW6-GW-032416													
ICS-MW6-GW-032416													
ICS-MW7-GW-112315													
ICS-MW7-GW-112315													
ICS-DUPL1-GW-112315													
ICS-DUPL1-GW-112315													
ICS-MW7-GW-032516	0.20 U	0.06 J	0.16 J	0.05 J	0.50 U	0.50 U	0.1 J	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U
ICS-MW7-GW-032516													
ICS-MW7-GW-032516													
ICS-MW7-GW-032516													
ICS-MW7-GW-032516													
ICS-DUP1-GW-032516	0.20 U	0.07 J	0.16 J	0.05 J	0.50 U	0.50 U	0.1 J	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U
ICS-DUP1-GW-032516													
ICS-DUP1-GW-032516													
ICS-DUP1-GW-032516													
ICS-DUP1-GW-032516													
ICS-DUP1-GW-032516													
ICS-MW8-GW-112015													
ICS-MW8-GW-112015													
ICS-MW8-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MW8-GW-032216													
ICS-MW8-GW-032216													
ICS-MW8-GW-032216													
ICS-MW8-GW-032216													
ICS-MW8-GW-032216													
ICS-Cp(MW20)-GW-032516	0.20 U	0.11 J	0.06 J	0.03 J	0.50 U	0.50 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U
ICS-Du(MW22)-GW-111815													
ICS-Du(MW22)-GW-111815													
ICS-Du(MW22)-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Du(MW22)-GW-032816													
ICS-Du(MW22)-GW-032816													
ICS-Du(MW22)-GW-032816													
ICS-Du(MW22)-GW-032816													
ICS-Dp(MW23)-GW-032816	0.20 U	0.25	0.16 J	0.66	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-HI(MW24)-GW-111815													
ICS-HI(MW24)-GW-111815													
ICS-HI(MW24)-GW-032916	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-HI(MW24)-GW-032916													
ICS-HI(MW24)-GW-032916													
ICS-HI(MW24)-GW-032916													
ICS-HI(MW24)-GW-032916													
ICS-HI(MW24)-GW-032916													
ICS-Ap(MW25)-GW-032516	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ju(MW27)-GW-112015													
ICS-Ju(MW27)-GW-112015													
ICS-Ju(MW27)-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ju(MW27)-GW-032816													
ICS-Ju(MW27)-GW-032816													
ICS-Ju(MW27)-GW-032816													
ICS-Ju(MW27)-GW-032816													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-Eu(MW28)-GW-111915													
ICS-Eu(MW28)-GW-111915													
ICS-Eu(MW28)-GW-032416	0.20 U	0.10 J	0.05 J	0.03 J	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Eu(MW28)-GW-032416													
ICS-Eu(MW28)-GW-032416													
ICS-Eu(MW28)-GW-032416													
ICS-Eu(MW28)-GW-032416													
ICS-Fu(MW30)-GW-111115													
ICS-Fu(MW30)-GW-111115													
ICS-Fu(MW30)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Fu(MW30)-GW-032316													
ICS-Fu(MW30)-GW-032316													
ICS-Fu(MW30)-GW-032316													
ICS-Fu(MW30)-GW-032316													
ICS-Fi(MW31)-GW-111015													
ICS-Fi(MW31)-GW-111015													
ICS-Fi(MW31)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Fi(MW31)-GW-032316													
ICS-Fi(MW31)-GW-032316													
ICS-Fi(MW31)-GW-032316													
ICS-Fi(MW31)-GW-032316													
ICS-Gl(MW32)-GW-111015													
ICS-Gl(MW32)-GW-111015													
ICS-Gl(MW32)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Gl(MW32)-GW-032316													
ICS-Gl(MW32)-GW-032316													
ICS-Gl(MW32)-GW-032316													
ICS-Gl(MW32)-GW-032316													
ICS-Gu(MW33)-GW-111015													
ICS-Gu(MW33)-GW-111015													
ICS-Gu(MW33)-GW-032316	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Gu(MW33)-GW-032316													
ICS-Gu(MW33)-GW-032316													
ICS-Gu(MW33)-GW-032316													
ICS-Gu(MW33)-GW-032316													
ICS-Ku(MW34)-GW-111015													
ICS-Ku(MW34)-GW-111015													
ICS-Ku(MW34)-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ku(MW34)-GW-032216													
ICS-Ku(MW34)-GW-032216													
ICS-Ku(MW34)-GW-032216													
ICS-Ki(MW35)-GW-111015													
ICS-Ki(MW35)-GW-111015													
ICS-Ki(MW35)-GW-032216	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ki(MW35)-GW-032216													
ICS-Ki(MW35)-GW-032216													
ICS-Ki(MW35)-GW-032216													
ICS-Ki(MW35)-GW-032216													

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	tert-Butyl- benzene 98-06-6 µg/L	sec-Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L	N-Nitroso-di-n- propylamine 621-64-7 µg/L	Hexachloro- ethane 67-72-1 µg/L
ICS-II(MW36)-GW-112015													
ICS-II(MW36)-GW-112015													
ICS-II(MW36)-GW-032816	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-II(MW36)-GW-032816													
ICS-II(MW36)-GW-032816													
ICS-II(MW36)-GW-032816													
ICS-II(MW36)-GW-032816													
ICS-Bp(MW38)-GW-032516	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
ICS-RB1-GW-032716	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-RB1-GW-032716													
ICS-RB1-GW-032716													
ICS-RB1-GW-032716													
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U							
Trip Blank	0.20 U	0.20 U	0.20 U	0.03 J	0.50 U	0.50 U							
ICS-RB2-GW-033016	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-RB2-GW-033016													
ICS-RB2-GW-033016													
ICS-RB2-GW-033016													

J = estimate associated with value less than the verifiable lower quantitation limit.

J₀ = estimate; due to noncompliant ICV/CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-MWA-GW-033016	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	3.7	1.0 U	0.8	1.0 U	1.0 U	0.2 U	0.2 U	0.1 J	3.9
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-DUP2-GW-033016	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	3.7	1.0 U	0.8	1.0 U	1.0 U	0.2 U	0.2 U	0.05 U	3.8
ICS-DUP2-GW-033016														
ICS-DUP2-GW-033016														
ICS-DUP2-GW-033016														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-MWB-GW-033016	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	3.5	1.0 U	6.4	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	1.3
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-032416	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.018	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-032316	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-MWC-GW-033016	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW1-GW-032216	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-032416	0.2 U	0.2 U	1.7	2.0 U	2.2	25	1.0 U	46	1.0 U	1.0 U	0.1 J	0.2 U	0.060	0.81
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW2-GW-032216	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW2-GW-032216														
ICS-MW2-GW-032216														
ICS-MW2-GW-032216														
ICS-MW2-GW-032216														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-032916	0.2 U	0.2 U	0.71 J	2.0 U	1.0 U	0.10	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.042
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW3-GW-032416	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW3-GW-032416														
ICS-MW3-GW-032416														
ICS-MW3-GW-032416														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-032816	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.1 J	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-MW4-GW-032916	0.2 U	0.2 U	1.0 U	0.3 J	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW4-GW-032916														
ICS-MW4-GW-032916														
ICS-MW4-GW-032916														
ICS-MW4-GW-032916														
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW5-GW-032916	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-MW6-GW-032416	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-MW6-GW-032416														
ICS-MW6-GW-032416														
ICS-MW6-GW-032416														
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
ICS-MW7-GW-032516	0.2 U	0.2 U	0.6 J	2.1	1.0 U	2.3	1.0 U	2.0	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.3
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-DUP1-GW-032516	0.2 U	0.2 U	0.6 J	2.0 U	1.0 U	2.3	1.0 U	1.7	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.3
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-MW8-GW-032216	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.03	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.012 J_Q
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-Cp(MW20)-GW-032516	0.2 U	0.2 U	0.3 J	2.0 U	1.0 U	0.4	1.0 U	0.1 J	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 J
ICS-Du(MW22)-GW-111815														
ICS-Du(MW22)-GW-111815														
ICS-Du(MW22)-GW-032816	0.2 U	0.2 U	1.0 U	0.3 J	1.0 U	0.016	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	2.9
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Dp(MW23)-GW-032816	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.2 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Hl(MW24)-GW-111815														
ICS-Hl(MW24)-GW-111815														
ICS-Hl(MW24)-GW-032916	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Ap(MW25)-GW-032516	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.2 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ju(MW27)-GW-112015														
ICS-Ju(MW27)-GW-112015														
ICS-Ju(MW27)-GW-032816	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.015	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Ju(MW27)-GW-032816														
ICS-Ju(MW27)-GW-032816														
ICS-Ju(MW27)-GW-032816														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-Eu(MW28)-GW-111915														
ICS-Eu(MW28)-GW-111915														
ICS-Eu(MW28)-GW-032416	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.4	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.12
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Fu(MW30)-GW-111115														
ICS-Fu(MW30)-GW-111115														
ICS-Fu(MW30)-GW-032316	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.029 J_Q
ICS-Fu(MW30)-GW-032316														
ICS-Fu(MW30)-GW-032316														
ICS-Fu(MW30)-GW-032316														
ICS-Fi(MW31)-GW-111015														
ICS-Fi(MW31)-GW-111015														
ICS-Fi(MW31)-GW-032316	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.039	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.023 J_Q
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Gl(MW32)-GW-111015														
ICS-Gl(MW32)-GW-111015														
ICS-Gl(MW32)-GW-032316	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gu(MW33)-GW-111015														
ICS-Gu(MW33)-GW-111015														
ICS-Gu(MW33)-GW-032316	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.040	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Ku(MW34)-GW-111015														
ICS-Ku(MW34)-GW-111015														
ICS-Ku(MW34)-GW-032216	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Kl(MW35)-GW-111015														
ICS-Kl(MW35)-GW-111015														
ICS-Kl(MW35)-GW-032216	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl- phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro- phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3- methylphenol 59-50-7 µg/L	2-Methyl- naphthalene 91-57-6 µg/L	2,4,6-Trichloro- phenol 88-06-2 µg/L	2,4,5-Trichloro- phenol 95-95-4 µg/L	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L
ICS-II(MW36)-GW-112015														
ICS-II(MW36)-GW-112015														
ICS-II(MW36)-GW-032816	0.2 U	0.2 U	1.0 U	0.4 J	1.0 U	0.04 J	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-Bp(MW38)-GW-032516	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.04 J	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U
Trip Blank														
Trip Blank														
Trip Blank														
ICS-RB1-GW-032716	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
Trip Blank														
Trip Blank														
Trip Blank														
ICS-RB2-GW-033016	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.01 U	1.0 U	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.01 U
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant ICV/CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L
ICS-DMCMWA-GW-112415														
ICS-DMCMWA-GW-112415														
ICS-DUPL2-GW-112415														
ICS-DUPL2-GW-112415														
ICS-MWA-GW-033016	0.4	1.0 U	1.0 U	0.2 U	0.2 U	1.0	0.2 U	0.025 U	0.9	0.7 J_Q	0.4	0.2 U	0.4	0.6
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-MWA-GW-033016														
ICS-DUP2-GW-033016	0.3	1.0 U	1.0 U	0.1 J	0.2 U	0.8	0.2 U	0.025 U	0.7	0.6 J_Q	0.4	0.2 U	0.4	0.5
ICS-DUP2-GW-033016														
ICS-DUP2-GW-033016														
ICS-DUP2-GW-033016														
ICS-DMCMWB-GW-112415														
ICS-DMCMWB-GW-112415														
ICS-MWB-GW-033016	0.10	1.0 U	1.0 U	0.1 J	0.2 U	0.6	0.2 U	0.025 U	0.12	0.7 J_Q	0.016	0.2 U	0.027	0.023
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-MWB-GW-033016														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-111915														
ICS-HCB1-GW-032416	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.25 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB1-GW-032416														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-111115														
ICS-HCB2R-GW-032316	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-HCB2R-GW-032316														
ICS-DMCMWC-GW-112415														
ICS-DMCMWC-GW-112415														
ICS-MWC-GW-033016	0.01 U	1.0 U	1.0 U	0.1 J	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.012	0.015
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MWC-GW-033016														
ICS-MW1-GW-111115														
ICS-MW1-GW-111115														
ICS-MW1-GW-032216	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														
ICS-MW1-GW-032216														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-112315														
ICS-SAMW1-GW-032416	0.30	1.0 U	1.0 U	0.2 U	0.2 U	0.76	0.2 U	0.025 U	1.5	1.0	0.11	0.2 U	0.16	0.15 J_Q
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-SAMW1-GW-032416														
ICS-MW2-GW-111115														
ICS-MW2-GW-111115														
ICS-MW2-GW-032216	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW2-GW-032216														
ICS-MW2-GW-032216														
ICS-MW2-GW-032216														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-112015														
ICS-SAMW2-GW-032916	0.016	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.3 J	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-SAMW2-GW-032916														
ICS-MW3-GW-112015														
ICS-MW3-GW-112015														
ICS-MW3-GW-032416	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW3-GW-032416														
ICS-MW3-GW-032416														
ICS-MW3-GW-032416														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-111915														
ICS-SAMW3-GW-032816	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-SAMW3-GW-032816														
ICS-MW4-GW-111115														
ICS-MW4-GW-111115														
ICS-MW4-GW-032916	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.015 J	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW4-GW-032916														
ICS-MW4-GW-032916														
ICS-MW4-GW-032916														
ICS-MW5-GW-112015														
ICS-MW5-GW-112015														
ICS-MW5-GW-032916	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.032	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														
ICS-MW5-GW-032916														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L
ICS-MW6-GW-111915														
ICS-MW6-GW-111915														
ICS-MW6-GW-032416	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-MW6-GW-032416														
ICS-MW6-GW-032416														
ICS-MW6-GW-032416														
ICS-MW7-GW-112315														
ICS-MW7-GW-112315														
ICS-DUPL1-GW-112315														
ICS-DUPL1-GW-112315														
ICS-MW7-GW-032516	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.028	0.2 U	0.4 J	0.024	0.2 U	0.01 U	0.2 U	0.014	0.01 U
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-MW7-GW-032516														
ICS-DUP1-GW-032516	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.032	0.2 U	0.025 U	0.028	0.2 U	0.01 U	0.2 U	0.016	0.012
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-DUP1-GW-032516														
ICS-MW8-GW-112015														
ICS-MW8-GW-112015														
ICS-MW8-GW-032216	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.4	0.2 U	0.01 U	0.024 J_Q
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-MW8-GW-032216														
ICS-Cp(MW20)-GW-032516	0.1 J	1.0 U	1.0 U	0.2 U	0.2 U	0.1 J	0.2 U	1.0 U	0.2	0.2	0.2	0.2	0.1 J	0.1 J
ICS-Du(MW22)-GW-111815														
ICS-Du(MW22)-GW-111815														
ICS-Du(MW22)-GW-032816	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Du(MW22)-GW-032816														
ICS-Dp(MW23)-GW-032816	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Hl(MW24)-GW-111815														
ICS-Hl(MW24)-GW-111815														
ICS-Hl(MW24)-GW-032916	0.01 U	1.0 U	1.0 U	0.1 J	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Hl(MW24)-GW-032916														
ICS-Ap(MW25)-GW-032516	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-Ju(MW27)-GW-112015														
ICS-Ju(MW27)-GW-112015														
ICS-Ju(MW27)-GW-032816	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.014	0.2 U	0.01 U	0.2 U	0.016	0.016
ICS-Ju(MW27)-GW-032816														
ICS-Ju(MW27)-GW-032816														
ICS-Ju(MW27)-GW-032816														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L
ICS-Eu(MW28)-GW-111915														
ICS-Eu(MW28)-GW-111915														
ICS-Eu(MW28)-GW-032416	0.018	1.0 U	1.0 U	0.1 J	0.2 U	0.050	0.2 U	0.12 J_P	0.061	0.2 U	0.013	0.2 U	0.036	0.039
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Eu(MW28)-GW-032416														
ICS-Fu(MW30)-GW-111115														
ICS-Fu(MW30)-GW-111115														
ICS-Fu(MW30)-GW-032316	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.038	0.2 U	0.01 U	0.032 J_Q
ICS-Fu(MW30)-GW-032316														
ICS-Fu(MW30)-GW-032316														
ICS-Fu(MW30)-GW-032316														
ICS-Fu(MW30)-GW-032316														
ICS-Fi(MW31)-GW-111015														
ICS-Fi(MW31)-GW-111015														
ICS-Fi(MW31)-GW-032316	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.079	0.2 U	0.01 U	0.034 J_Q
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Fi(MW31)-GW-032316														
ICS-Gl(MW32)-GW-111015														
ICS-Gl(MW32)-GW-111015														
ICS-Gl(MW32)-GW-032316	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gl(MW32)-GW-032316														
ICS-Gu(MW33)-GW-111015														
ICS-Gu(MW33)-GW-111015														
ICS-Gu(MW33)-GW-032316	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Gu(MW33)-GW-032316														
ICS-Ku(MW34)-GW-111015														
ICS-Ku(MW34)-GW-111015														
ICS-Ku(MW34)-GW-032216	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.035	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Ku(MW34)-GW-032216														
ICS-Kl(MW35)-GW-111015														
ICS-Kl(MW35)-GW-111015														
ICS-Kl(MW35)-GW-032216	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														
ICS-Kl(MW35)-GW-032216														

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Dibenzo-furan 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L
ICS-II(MW36)-GW-112015														
ICS-II(MW36)-GW-112015														
ICS-II(MW36)-GW-032816	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.05 J	0.01 U	0.2 U	0.01 U	0.01 U
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-II(MW36)-GW-032816														
ICS-Bp(MW38)-GW-032516	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trip Blank														
Trip Blank														
Trip Blank														
ICS-RB1-GW-032716	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
ICS-RB1-GW-032716														
Trip Blank														
Trip Blank														
Trip Blank														
ICS-RB2-GW-033016	0.01 U	1.0 U	1.0 U	0.2 U	0.2 U	0.01 U	0.2 U	0.025 U	0.01 U	0.2 U	0.01 U	0.2 U	0.01 U	0.01 U
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														
ICS-RB2-GW-033016														

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant ICV/CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-DMCMTWA-GW-112415												
ICS-DMCMTWA-GW-112415												
ICS-DUPL2-GW-112415												
ICS-DUPL2-GW-112415												
ICS-MWA-GW-033016	0.2 U	0.088	1.4	0.2	0.2 U	0.2 J	0.060	0.022 J	0.05 U	0.037 J	10	1.6
ICS-MWA-GW-033016												
ICS-MWA-GW-033016												
ICS-MWA-GW-033016												
ICS-MWA-GW-033016												
ICS-DUP2-GW-033016	0.2 U	0.083	1.2	0.14	0.2 U	0.1 J	0.1 J	0.019 J	0.05 U	0.2 U	9.4	1.3
ICS-DUP2-GW-033016												
ICS-DUP2-GW-033016												
ICS-DUP2-GW-033016												
ICS-DMCMWB-GW-112415												
ICS-DMCMWB-GW-112415												
ICS-MWB-GW-033016	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	5.5	0.05
ICS-MWB-GW-033016												
ICS-MWB-GW-033016												
ICS-MWB-GW-033016												
ICS-MWB-GW-033016												
ICS-HCB1-GW-111915												
ICS-HCB1-GW-111915												
ICS-HCB1-GW-032416	0.2 U	0.01 U	0.1 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.02 U
ICS-HCB1-GW-032416												
ICS-HCB1-GW-032416												
ICS-HCB1-GW-032416												
ICS-HCB1-GW-032416												
ICS-HCB2R-GW-111115												
ICS-HCB2R-GW-111115												
ICS-HCB2R-GW-032316	0.2 U	0.01 U	0.4 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-HCB2R-GW-032316												
ICS-HCB2R-GW-032316												
ICS-HCB2R-GW-032316												
ICS-HCB2R-GW-032316												
ICS-DMCMWC-GW-112415												
ICS-DMCMWC-GW-112415												
ICS-MWC-GW-033016	0.2 U	0.01 U	0.3	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.027
ICS-MWC-GW-033016												
ICS-MWC-GW-033016												
ICS-MWC-GW-033016												
ICS-MWC-GW-033016												
ICS-MW1-GW-111115												
ICS-MW1-GW-111115												
ICS-MW1-GW-032216	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW1-GW-032216												
ICS-MW1-GW-032216												
ICS-MW1-GW-032216												
ICS-MW1-GW-032216												

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-SAMW1-GW-112315												
ICS-SAMW1-GW-112315												
ICS-SAMW1-GW-032416	0.2 U	0.017	0.6	0.030	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	28	0.36
ICS-SAMW1-GW-032416												
ICS-SAMW1-GW-032416												
ICS-SAMW1-GW-032416												
ICS-SAMW1-GW-032416												
ICS-MW2-GW-111115												
ICS-MW2-GW-111115												
ICS-MW2-GW-032216	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW2-GW-032216												
ICS-MW2-GW-032216												
ICS-MW2-GW-032216												
ICS-MW2-GW-032216												
ICS-SAMW2-GW-112015												
ICS-SAMW2-GW-112015												
ICS-SAMW2-GW-032916	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.14	0.02 U
ICS-SAMW2-GW-032916												
ICS-SAMW2-GW-032916												
ICS-SAMW2-GW-032916												
ICS-SAMW2-GW-032916												
ICS-MW3-GW-112015												
ICS-MW3-GW-112015												
ICS-MW3-GW-032416	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW3-GW-032416												
ICS-MW3-GW-032416												
ICS-MW3-GW-032416												
ICS-MW3-GW-032416												
ICS-SAMW3-GW-111915												
ICS-SAMW3-GW-111915												
ICS-SAMW3-GW-032816	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1	0.02 U
ICS-SAMW3-GW-032816												
ICS-SAMW3-GW-032816												
ICS-SAMW3-GW-032816												
ICS-SAMW3-GW-032816												
ICS-MW4-GW-111115												
ICS-MW4-GW-111115												
ICS-MW4-GW-032916	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW4-GW-032916												
ICS-MW4-GW-032916												
ICS-MW4-GW-032916												
ICS-MW4-GW-032916												
ICS-MW5-GW-112015												
ICS-MW5-GW-112015												
ICS-MW5-GW-032916	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												
ICS-MW5-GW-032916												

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-MW6-GW-111915												
ICS-MW6-GW-111915												
ICS-MW6-GW-032416	0.2 U	0.01 U	0.3 J_B	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-MW6-GW-032416												
ICS-MW6-GW-032416												
ICS-MW6-GW-032416												
ICS-MW6-GW-032416												
ICS-MW7-GW-112315												
ICS-MW7-GW-112315												
ICS-DUPL1-GW-112315												
ICS-DUPL1-GW-112315												
ICS-MW7-GW-032516	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	2.7	0.014
ICS-MW7-GW-032516												
ICS-MW7-GW-032516												
ICS-MW7-GW-032516												
ICS-MW7-GW-032516												
ICS-DUP1-GW-032516	0.2 U	0.01 U	0.1 J	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	2.7	0.028
ICS-DUP1-GW-032516												
ICS-DUP1-GW-032516												
ICS-DUP1-GW-032516												
ICS-DUP1-GW-032516												
ICS-MW8-GW-112015												
ICS-MW8-GW-112015												
ICS-MW8-GW-032216	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.442	0.024
ICS-MW8-GW-032216												
ICS-MW8-GW-032216												
ICS-MW8-GW-032216												
ICS-MW8-GW-032216												
ICS-MW8-GW-032216												
ICS-Cp(MW20)-GW-032516	0.2 U	0.1 J	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1.1	0.3
ICS-Du(MW22)-GW-111815												
ICS-Du(MW22)-GW-111815												
ICS-Du(MW22)-GW-032816	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	2.9	0.02 U
ICS-Du(MW22)-GW-032816												
ICS-Du(MW22)-GW-032816												
ICS-Du(MW22)-GW-032816												
ICS-Du(MW22)-GW-032816												
ICS-Dp(MW23)-GW-032816	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
ICS-HI(MW24)-GW-111815												
ICS-HI(MW24)-GW-111815												
ICS-HI(MW24)-GW-032916	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-HI(MW24)-GW-032916												
ICS-HI(MW24)-GW-032916												
ICS-HI(MW24)-GW-032916												
ICS-HI(MW24)-GW-032916												
ICS-HI(MW24)-GW-032916												
ICS-Ap(MW25)-GW-032516	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
ICS-Ju(MW27)-GW-112015												
ICS-Ju(MW27)-GW-112015												
ICS-Ju(MW27)-GW-032816	0.2 U	0.01 U	0.4	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.029	0.032
ICS-Ju(MW27)-GW-032816												
ICS-Ju(MW27)-GW-032816												
ICS-Ju(MW27)-GW-032816												
ICS-Ju(MW27)-GW-032816												

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-Eu(MW28)-GW-111915												
ICS-Eu(MW28)-GW-111915												
ICS-Eu(MW28)-GW-032416	0.2 U	0.01 U	1.2	0.011	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.64	0.086
ICS-Eu(MW28)-GW-032416												
ICS-Eu(MW28)-GW-032416												
ICS-Eu(MW28)-GW-032416												
ICS-Eu(MW28)-GW-032416												
ICS-Fu(MW30)-GW-111115												
ICS-Fu(MW30)-GW-111115												
ICS-Fu(MW30)-GW-032316	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.067	0.032
ICS-Fu(MW30)-GW-032316												
ICS-Fu(MW30)-GW-032316												
ICS-Fu(MW30)-GW-032316												
ICS-Fu(MW30)-GW-032316												
ICS-Fi(MW31)-GW-111015												
ICS-Fi(MW31)-GW-111015												
ICS-Fi(MW31)-GW-032316	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.14	0.034
ICS-Fi(MW31)-GW-032316												
ICS-Fi(MW31)-GW-032316												
ICS-Fi(MW31)-GW-032316												
ICS-Fi(MW31)-GW-032316												
ICS-Gl(MW32)-GW-111015												
ICS-Gl(MW32)-GW-111015												
ICS-Gl(MW32)-GW-032316	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-Gl(MW32)-GW-032316												
ICS-Gl(MW32)-GW-032316												
ICS-Gl(MW32)-GW-032316												
ICS-Gl(MW32)-GW-032316												
ICS-Gu(MW33)-GW-111015												
ICS-Gu(MW33)-GW-111015												
ICS-Gu(MW33)-GW-032316	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04	0.02 U
ICS-Gu(MW33)-GW-032316												
ICS-Gu(MW33)-GW-032316												
ICS-Gu(MW33)-GW-032316												
ICS-Gu(MW33)-GW-032316												
ICS-Ku(MW34)-GW-111015												
ICS-Ku(MW34)-GW-111015												
ICS-Ku(MW34)-GW-032216	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-Ku(MW34)-GW-032216												
ICS-Ku(MW34)-GW-032216												
ICS-Ku(MW34)-GW-032216												
ICS-Ku(MW34)-GW-032216												
ICS-Kl(MW35)-GW-111015												
ICS-Kl(MW35)-GW-111015												
ICS-Kl(MW35)-GW-032216	0.2 U	0.01 U	0.5	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-Kl(MW35)-GW-032216												
ICS-Kl(MW35)-GW-032216												
ICS-Kl(MW35)-GW-032216												
ICS-Kl(MW35)-GW-032216												

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L
ICS-II(MW36)-GW-112015												
ICS-II(MW36)-GW-112015												
ICS-II(MW36)-GW-032816	0.2 U	0.01 U	0.2	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04	0.02 U
ICS-II(MW36)-GW-032816												
ICS-II(MW36)-GW-032816												
ICS-II(MW36)-GW-032816												
ICS-II(MW36)-GW-032816												
ICS-Bp(MW38)-GW-032516	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.04	0.4 U
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB1-GW-032716	0.2 U	0.01 U	1.6	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-RB1-GW-032716												
ICS-RB1-GW-032716												
ICS-RB1-GW-032716												
ICS-RB1-GW-032716												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-GW-033016	0.2 U	0.01 U	0.2 U	0.01 U	0.2 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
ICS-RB2-GW-033016												
ICS-RB2-GW-033016												
ICS-RB2-GW-033016												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-DMCMWA-GW-112415																
ICS-DMCMWA-GW-112415																
ICS-DUPL2-GW-112415																
ICS-DUPL2-GW-112415																
ICS-MWA-GW-033016	0.0058 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0062 U	0.030	0.0062 U	0.0062 U	0.11 J_p	0.0062 U	0.0062 U	0.031 U
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-MWA-GW-033016																
ICS-DUP2-GW-033016	0.0044 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0062 U	0.048	0.0062 U	0.0062 U	0.17 J_p	0.0062 U	0.0062 U	0.031 U
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DUP2-GW-033016																
ICS-DMCMWB-GW-112415																
ICS-DMCMWB-GW-112415																
ICS-MWB-GW-033016	0.0048 U	0.0088 U	0.00062 U	0.00062 U	0.0019 U	0.00062 U	0.00062 U	0.00062 U	0.0066 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-MWB-GW-033016																
ICS-HCB1-GW-111915																
ICS-HCB1-GW-111915																
ICS-HCB1-GW-032416	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB1-GW-032416																
ICS-HCB2R-GW-111115																
ICS-HCB2R-GW-111115																
ICS-HCB2R-GW-032316	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 J	0.0012 U	0.0012 U	0.0026 J_p	0.0012 U	0.0050	0.0062 U
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-HCB2R-GW-032316																
ICS-DMCMWC-GW-112415																
ICS-DMCMWC-GW-112415																
ICS-MWC-GW-033016	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0023 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MWC-GW-033016																
ICS-MW1-GW-111115																
ICS-MW1-GW-111115																
ICS-MW1-GW-032216	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.013 U	0.0050 U	0.021 U	0.0012 U	0.0045 U	0.0049 U	0.041 U	0.0012 U	0.021 U	0.0062 U
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																
ICS-MW1-GW-032216																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-SAMW1-GW-112315																
ICS-SAMW1-GW-112315																
ICS-SAMW1-GW-032416	0.0018 U	0.013 U	0.012 U	0.017 U	0.0085 U	0.00062 U	0.029 U	0.00062 U	0.0058 U	0.021 U	0.0025 U	0.024 U	0.0012 U	0.013 U	0.019 U	0.076 U
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-SAMW1-GW-032416																
ICS-MW2-GW-111115																
ICS-MW2-GW-111115																
ICS-MW2-GW-032216	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0017 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW2-GW-032216																
ICS-MW2-GW-032216																
ICS-MW2-GW-032216																
ICS-SAMW2-GW-112015																
ICS-SAMW2-GW-112015																
ICS-SAMW2-GW-032916	0.017 U	0.0088 U	0.0086 U	0.00062 U	0.0038 U	0.0028 U	0.026 U	0.00062 U	0.0012 U	0.0037 U	0.0012 U	0.0022 U	0.0035 U	0.0012 U	0.0012 U	0.0062 U
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-SAMW2-GW-032916																
ICS-MW3-GW-112015																
ICS-MW3-GW-112015																
ICS-MW3-GW-032416	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW3-GW-032416																
ICS-MW3-GW-032416																
ICS-MW3-GW-032416																
ICS-SAMW3-GW-111915																
ICS-SAMW3-GW-111915																
ICS-SAMW3-GW-032816	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-SAMW3-GW-032816																
ICS-MW4-GW-111115																
ICS-MW4-GW-111115																
ICS-MW4-GW-032916	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW4-GW-032916																
ICS-MW4-GW-032916																
ICS-MW4-GW-032916																
ICS-MW5-GW-112015																
ICS-MW5-GW-112015																
ICS-MW5-GW-032916	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																
ICS-MW5-GW-032916																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-MW6-GW-111915																
ICS-MW6-GW-111915																
ICS-MW6-GW-032416	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW6-GW-032416																
ICS-MW7-GW-112315																
ICS-MW7-GW-112315																
ICS-DUPL1-GW-112315																
ICS-DUPL1-GW-112315																
ICS-MW7-GW-032516	0.00062 U	0.00062 U	0.0066 U	0.0090 U	0.00062 U	0.00062 U	0.00062 U	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.0021 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW7-GW-032516																
ICS-MW7-GW-032516																
ICS-MW7-GW-032516																
ICS-DUP1-GW-032516	0.00062 U	0.00062 U	0.00062 U	0.0066 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0018 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-DUP1-GW-032516																
ICS-MW8-GW-112015																
ICS-MW8-GW-112015																
ICS-MW8-GW-032216	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0023 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-MW8-GW-032216																
ICS-Cp(MW20)-GW-032516																
ICS-Du(MW22)-GW-111815																
ICS-Du(MW22)-GW-111815																
ICS-Du(MW22)-GW-032816	0.0029 U	0.00062 U	0.0022 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Du(MW22)-GW-032816																
ICS-Dp(MW23)-GW-032816																
ICS-HI(MW24)-GW-111815																
ICS-HI(MW24)-GW-111815																
ICS-HI(MW24)-GW-032916	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-HI(MW24)-GW-032916																
ICS-HI(MW24)-GW-032916																
ICS-HI(MW24)-GW-032916																
ICS-HI(MW24)-GW-032916																
ICS-Ap(MW25)-GW-032516																
ICS-Ju(MW27)-GW-112015																
ICS-Ju(MW27)-GW-112015																
ICS-Ju(MW27)-GW-032816	0.00062 U	0.00062 U	0.0057 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Ju(MW27)-GW-032816																
ICS-Ju(MW27)-GW-032816																
ICS-Ju(MW27)-GW-032816																
ICS-Ju(MW27)-GW-032816																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-Eu(MW28)-GW-111915																
ICS-Eu(MW28)-GW-111915																
ICS-Eu(MW28)-GW-032416	0.00062 U	0.0021 U	0.00062 U	0.00062 U	0.0049 U	0.00062 U	0.017 U	0.00062 U	0.0012 U	0.033 U	0.0039 U	0.0012 U	0.015 U	0.0012 U	0.015 U	0.067 U
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Eu(MW28)-GW-032416																
ICS-Fu(MW30)-GW-111115																
ICS-Fu(MW30)-GW-111115																
ICS-Fu(MW30)-GW-032316	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Fu(MW30)-GW-032316																
ICS-Fu(MW30)-GW-032316																
ICS-Fu(MW30)-GW-032316																
ICS-Fi(MW31)-GW-111015																
ICS-Fi(MW31)-GW-111015																
ICS-Fi(MW31)-GW-032316	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Fi(MW31)-GW-032316																
ICS-Gl(MW32)-GW-111015																
ICS-Gl(MW32)-GW-111015																
ICS-Gl(MW32)-GW-032316	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gl(MW32)-GW-032316																
ICS-Gu(MW33)-GW-111015																
ICS-Gu(MW33)-GW-111015																
ICS-Gu(MW33)-GW-032316	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Gu(MW33)-GW-032316																
ICS-Ku(MW34)-GW-111015																
ICS-Ku(MW34)-GW-111015																
ICS-Ku(MW34)-GW-032216	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Ku(MW34)-GW-032216																
ICS-Ku(MW34)-GW-032216																
ICS-Ku(MW34)-GW-032216																
ICS-Kl(MW35)-GW-111015																
ICS-Kl(MW35)-GW-111015																
ICS-Kl(MW35)-GW-032216	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-Kl(MW35)-GW-032216																
ICS-Kl(MW35)-GW-032216																
ICS-Kl(MW35)-GW-032216																

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L
ICS-II(MW36)-GW-112015																
ICS-II(MW36)-GW-112015																
ICS-II(MW36)-GW-032816	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-II(MW36)-GW-032816																
ICS-II(MW36)-GW-032816																
ICS-II(MW36)-GW-032816																
ICS-II(MW36)-GW-032816																
ICS-Bp(MW38)-GW-032516																
Trip Blank																
Trip Blank																
Trip Blank																
ICS-RB1-GW-032716	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-RB1-GW-032716																
ICS-RB1-GW-032716																
ICS-RB1-GW-032716																
ICS-RB1-GW-032716																
Trip Blank																
Trip Blank																
Trip Blank																
ICS-RB2-GW-033016	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.0012 U	0.0012 U	0.0012 U	0.0021 U	0.0012 U	0.0012 U	0.0012 U	0.0062 U
ICS-RB2-GW-033016																
ICS-RB2-GW-033016																
ICS-RB2-GW-033016																
ICS-RB2-GW-033016																

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081B).

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-DMCMWA-GW-112415															
ICS-DMCMWA-GW-112415															
ICS-DUPL2-GW-112415															
ICS-DUPL2-GW-112415															
ICS-MWA-GW-033016	0.0062 U	0.0062 U	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.083	0.14	0.067	0.010 U	0.010 U	0.29
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-MWA-GW-033016															
ICS-DUP2-GW-033016	0.0062 U	0.0062 U	0.0031 U	0.0031 U	0.32 U	0.0062 U	0.0062 U	0.010 U	0.010 U	0.096	0.19	0.073	0.010 U	0.010 U	0.36
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DUP2-GW-033016															
ICS-DMCMWB-GW-112415															
ICS-DMCMWB-GW-112415															
ICS-MWB-GW-033016	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0021	0.0012 U	0.010 U	0.010 U	0.010 U	0.018	0.008 J	0.010 U	0.010 U	0.026
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-MWB-GW-033016															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-111915															
ICS-HCB1-GW-032416	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.054	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.054
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB1-GW-032416															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-111115															
ICS-HCB2R-GW-032316	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.020 U	0.050 U	0.028	0.010 U	0.010 U	0.050 U
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-HCB2R-GW-032316															
ICS-DMCMWC-GW-112415															
ICS-DMCMWC-GW-112415															
ICS-MWC-GW-033016	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.012 U	0.016	0.005 J	0.010 U	0.010 U	0.021
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MWC-GW-033016															
ICS-MW1-GW-111115															
ICS-MW1-GW-111115															
ICS-MW1-GW-032216	0.015 U	0.023 U	0.0029 U	0.0072 U	0.063 U	0.0012 U	0.0056 U	0.010 U	0.010 U	0.15 U	0.66	0.85	0.010 U	0.010 U	1.5
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															
ICS-MW1-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-112315															
ICS-SAMW1-GW-032416	0.0012 U	0.0074 U	0.0082 U	0.0098 U	0.063 U	0.012 U	0.017 U	0.010 U	1.7	0.010 U	0.58	0.25	0.010 U	0.010 U	2.5
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-SAMW1-GW-032416															
ICS-MW2-GW-111115															
ICS-MW2-GW-111115															
ICS-MW2-GW-032216	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-MW2-GW-032216															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-112015															
ICS-SAMW2-GW-032916	0.0012 U	0.0012 U	0.0017 U	0.00062 U	0.063 U	0.019 U	0.0058 U	0.010 U	0.010 U	0.078	0.089 J _p	0.024	0.010 U	0.010 U	0.19
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-SAMW2-GW-032916															
ICS-MW3-GW-112015															
ICS-MW3-GW-112015															
ICS-MW3-GW-032416	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-MW3-GW-032416															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-111915															
ICS-SAMW3-GW-032816	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-SAMW3-GW-032816															
ICS-MW4-GW-111115															
ICS-MW4-GW-111115															
ICS-MW4-GW-032916	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW4-GW-032916															
ICS-MW5-GW-112015															
ICS-MW5-GW-112015															
ICS-MW5-GW-032916	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															
ICS-MW5-GW-032916															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-MW6-GW-111915															
ICS-MW6-GW-111915															
ICS-MW6-GW-032416	0.0012 U	0.0012 U	0.0032	0.0027	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.015 U	0.025 U	0.010 U	0.010 U	0.010 U	0.025 U
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW6-GW-032416															
ICS-MW7-GW-112315															
ICS-MW7-GW-112315															
ICS-DUPL1-GW-112315															
ICS-DUPL1-GW-112315															
ICS-MW7-GW-032516	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.057	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.057
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-MW7-GW-032516															
ICS-DUP1-GW-032516	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.054	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.054
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-DUP1-GW-032516															
ICS-MW8-GW-112015															
ICS-MW8-GW-112015															
ICS-MW8-GW-032216	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0081 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-MW8-GW-032216															
ICS-Cp(MW20)-GW-032516								0.010 U	0.041	0.010 U	0.020 U	0.010 U	0.010 U	0.010 U	0.041
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-111815															
ICS-Du(MW22)-GW-032816	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.004 J	0.010 U	0.010 U	0.010 U
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Du(MW22)-GW-032816															
ICS-Dp(MW23)-GW-032816								0.010 U	0.010 U	0.010 U	0.025 U	0.008 J	0.010 U	0.010 U	0.025 U
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-111815															
ICS-HI(MW24)-GW-032916	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-HI(MW24)-GW-032916															
ICS-Ap(MW25)-GW-032516								0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-112015															
ICS-Ju(MW27)-GW-032816	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0054 U	0.010 U	0.010 U	0.010 U	0.010 U	0.006 J	0.010 U	0.010 U	0.010 U
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															
ICS-Ju(MW27)-GW-032816															

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans-Chlordane 5103-74-2 µg/L	cis-Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro-benzene 118-74-1 µg/L	Hexachloro-butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-111915															
ICS-Eu(MW28)-GW-032416	0.012 U	0.019 U	0.0021 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.19	0.010 U	0.12	0.077	0.010 U	0.010 U	0.39
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Eu(MW28)-GW-032416															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-111115															
ICS-Fu(MW30)-GW-032316	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fu(MW30)-GW-032316															
ICS-Fi(MW31)-GW-111015															
ICS-Fi(MW31)-GW-111015															
ICS-Fi(MW31)-GW-032316	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Fi(MW31)-GW-032316															
ICS-Fi(MW31)-GW-032316															
ICS-Fi(MW31)-GW-032316															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-111015															
ICS-Gl(MW32)-GW-032316	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gl(MW32)-GW-032316															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-111015															
ICS-Gu(MW33)-GW-032316	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Gu(MW33)-GW-032316															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-111015															
ICS-Ku(MW34)-GW-032216	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Ku(MW34)-GW-032216															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-111015															
ICS-Kl(MW35)-GW-032216	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															
ICS-Kl(MW35)-GW-032216															

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, November 2015 and March 2016

Field I.D.	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L	trans- Chlordane 5103-74-2 µg/L	cis- Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-112015															
ICS-II(MW36)-GW-032816	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-II(MW36)-GW-032816															
ICS-Bp(MW38)-GW-032516								0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Trip Blank															
Trip Blank															
Trip Blank															
ICS-RB1-GW-032716	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
ICS-RB1-GW-032716															
Trip Blank															
Trip Blank															
Trip Blank															
ICS-RB2-GW-033016	0.0012 U	0.0012 U	0.00062 U	0.00062 U	0.063 U	0.0012 U	0.0012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.020 U	0.020 U
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															
ICS-RB2-GW-033016															

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses and/or within the mixture pattern on GC/ECD (M.8082).

U = nondetected at the associated lower reporting limit.

**D.M.D., Inc.****Environmental & Toxicological Services**

13706 SW Caster Road, Vashon, WA 98070-7428 (206) 463-6223 fax: (206) 463-4013

MEMORANDUM

TO: Matt Dalton (DOF)

FROM: Raleigh Farlow

DATE: November 19, 2016

SUBJECT: Data Evaluation/Assessment for 61 Groundwaters Collected from Monitoring Wells during September and October 2016 from the ICS / [former] NW Cooperage Site, Seattle, WA

Sixty-one well water samples were collected by Dalton, Olmsted & Fuglevand (DOF) staff during September and October, 2016 for chemical characterization. All samples were delivered in six sample delivery groups (SDG's) to Analytical Resources Inc. (ARI) of Tukwila, Washington within 51 hours of collection. Samples were received on ice at temperatures between 1.3 and 5.8 °C, and maintained at the project laboratory at 4 °C prior to analyses. Appropriate chemical preservatives were specified and used for water samples; nitric acid (HNO₃) for total and dissolved metals, and HCl for VOC's. Dissolved metals in water were determined following field filtration through 0.45 µm in-line filters prior to acid preservation. Six trip/transport blanks were submitted and analyzed for TPH-G and VOC's, and two field equipment rinsate blanks were generated and analyzed for quality control purposes.

Sample collection, handling, and analyses were conducted in accordance with the project sampling and analysis plan (SAP) (*Sampling and Analysis Plan to Complete Remedial Investigation Sampling ICS / Former NW Cooperage Site, Seattle, Washington*, prepared by DOF, February 2012), *Data Gap Memorandum, ICS/NWC Remedial Investigation Testing, Seattle, Washington*, 11/11/14, from M. Dalton (DOF) to V. Sutton (WDOE), and *Proposed Round 3 Sampling Program, ICS/NWC RI/FS*, 7/8/16, from M. Dalton (DOF) to V. Sutton (WDOE). All analyses were performed by methods presented in Table SAP-4 of the SAP.

VOC's	SW846-M.8260C	SVOC's	SW846-M.8270D
chlor. pesticides	SW846-M.8081A	SVOC's (PAH's)	SW846-M.8270 - SIM
PCB's as Aroclors	SW846-M.8082A	chlor. phenols	SW846-M.8041A
metals (excl Hg)	EPA 200.8	Hg (low-level)	SW846-M.7470A
total petroleum HC's	NWTPH-Dx & -G		

Semivolatile organic compound (SVOC's) analyses were performed by SW846 M.8270 in full-scan mode, and polycyclic aromatic hydrocarbons (PAH's) were further analyzed and reported from analyses performed in the (M.8270D) SIM [selected ion monitoring] mode to improve/lower the reporting limits. SVOC lower reporting limits were enhanced/improved over previous monitoring events by increasing extraction volumes to one liter utilizing separatory

funnel technique. PAH results were preferentially reported from the full-scan analyses (full-scan GC/MS is considered a more reliable method and exhibits minimal bias) or from the method yielding non-qualified results for detected analytes. Lower reporting limits for nondetected PAH's are reported from the SIM method in conjunction with silica gel chromatographic extract cleanup. Selected analytes, such as dichloro- and trichloro-benzenes were analyzed by both the SVOC method (M.8270D) and the volatile organic compound (VOC's) method (M.8260C). Consistent with previous quarters' reporting, results from the SVOC's analyses are considered as more representative. Naphthalene and hexachlorobutadiene (HCBd) results generated by M.8260C (VOC's method) were not reported in the attached results table due to lower reporting limits available for the SVOC-SIM (M.8270-SIM) and chlorinated pesticides (by M.8081A) methods, respectively. Method 8081A options employed for these analyses include separatory funnel extraction (M.3510C), silica gel chromatographic cleanup, and elemental sulfur (S_x) removal. Hexachlorobenzene (HCB) results were generated and reported by both M.8270D and M.8081A, while only the results generated by M.8081A are retained here due to significantly reduced reporting limits. The lower reporting limit for pentachlorophenol (PCP) was improved over M.8270D by use of M.8041 (diazomethane ether derivatives analyzed by GC/ECD [dual column] option). PCB's analyzed by M.8082A and reported as Aroclors included separatory funnel extraction (M.3510C), silica gel chromatographic cleanup, S_x removal, and strong acid (H₂SO₄) digestion. NWTPH-Dx extract preparation was supplemented with silica gel chromatography and strong acid (H₂SO₄) cleanup steps.

Metals were determined by the application of ICP-MS (U.S. EPA 200.8) UCT™ (universal cell technology) operated in the kinetic energy dissociation (KED) mode tuned for optimum selectivity of arsenic, cadmium, copper, nickel and zinc. This allows increased discrimination from interferences in saline and brackish waters (samples typically require dilution to yield TDS < 1000-2000 ppm). Chromium, lead and silver are analyzed by ICP-MS in the "standard mode".

Samples were relinquished by DOF under chain-of-custody (C-O-C) procedure. All analyses for parameters reported in the attached results table were completed within the technical holding time requirements identified in the project SAP (Table SAP-2) and/or within the recommended maximum holding times recommended by the U.S. EPA. Sample holding times/conditions are determined to be acceptable or within SAP specifications.

Lower **reporting limits** were generally consistent with specified-limits presented in the SAP and to address the proposed contaminant screening levels (SL's) presented in Table 3 of the 7/8/16 Round 3 Sampling Program description. In most cases, lower reporting limits were sufficient for comparison of site contaminant levels to the proposed SL's. Several samples exhibited elevated reporting limits for copper (Cu > 3.1 µg/l) due to high dissolved solids concentrations requiring digestate dilutions during instrumental analyses. Elevated pesticide reporting limits (specifically, DDE and DDT reporting limits greater than the proposed SL of 0.001 µg/l) due to interferences associated with the presence of PCB's. Selected results (4,4'-DDD, 4,4'-DDE, beta-BHC and *trans*-Chlordane) were qualified with the "Jp" qualifier code due to variability in the dual column confirmation analyses in samples ICS-DOFMW1-W-092616, ICS-SAMW1-W-093016, ICS-MWJu(MW27)-W-092716 and ICS-MWDu(MW22)-W-100116 (>40RPD [relative percent difference] in dual-column quantitative confirmation). Multi-parametric analyte results, such as

for Aroclors 1254 and 1260 in sample ICS-DMCMTWA-W-092916 (and the associated blind duplicate, ICS-DUP2-W-092916) were “J_p” qualified due to deviations in relative peak contributions compared to the standard reference mixture. Analyte concentrations reported at less than the [specified] lower reporting limit (LOQ) or the established linear concentration range for all parameter groups are qualified as estimated with the “J” qualifier code.

Method blanks (MB) were analyzed and reported for all analytical parameters and groups (analytical groups are ≤ 20 samples). Method blanks generally reported nondetects, with the exception of some analytes at levels between the “lower reporting limits” and method detection limits. Analytes and associated analytical groups requiring qualification of results due to possible impact from background contributions found in method blanks include:

16I0429	<i>bis</i> (2-ethylhexyl)phthalate	0.2 µg/l
16I0461	<i>m,p</i> -xylenes	0.07 µg/l
	1,2,4-trimethylbenzene	0.07 µg/l
16I0484	carbon disulfide	0.11 µg/l
	1,2,4-trimethylbenzene	0.05 µg/l
16J0027	carbon disulfide	0.05 µg/l
	chromium	0.014 & 0.016 µg/l

Sample results that are likely affected by laboratory background contributions are qualified with the “J_B” qualifier code indicating potential positive bias. Positive results (detections) reported at 2x method blank levels in associated data delivery groups, which required qualification with the “J_B” code are found in the attached results table for carbon disulfide, *m,p*-xylenes, 1,2,4-trimethylbenzene, *bis*(2-ethylhexyl)phthalate and chromium.

Two field equipment **rinsate blanks** were generated and submitted for determination of potential bias associated with field activities. Six **trip/transport blanks** were also generated and submitted for analysis and determination of potential contamination during handling of VOC’s and TPH-G samples. Results of these analyses are reported in the attached table. Trip/transport blanks reported detects, generally less than the “lower reporting limit” or LOQ, for 4 VOC analytes. Trip/transport blanks results are treated similarly to method blanks – data qualification and limitations are associated with samples within each delivery group. Chloromethane and methylene chloride are additional analytes requiring data qualification with the “J_B” qualifier code due to potential positive bias from laboratory and/or field background and handling. Chloromethane and methylene chloride were not reported in laboratory method blanks, but were found in several trip/transport blanks at less than the respective LOQ’s. With the exception of chloromethane and methylene chloride, no additional results required further qualification due to trip/transport blanks performance. Field equipment rinsate blanks exhibited low level metals (chromium, nickel and zinc), acetone, chloroform, toluene, ethylbenzene, *o*-xylene, 1,2,4-trimethylbenzene, other VOC analytes typically found in method and trip/transport blanks, benzoic acid (at 0.3 and 1.1 µg/l), and naphthalene (at 0.010 and 0.011 µg/l). The “J_B” qualifier code was assigned to additional results based on field equipment rinsate blanks performance.

Laboratory control sample (**LCS/LCSD**) and matrix spike (**MS/MSD**) recoveries were within acceptable ranges for most analytes. LCS/LCSD runs were performed for all analytical groups, however, MS/MSD runs were occasionally not performed. **LCS** recoveries for TPH-Dx were reported slightly low at 67, 69 and 69% for analytical groups 16I0412, 16J0009 and 16J0027, respectively (specified limit = 70-120%). *trans*-1,4-Dichloro-2-butene reported lower than specified recoveries (55-129%) at 35 and 31% for the LCS and LCSD in analytical group 16J0009. This analyte has not ever been detected in any site groundwater samples. Benzoic acid reported a slightly low LCS recovery of 26% (lower-limit specification = 30%) for analytical groups 16J0009 and 16J0027, which is comparable to the d₅-phenol surrogate compound recovery of 31%; thus, showing reasonable correlation with the appropriate surrogate compound. Similarly, phenol LCS recoveries were slightly less than the specified lower-limit specification of 30% for half of the analytical groups. Phenol recoveries for LCS's always tracked well with the associated d₅-phenol surrogate compound recoveries within a few percent. Selected chlorinated pesticide analytes (endrin aldehyde, endosulfan sulfate and endrin ketone) reported lower-than-specified LCS recoveries for analytical group 16I0461. LCS recoveries for these three analytes in this analytical group only ranged from 4.5 to 15%. The other five analytical groups exhibited within-specification recoveries for these analytes. None of these analytes have ever been detected in site groundwaters. No sample results require qualification due to LCS/LCSD recovery performance.

Matrix spike (MS/MSD) recovery performance was generally within specification for almost all analytes. Diesel fuel recoveries during TPH-Dx analyses were generally just less than the specified lower limit of 70% for most evaluations; the lowest at 65% for the MS (69% for the MSD) on sample ICS-DOFMW1-W-092616. No diesel-range organic compounds were reported above the lower reporting limit (LOQ) in the associated analytical group. TPH-G MS/MSD recovery in ICS-SAMW1-W-093016 is reported at 64/63% (specified range = 80-120%), while the associated LCS/LCSD recovery is reported at 90/90%. Consistent with previous quarters' monitoring results, phenolic and acidic analytes showed generally lower recoveries than the neutral organic compounds and occasionally less than the specified lower advisory limit. MS/MSD recovery for benzoic acid was 4.8 and 3.6% in ICS-DOFDu(M22)-W-100116 (specified lower limit = 30%). All associated samples (with analytical group 16J0027) reported benzoic acid as either nondetected or at less than the LOQ; detections of benzoic acid at levels less than the LOQ are determined to be estimates associated with the laboratory method blank and/or the field equipment rinsate blanks ("J_B" qualified). ICS-DOFMW6-W-092716 exhibited an MS/MSD phenol recovery of 28 and 32%, and a d₅-phenol (surrogate compound) recovery of 27 and 34%, indicating that the surrogate compound and phenol recoveries correlated well, as expected. A similar [good] correlation is observed for the MS/MSD recovery for phenol in sample ICS-DOFDu(MW22)-W-100116 where the phenol recovery is 15/18% and the associated d₅-phenol recovery is 16/19%. As presented below, following surrogate compounds performance, phenolic and other acidic organic compound recovery performances are determined to be acceptable. No results required qualification due to noncompliant LCS/LCSD and MS/MSD recoveries.

Surrogate compound recoveries (for organic analytes) were evaluated for VOC's, SVOC's, TPH-Dx, TPH-G, chlorinated pesticides (including hexachlorobutadiene [HCBd]) and

hexachlorobenzene [HCB]), PCB's, and chlorinated phenols (PCP). Four labeled compounds were utilized for the evaluation of VOC's recovery performance (d_4 -1,2-dichloroethane, d_8 -toluene, 4-bromofluorobenzene and d_4 -1,2-dichlorobenzene) and TPH-G (d_5 -chlorobenzene, d_8 -toluene, 4-bromofluorobenzene and d_4 -1,2-dichlorobenzene). Tetrachloro-*meta*-xylene (TCMX) and decachlorobiphenyl (DCBP) were utilized as the surrogates for evaluation of chlorinated pesticides and PCB's analytical performance, and *o*-terphenyl was utilized as the surrogate for the TPH-Dx analyses. SVOC recoveries were evaluated with the use of four labeled phenols and four labeled neutral compounds. PAH's by GC/MS-SIM (M.8270D-SIM) utilized the surrogate compounds d_{10} -2-methylnaphthalene, d_{10} -fluoranthene and d_{14} -dibenz(a,h)anthracene. Chlorinated phenols by M.8041A utilized 2,4,6-tribromophenol as the recovery surrogate compound. All surrogate recoveries were within specification, with the following exceptions: several samples showed TCMX or DCBP (chlor. pesticides) at slightly less than the specified range (specified range = 30-160%) on one of the two columns, but not both columns (M.8081A is a dual-column confirmatory method); d_{10} -2-methylnaphthalene of 40% (specified range = 42-120%), d_{10} -fluoranthene of 44% (specified range = 57-120%) and d_{14} -dibenz(a,h)anthracene of 42% (specified range = 29-120%) for PAH (by M.8270D-SIM) in ICS-DOFMW6-W-092716; and d_5 -phenol recovery (by M.8270D) exhibiting less than the specified lower limit of 30% in a large number of samples. Chlorinated pesticide surrogate compounds recovery performance are determined to be acceptable. Because two of the three surrogate compounds for low-level PAH analyses exhibited less than specified recoveries in sample ICS-DOFMW6-W-092716, qualification of positive [hits] results was performed. Naphthalene is reported at 0.018 $\mu\text{g/l}$ and fluorene at 0.004 $\mu\text{g/l}$ (previously J qualified due to less than the verifiable quantitation limit or LOQ) in ICS-DOFMW6-W-092716. Both values are considered estimates and are thus qualified as such; naphthalene as 0.018 $\mu\text{g/l}$ "J_{RB}" due to likely low recovery and presence in the associated field rinsate blanks, and fluorene as 0.004 $\mu\text{g/l}$ "J" due to a result less than the LOQ of 0.010 $\mu\text{g/l}$. No other results require qualification due to surrogate compound recovery performance.

Four phenolic surrogate compounds were employed for evaluation of phenolic and acidic analytes by M.8270D. M.8270D as applied for these analyses and specifically to this project due to specific reporting requirements is an enhanced method for improvement of lower reporting limits of all method analytes. These enhancements include increased sample extraction volumes utilizing separatory funnel technique. This method includes a default pH extraction range of 5.0 to 9.0 for extraction of acidic, neutral and basic compounds. This pH range is considered a compromise range to include all three classes of compounds. However, for this site, no basic compounds are included in the project compounds of concern. As a consequence, low-level phenolic/acidic compounds are expected to suffer some increased losses in recovery due to near-neutral pH extraction conditions. Optimum pH for extraction recovery of acidic compounds is near pH 2, as applied in M.8041A for the selective and efficient extraction of phenolic organic compounds. The laboratory applied their default advisory range for surrogate compound recoveries for SVOC analytes, including phenolic/acidic compounds, of 30-160%. As expected, and consistent with the observed recoveries of acidic compounds during LCS/LCSD and MS/MSD analyses by M.8270D, phenolic surrogate compounds exhibited some of the lowest recoveries of the eight surrogate compounds employed. All six analytical groups analyzed for SVOC's exhibited relatively low recoveries for d_5 -phenol. The other three phenolic surrogate

compounds exhibited recoveries within the default advisory range of 30-160%. The d₅-phenol recoveries ranged from 16-42%; for comparison, the recommended acceptance range for phenolic surrogate compound recoveries by M.8041A (a phenolic compound method) is 10-181%. It is determined that the recoveries exhibited by phenolic/acidic surrogate compounds analyzed by M.8270D (enhanced for low-level reporting limits) are reasonable and acceptable. Method 8270D recovery performance for this monitoring event is considered acceptable. No qualification of phenolic and acidic organic compound results was performed due to surrogate compounds performance.

Initial and continuing calibration verification (ICV/CCV) checks revealed occasional [minor] noncompliant responses (ICV/CCV RPD compared to initial calibration responses > 20) for carbon tetrachloride, dibromochloromethane, *trans*-1,4-dichloro-2-butene, bromoform, acrolein, and the following analytes by M.8270D (full-scan): 2,4,6-trichlorophenol, benzoic acid, carbazole, pentachlorophenol, 2,6-dinitrotoluene, 2,4,6-tribromophenol (surrogate standard), indeno(1,2,3-cd)pyrene, benzo(g,h,i)perylene and dibenz(a,h)anthracene. Potentially affected sample results are required to be qualified with the “J_Q” code (detections are determined to be estimates based on calibration deviations). Results for carbazole (3 samples) in analytical group 16I0484 required qualification due to non-compliant ICV/CCV performances.

TPH-Dx and TPH-G analyses indicate presence of principally weathered gasoline in samples from ICS-DMCMTWA-W-092916, ICS-DMCMTWB-W-092916 and ICS-SAMW1-W-093016; mineral spirits and mineral oil (associated with PCB's) in ICS-SAMW1-W-093016; weathered diesel fuel and mineral oil (associated with PCB's) in ICS-DMCMTWA-W-092916; and motor oil lubricant in ICS-DOFJu(MW27)-W-092716. Bold type values in the attached results table are associated with the patterns that most resemble the hydrocarbon mixtures present; as summarized above.

The analysis of chlorinated pesticides, principally the DDT-suite of compounds (i.e. DDD, DDE and DDT) by M.8081A, are susceptible to interferences or positive bias in the presence of PCB's. Elevated reporting limits for chlorinated pesticides are especially apparent in sample ICS-SAMW1-W-093016 which reports the greatest levels of PCB's, at 3.2 µg/l. Samples exhibiting levels of PCB's greater than 0.05 µg/l tend to show some level of interference and potential positive bias in the reporting of chlorinated pesticides, including the DDT-suite of constituents.

Initial inspection of results indicated the dissolved (filtered) zinc (Zn) value reported for ICS-DOFMW4-W-092616 to likely be nonrepresentative due to an elevated level at 23.5 µg/L and a nonfiltered (total) value of 4 µg/l J. Similarly, the dissolved (filtered) chromium values were significantly greater than the total (nonfiltered) values for ICS-DMCMTWA-W-092916 and ICS-DMCMTWB-W-092916 (dissolved vs. total of 14.8 vs. 2.7 and 22.9 vs. 4.8, respectively). The blind duplicate dissolved (filtered) and total (nonfiltered) chromium values for ICS-DMCMTWA-W-092916 are comparable and reported at 2.4 µg/l J and 3.0 µg/l, respectively. A reanalysis of the initial digestates (within the recommended maximum holding time) for total chromium in samples ICS-DMCMTWA-W-092916 and ICS-DMCMTWB-W-092916 yielded similar results as the initial report. A re-preparation and analysis for dissolved (filtered) chromium revealed

significantly less chromium for both samples – these results are reported in the attached Results Table. Re-preparation (digestion) and analysis for total and dissolved zinc in sample ICS-DOFMW4-W-092616 showed comparable levels less than the LOQ; these results are reported in the attached Results Table. The elevated suspect values for [dissolved] chromium and zinc in these (three) samples appear to be due to inadvertent background contamination in the laboratory, or possible digestate mixups – the initial suspect results could not be replicated. The initial result for hexachlorobenzene (by M.8081A) in ICS-DOFJu(M27)-W-092716 was reported as 0.00082 µg/l U (nondetected); which was determined to be an error and is actually 0.0082 µg/l U.

Sample results reported here are determined to be in general compliance with method and SAP requirements. All reported data for ground water samples (attached) are considered usable for the intended purposes of the project.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-DMCMWA-W-092916	GW-mon. well	9/29/2016	nonfiltered	16I0484-01		2.7		0.10 U		3.8
ICS-DMCMWA-W-092916	GW-mon. well	9/29/2016	field-filtered, 0.45 µm	16I0484-06	2.3		0.10 U		2.2	
ICS-DUP2-W-092916	GW-DMCMWA dup.	9/29/2016	nonfiltered	16I0484-04		2.8		0.04 J		3.0
ICS-DUP2-W-092916	GW-DMCMWA dup.	9/29/2016	field-filtered, 0.45 µm	16I0484-09	2.3		0.10 U		2.4 J	
ICS-DMCMWB-W-092916	GW-mon. well	9/29/2016	nonfiltered	16I0484-02		5.1		1.0 U		7.4
ICS-DMCMWB-W-092916	GW-mon. well	9/29/2016	field-filtered, 0.45 µm	16I0484-07	4.5		0.10 U		6.0	
ICS-HCB1-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-04		0.5 J		2.0 U		2.3
ICS-HCB1-W-093016	GW-mon. well	9/30/2016	field-filtered, 0.45 µm	16J0009-11	0.64 J		1.0 U		2.4	
ICS-HCB2R-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-05						
ICS-DMCMWC-W-092916	GW-mon. well	9/29/2016	nonfiltered	16I0484-03		0.7 J		1.0 U		0.83
ICS-DMCMWC-W-092916	GW-mon. well	9/29/2016	field-filtered, 0.45 µm	16I0484-08	0.58		0.10 U		1.7 J	
ICS-DOFMW1-W-092616	GW-mon. well	9/26/2016	nonfiltered	16I0412-01		1.9		0.50 U		4.5
ICS-DOFMW1-W-092616	GW-mon. well	9/26/2016	field-filtered, 0.45 µm	16I0412-06	1.7		0.20 U		3.8	
ICS-SAMW1-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-02		4.1		0.10 U		29
ICS-SAMW1-W-093016	GW-mon. well	9/30/2016	field-filtered, 0.45 µm	16J0009-09	4.2		0.10 U		25	
ICS-DOFMW2-W-092616	GW-mon. well	9/26/2016	nonfiltered	16I0412-02		3.6		0.20 U		69
ICS-DOFMW2-W-092616	GW-mon. well	9/26/2016	field-filtered, 0.45 µm	16I0412-07	3.8		0.20 U		62	
ICS-SAMW2-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-03		1.5		0.04 J		3.1
ICS-SAMW2-W-093016	GW-mon. well	9/30/2016	field-filtered, 0.45 µm	16J0009-10	1.3 J		1.0 U		2.5	
ICS-DOFMW3-W-092616	GW-mon. well	9/26/2016	nonfiltered	16I0412-03		5.8		0.20 U		84
ICS-DOFMW3-W-092616	GW-mon. well	9/26/2016	field-filtered, 0.45 µm	16I0412-08	5.5		0.20 U		74	
ICS-SAMW3-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-03		0.62		0.12		1.7
ICS-SAMW3-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-10	0.41		0.09 J		3.3	
ICS-DOFMW4-W-092616	GW-mon. well	9/26/2016	nonfiltered	16I0412-04		2.9		0.20 U		64
ICS-DOFMW4-W-092616	GW-mon. well	9/26/2016	field-filtered, 0.45 µm	16I0412-09	3.3		0.20 U		59	
ICS-DOFMW5-W-092616	GW-mon. well	9/26/2016	nonfiltered	16I0412-05		0.68		0.20 U		14
ICS-DOFMW5-W-092616	GW-mon. well	9/26/2016	field-filtered, 0.45 µm	16I0412-10	0.60		0.20 U		12	
ICS-DOFMW6-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-01		0.41		0.10 U		7.0
ICS-DOFMW6-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-08	0.45		0.10 U		7.8	
ICS-DOFMW7-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-02		0.98		0.10 U		4.6
ICS-DOFMW7-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-09	0.96		0.10 U		4.8	
ICS-DUP1-W-092716	GW-MW7 dup.	9/27/2016	nonfiltered	16I0429-07		0.98		0.10 U		4.5
ICS-DUP1-W-092716	GW-MW7 dup.	9/27/2016	field-filtered, 0.45 µm	16I0429-14	0.93		0.10 U		4.4	
ICS-DOFMW8-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-01		9.6		0.10 U		2.3
ICS-DOFMW8-W-093016	GW-mon. well	9/30/2016	field-filtered, 0.45 µm	16J0009-08	9.5		0.10 U		1.4	
ICS-MWCp(MW20)-W-100116	GW-mon. well	10/1/2016	nonfiltered	16J0027-03						
ICS-MWDu(MW22)-W-100116	GW-mon. well	10/1/2016	nonfiltered	16J0027-05		2.1		0.10 U		12
ICS-MWDu(MW22)-W-100116	GW-mon. well	10/1/2016	field-filtered, 0.45 µm	16J0027-08	1.8		0.10 U		11	

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Matrix	Collection Date	Comments	Lab I.D.	Arsenic 7440-38-2		Cadmium 7440-43-9		Chromium 7440-47-3	
					diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MWDp(MW23)-W-100116	GW-mon. well	10/1/2016	nonfiltered	16J0027-04						
ICS-MWHI(MW24)-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-05		0.19 J		0.10 U		1.0
ICS-MWHI(MW24)-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-12	0.16 J		0.10 U		1.6 J	
ICS-MWAp(MW25)-W-100116	GW-mon. well	10/1/2016	nonfiltered	16J0027-01						
ICS-MWJu(MW27)-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-06		2.5		0.12		3.4
ICS-MWJu(MW27)-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-13	1.2		0.10 U		1.6 J	
ICS-MWEu(MW28)-W-093016	GW-mon. well	9/30/2016	nonfiltered	16J0009-06		2.4		1.0 U		2.1
ICS-MWEu(MW28)-W-093016	GW-mon. well	9/30/2016	field-filtered, 0.45 µm	16J0009-12	2.8		1.0 U		2.3	
ICS-MWFe(MW30)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-01		0.36		0.04 J		0.37 J_B
ICS-MWFe(MW30)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-08	0.36		0.06 J		0.35 J_B	
ICS-MWFI(MW31)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-02		0.75		0.10 U		12
ICS-MWFI(MW31)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-09	0.75		0.20 U		14	
ICS-MWGI(MW32)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-04		0.6 J		1.0 U		0.90
ICS-MWGI(MW32)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-11	1.0 J		1.0 U		2.5 J	
ICS-MWGu(MW33)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-03		0.55		0.10 U		0.80
ICS-MWGu(MW33)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-10	0.71		0.10 U		0.85	
ICS-MWKu(MW34)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-05		1.2		0.04 J		1.4
ICS-MWKu(MW34)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-12	1.1		0.20 U		1.5	
ICS-MWKI(MW35)-W-092816	GW-mon. well	9/28/2016	nonfiltered	16I0461-06		0.30		1.0 U		1.3
ICS-MWKI(MW35)-W-092816	GW-mon. well	9/28/2016	field-filtered, 0.45 µm	16I0461-13	0.6 J		1.0 U		3.6 J	
ICS-MWII(MW36)-W-092716	GW-mon. well	9/27/2016	nonfiltered	16I0429-04		0.31		0.10 U		1.9
ICS-MWII(MW36)-W-092716	GW-mon. well	9/27/2016	field-filtered, 0.45 µm	16I0429-11	0.33		0.10 U		3.2	
ICS-MWBp(MW38)-W-100116	GW-mon. well	10/1/2016	nonfiltered	16J0027-02						
Trip Blank	blank water	9/26/2016	trip/transport blank	16I0412-11						
Trip Blank	blank water	9/27/2016	trip/transport blank	16I0429-15						
ICS-RB1-W-092816	field equip rinsate	9/28/2016	nonfiltered	16I0461-07		0.20 U		0.10 U		0.14 J
ICS-RB1-W-092816	field equip rinsate	9/28/2016	field-filtered, 0.45 µm	16I0461-14	0.20 U		0.10 U		0.5 U	
Trip Blank	blank water	9/28/2016	trip/transport blank	16I0461-15						
Trip Blank	blank water	9/29/2016	trip/transport blank	16I0484-05						
Trip Blank	blank water	9/30/2016	trip/transport blank	16J0009-07						
Trip Blank	blank water	10/1/2016	trip/transport blank	16J0027-07						
ICS-RB2-W-100116	field equip rinsate	10/1/2016	nonfiltered	16J0027-06		0.20 U		0.10 U		0.22 J_B
ICS-RB2-W-100116	field equip rinsate	10/1/2016	field-filtered, 0.45 µm	16J0027-09	0.20 U		0.10 U		0.21 J_B	

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Zinc 7440-66-6	
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-DMCMWA-W-092916		1.6		11	20 U		1.2 J_B		0.20 U		10	
ICS-DMCMWA-W-092916	0.5 U		0.10 U		20 U		0.28 J		0.20 U		1 J_B	
ICS-DUP2-W-092916		1.7		13	20 U		1.2 J_B		0.20 U		12	
ICS-DUP2-W-092916	0.5 U		0.10 U		20 U		0.25 J		0.20 U		1 J_B	
ICS-DMCMWB-W-092916		5 U		12	23		1.4 J_B		2.0 U		10 J	
ICS-DMCMWB-W-092916	0.5 U		0.54		20 U		0.72		0.02 J		1 J_B	
ICS-HCB1-W-093016		10 U		2 U	20 U		2.4 J		4.0 U		80 U	
ICS-HCB1-W-093016	5 U		1 U		20 U		0.5 J		2.0 U		40 U	
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916		5 U		1.0 U	20 U		5.0 U		2.0 U		40 U	
ICS-DMCMWC-W-092916	0.5 U		0.10 U		20 U		0.21 J		0.20 U		1 J_B	
ICS-DOFMW1-W-092616		2.2 J		0.62	20 U		8.6		2.0 U		20 U	
ICS-DOFMW1-W-092616	1 U		0.20 U		20 U		7.6		0.40 U		2 J_B	
ICS-SAMW1-W-093016		2.7		2.4	20 U		3.4		0.28		8.6	
ICS-SAMW1-W-093016	1.5		1.6		20 U		3.2		0.32		6.9	
ICS-DOFMW2-W-092616		16		1.0	20 U		1.5 J_B		0.14 J		4 J	
ICS-DOFMW2-W-092616	15		1.1		20 U		1.5		0.14 J		4 J	
ICS-SAMW2-W-093016		0.54		0.96	20 U		1.8		2.0 U		3 J	
ICS-SAMW2-W-093016	5 U		1 U		20 U		1.5 J		2.0 U		40 U	
ICS-DOFMW3-W-092616		11		0.88	20 U		2.0 J		0.13 J		3 J	
ICS-DOFMW3-W-092616	11		0.94		20 U		1.7		0.14 J		5 J	
ICS-SAMW3-W-092716		7.4		0.12	36		2.6		0.03 J		6.4	
ICS-SAMW3-W-092716	9.2		0.50 U		20 U		2.6		1.0 U		5.9	
ICS-DOFMW4-W-092616		18		1.1	20 U		1.2 J_B		0.13 J		5 J	
ICS-DOFMW4-W-092616	19		1.2		20 U		1.4		0.12 J		5 J	
ICS-DOFMW5-W-092616		4.1		0.29	20 U		0.4 J_B		1.0 U		8 U	
ICS-DOFMW5-W-092616	4.1		0.30		20 U		0.5 J		0.4 U		3 J	
ICS-DOFMW6-W-092716		1.7		0.17	65		1.0 J_B		0.02 J		31	
ICS-DOFMW6-W-092716	1.7		0.15		20 U		1.0		0.02 J		29	
ICS-DOFMW7-W-092716		0.50 U		0.15	20 U		1.4 J_B		0.20 U		1 J_B	
ICS-DOFMW7-W-092716	5 U		0.10 U		20 U		1.6 J		0.20 U		4 U	
ICS-DUP1-W-092716		0.91		0.20	20 U		2.9		0.20 U		1 J_B	
ICS-DUP1-W-092716	0.50 U		0.10 U		20 U		1.4		0.20 U		1 J_B	
ICS-DOFMW8-W-093016		1.1		3.1	20 U		5.1		0.20 U		3 J	
ICS-DOFMW8-W-093016	0.5 U		0.10 U		20 U		4.7		0.20 U		1 J_B	
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116		4.7		0.62	20 U		1.27 J_B		0.02 J		5.2	
ICS-MWDu(MW22)-W-100116	4.1		0.29		20 U		0.74		0.02 J		1 J_B	

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Copper 7440-50-8		Lead 7439-92-1		Mercury 7439-97-6		Nickel 7440-02-0		Silver 7440-22-4		Zinc 7440-66-6	
	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHl(MW24)-W-092716		2.4		0.09 J		20 U		0.23 J_B		0.20 U		1 J_B
ICS-MWHl(MW24)-W-092716	2.5 U		0.50 U		20 U		2.5 U		1.0 U		1 J_B	
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716		5.0		9.8		59		2.9		0.02 J		48
ICS-MWJu(MW27)-W-092716	2.5 U		0.50 U		20 U		1.0 J		1.0 U		1 J_B	
ICS-MWEu(MW28)-W-093016		5 U		1 U		20 U		1.4 J_B		2.0 U		40 U
ICS-MWEu(MW28)-W-093016	5 U		1 U		20 U		0.8 J		2.0 U		40 U	
ICS-MWfu(MW30)-W-092816		3.1		0.10 U		20 U		3.3		0.20 U		2 J_B
ICS-MWfu(MW30)-W-092816	3.3		0.10 U		20 U		3.4		0.20 U		2 J_B	
ICS-MWFl(MW31)-W-092816		0.75		0.08 J		49		1.4 J_B		0.04 J		1 J_B
ICS-MWFl(MW31)-W-092816	1.0 U		0.20 U		20 U		0.82 J		0.05 J		8 U	
ICS-MWGl(MW32)-W-092816		10 U		1.0 U		20 U		10 U		2.0 U		40 U
ICS-MWGl(MW32)-W-092816	5 U		1.0 U		20 U		5.0 U		2.0 U		40 U	
ICS-MWGu(MW33)-W-092816		1.5		0.14		20 U		1.1 J_B		0.20 U		1 J_B
ICS-MWGu(MW33)-W-092816	10 U		0.10 U		20 U		10 U		0.20 U		1 J_B	
ICS-MWKu(MW34)-W-092816		2.0		0.07 J		20 U		3.9		0.40 U		3 J
ICS-MWKu(MW34)-W-092816	1.5		0.20 U		20 U		2.8		0.40 U		5	
ICS-MWKl(MW35)-W-092816		1.2		1.0 U		20 U		1.3 J_B		2.0 U		1 J_B
ICS-MWKl(MW35)-W-092816	5 U		1.0 U		20 U		0.9 J		2.0 U		17 J	
ICS-MWIl(MW36)-W-092716		0.50 U		0.07 J		140		0.56 J_B		0.20 U		1 J_B
ICS-MWIl(MW36)-W-092716	2.5 U		0.50 U		20 U		0.6 J		1.0 U		1 J_B	
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816		0.5 U		0.10 U		20 U		0.20 J		0.20 U		1 J
ICS-RB1-W-092816	0.5 U		0.10 U		20 U		0.50 U		0.20 U		1 J	
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116		0.5 U		0.10 U		20 U		0.75		0.20 U		1 J
ICS-RB2-W-100116	0.5 U		0.10 U		20 U		0.50 U		0.20 U		4 U	

J = estimate associated with value less than the verifiable lower quantitation limit (LOQ).

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L
ICS-DMCMTWA-W-092916	0.50	1.2	2.1	0.50 U	1.0 U	0.20 U	0.20 U	0.50 J_B	5.0 U	0.08 J_B	0.20 U	0.20 U
ICS-DMCMTWA-W-092916												
ICS-DUP2-W-092916	0.49	0.23	0.26	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.06 J_B	0.20 U	0.20 U
ICS-DUP2-W-092916												
ICS-DMCMTWB-W-092916	0.44	0.20	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.52 J_B	5.0 U	0.11 J_B	0.20 U	0.20 U
ICS-DMCMTWB-W-092916												
ICS-HCB1-W-093016	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.05 J_B	0.20 U	0.08 J
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	3.6 J_B	2.4 J_B	0.10 J_B	0.20 U	0.20 U
ICS-DMCMTWC-W-092916	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.63 J_B	5.0 U	0.05 J_B	0.20 U	0.20 U
ICS-DMCMTWC-W-092916												
ICS-DOFMW1-W-092616	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	0.73 J_B	3.3 J_B	0.20 U	0.20 U	0.15 J
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	2.5	0.69	0.94	0.50 U	1.0 U	6.2	2.9	0.59 J_B	5.5 J_B	0.17 J	0.07 J	11
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.10 U	0.10 U	0.20 U	0.22 J_B	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.14 J_B	0.20 U	0.10 J
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.19 J	0.20 U	1.0 U	8.5	0.20 U	0.20 U	0.20 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.14 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.10 U	0.10 U	0.20 U	0.11 J	1.0 U	0.20 U	0.20 U	0.52 J_B	5.0 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.26	0.39	1.0 U	5.0 U	0.20 U	0.20 U	0.28
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.48	3.0	0.72 J_B	5.0 U	0.06 J_B	0.20 U	0.64
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.52	3.2	0.50 J_B	5.0 U	0.20 U	0.20 U	0.67
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.12	0.10 U	0.20 U	0.50 U	1.0 U	1.0	3.8	0.72 J_B	2.8 J_B	0.07 J_B	0.20 U	0.12 J
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116				0.50 U	1.0 U	0.07 J	0.20 U	1.0 U	2.3 J_B	0.04 J_B	0.20 U	0.30
ICS-MWDu(MW22)-W-100116	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.04 J_B	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Total Petroleum Hydrocarbons **			Chloro- methane	Bromo- methane	Vinyl chloride	Chloro- ethane	Methylene chloride	Acetone	Carbon disulfide	1,1-Dichloro- ethene	1,1-Dichloro- ethane
	Gasoline-range mg/L	Diesel-range mg/L	Lube-range mg/L	74-87-3 µg/L	74-83-9 µg/L	75-01-4 µg/L	75-00-3 µg/L	75-09-2 µg/L	67-64-1 µg/L	75-15-0 µg/L	75-35-4 µg/L	75-34-3 µg/L
ICS-MWDp(MW23)-W-100116				0.50 U	1.0 U	0.20	0.20 U	1.0 U	5.3 J_B	0.07 J_B	0.20 U	0.15 J
ICS-MWHI(MW24)-W-092716	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.07 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.25
ICS-MWJu(MW27)-W-092716	0.10 U	0.11	0.63	0.50 U	1.0 U	0.09 J	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.13 J
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.08 J_B	0.20 U	0.11 J
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.10 U	0.10 U	0.20 U	0.14 J	1.0 U	0.06 J	0.17 J	0.49 J_B	5.0 U	0.20 U	0.20 U	0.08 J
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.10 U	0.10 U	0.20 U	0.11 J	1.0 U	0.20 U	0.20 U	0.53 J_B	5.0 U	0.20 U	0.20 U	0.10 J
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.10 U	0.10 U	0.20 U	0.12 J	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.08 J_B	0.20 U	0.20 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKl(MW35)-W-092816	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.07 J	0.20 U	1.0 U	5.0 U	0.05 J_B	0.20 U	0.07 J
ICS-MWKl(MW35)-W-092816												
ICS-MWIl(MW36)-W-092716	0.10 U	0.10 U	0.20 U	0.10 J	1.0 U	0.12 J	0.24	0.56 J_B	5.0 U	0.20 U	0.20 U	0.20
ICS-MWIl(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	2.4 J_B	0.20 U	0.20 U	0.20 U
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	0.65 J_B	5.0 U	0.13 J	0.20 U	0.20 U
ICS-RB1-W-092816	0.10 U	0.10 U	0.20 U	0.14 J	1.0 U	0.20 U	0.20 U	4.0	3.2 J	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816												
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	0.51 J_B	5.0 U	0.06 J	0.20 U	0.20 U
Trip Blank	0.10 U			0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.10 J_B	0.20 U	0.20 U
Trip Blank				0.11 J	1.0 U	0.20 U	0.20 U	0.50 J_B	5.0 U	0.07 J	0.20 U	0.20 U
Trip Blank				0.50 U	1.0 U	0.20 U	0.20 U	1.0 U	5.0 U	0.17 J	0.20 U	0.20 U
ICS-RB2-W-100116	0.10 U	0.10 U	0.20 U	0.50 U	1.0 U	0.20 U	0.20 U	3.6	3.4 J	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116												

** bold-typed values resemble corresponding petroleum hydrocarbon mixture [typically, weathered]

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	<i>trans</i> -1,2-Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2-Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloroethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L
ICS-DMCMTWA-W-092916	0.20 U	0.11 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWA-W-092916												
ICS-DUP2-W-092916	0.20 U	0.09 J	0.32 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP2-W-092916												
ICS-DMCMTWB-W-092916	0.20 U	0.10 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWB-W-092916												
ICS-HCB1-W-093016	0.20 U	0.15 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWC-W-092916	0.20 U	0.20 U	0.14 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWC-W-092916												
ICS-DOFMW1-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	4.4	2.8	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.77	0.20 U	0.26	0.20 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.20 U	0.17 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.06 J	0.20 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.20 U	0.10 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.27	0.12 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.45	0.31	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.07 J	0.20 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.47	0.33	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.08 J	0.20 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.39	0.43	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116	0.20 U	0.08 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116	0.08 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	<i>trans</i> -1,2-Dichloroethene 156-60-5 µg/L	<i>cis</i> -1,2-Dichloroethene 156-59-2 µg/L	Chloroform 67-66-3 µg/L	1,2-Dichloroethane 107-06-2 µg/L	2-Butanone 78-93-3 µg/L	1,1,1-Tri-chloroethane 71-55-6 µg/L	Carbon tetrachloride 56-23-5 µg/L	Bromo-dichloromethane 75-27-4 µg/L	1,2-Dichloro-propane 78-87-5 µg/L	<i>cis</i> -1,3-Dichloro-propene 10061-01-5 µg/L	Trichloro-ethene 79-01-6 µg/L	Dibromo-chloromethane 124-48-1 µg/L
ICS-MWDp(MW23)-W-100116	0.32	1.4	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.20 U
ICS-MWHI(MW24)-W-092716	0.20 U	0.09 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116	0.20 U	0.08 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716	0.20 U	0.23	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.20 U	0.20 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.20 U	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.20 U	0.85	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.20 U	0.42	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.20 U	0.15 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.08 J	3.4	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.20 U	0.26	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116	0.20 U	0.20 U	0.07 J_B	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816	0.20 U	0.20 U	0.05 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816												
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116	0.20 U	0.20 U	0.04 J	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

<u>Field I.D.</u>	1,1,2-Trichloro- ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	<i>trans</i> -1,3- Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2- pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro- ethene 127-18-4 µg/L	1,1,2,2-Tetra- chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro- benzene 108-90-7 µg/L	Ethyl- benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L
ICS-DMCMWA-W-092916	0.20 U	36	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32 J_B	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.20 U	35	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.31 J_B	0.20 U	0.12 J	0.20 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.20 U	0.25	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.36 J_B	0.20 U	0.85	0.20 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.07 J_B	0.20 U	0.10 J	0.20 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.14 J	0.20 U	0.38 J_B	0.20 U	0.09 J	0.20 U
ICS-DMCMWC-W-092916	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.20 U	12	0.20 U	0.20 U	1.3 J	5.0 U	0.20 U	0.20 U	290	2.2	420	8.7
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.20 U	0.44	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.35 J_B	0.05 J	0.93	0.20 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.06 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.20 U	0.59	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.32 J_B	7.0	0.17 J	0.20 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.20 U	1.9	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.35 J_B	0.07 J	0.14 J	0.20 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.20 U	2.0	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.33 J_B	0.06 J	0.17 J	0.20 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.20 U	60	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.87	0.84	0.15 J	0.20 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116	0.20 U	1.6	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	1.2	0.20 U	0.16 J	0.20 U
ICS-MWDu(MW22)-W-100116	0.20 U	0.22	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 J_B	4.5	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	1,1,2-Trichloro-ethane 79-00-5 µg/L	Benzene 71-43-2 µg/L	<i>trans</i> -1,3-Dichloropropene 10061-02-6 µg/L	Bromo-form 75-25-2 µg/L	4-Methyl-2-pentanone 108-10-1 µg/L	2-Hexanone 591-78-6 µg/L	Tetrachloro-ethene 127-18-4 µg/L	1,1,2,2-Tetra-chloroethane 79-34-5 µg/L	Toluene 108-88-3 µg/L	Chloro-benzene 108-90-7 µg/L	Ethyl-benzene 100-41-4 µg/L	Styrene 100-42-5 µg/L
ICS-MWDp(MW23)-W-100116	0.20 U	0.82	0.20 U	0.20 U	5.0 U	5.0 U	9.0	0.20 U	0.18 J_B	9.4	0.20 U	0.20 U
ICS-MWHl(MW24)-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHl(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716	0.20 U	0.05 J	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.04 J_B	0.20 U	0.05 J	0.20 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.20 U	0.57	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.25 J_B	0.20 U	0.71	0.20 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKu(MW34)-W-092816												
ICS-MWkl(MW35)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWkl(MW35)-W-092816												
ICS-MWIl(MW36)-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWIl(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	1.6	0.20 U	0.05 J_B	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.30	0.20 U	0.04 J	0.20 U
ICS-RB1-W-092816												
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	5.0 U	0.20 U	0.20 U	0.24	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	<i>m</i> - & <i>p</i> - Xylenes 179601-23-1 µg/L	<i>o</i> -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L
ICS-DMCMWA-W-092916	0.20 U	0.20 U	0.86	0.74	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.20 U	0.20 U	0.77	0.75	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.20 U	0.20 U	3.6	0.95	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.20 U	0.20 U	0.09 J_B	0.04 J_B	0.06 J	0.20 U	0.05 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.20 U	0.20 U	0.08 J_B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-W-092916	0.20 U	0.20 U	0.05 J_B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.20 U	0.20 U	160	82	8.0	4.6	12	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.20 U	0.20 U	0.70	0.21	0.24	0.05 J	0.14 J	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.20 U	0.20 U	0.21 J_B	0.29	0.11 J	0.34	0.57	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.06 J	0.20 U	0.54	0.11 J	0.11 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.08 J	0.20 U	0.55	0.13 J	0.10 J	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.20 U	0.20 U	1.8	0.58	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116	0.20 U	0.20 U	1.0	0.30	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116	0.20 U	0.20 U	0.13 J_B	0.08 J_B	0.16 J	0.65	2.5	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Trichloro- fluoromethane 75-69-4 µg/L	1,1,2-Trichloro-1,2,2- trifluoroethane 76-13-1 µg/L	m - & p - Xylenes 179601-23-1 µg/L	o -Xylene 95-47-6 µg/L	1,2-Dichloro- benzene 95-50-1 µg/L	1,3-Dichloro- benzene 541-73-1 µg/L	1,4-Dichloro- benzene 106-46-7 µg/L	Acrolein 107-02-8 µg/L	Bromoethane 74-96-4 µg/L	1,1-Dichloro- propene 563-58-6 µg/L	Dibromo- methane 74-95-3 µg/L	1,1,1,2-Tetra- chloroethane 630-20-6 µg/L
ICS-MWDp(MW23)-W-100116	0.20 U	0.20 U	0.16 J_B	0.04 J_B	0.26	0.94	3.6	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116	0.07 J	0.13 J	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.20 U	0.20 U	0.27 J	0.25	0.21	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWEu(MW28)-W-093016												
ICS-MWEu(MW30)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWEu(MW30)-W-092816												
ICS-MWFI(MW31)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFI(MW31)-W-092816												
ICS-MWGI(MW32)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGI(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.04 J	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816	0.20 U	0.20 U	0.13 J_B	0.04 J	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816												
Trip Blank	0.20 U	0.20 U	0.06 J_B	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.20 U	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116	0.20 U	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	5.0 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	1,2,3-Trichloro- propane 96-18-4 µg/L	<i>trans</i> -1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L
ICS-DMCMTWA-W-092916	0.50 U	1.0 U	0.05 J	0.75	0.20 U	0.20 U	0.20 U	0.20 U	2.4	1.0	0.20 U	0.20 U
ICS-DMCMTWA-W-092916												
ICS-DUP2-W-092916	0.50 U	1.0 U	0.06 J	0.71	0.20 U	0.20 U	0.20 U	0.20 U	2.3	0.99	0.20 U	0.20 U
ICS-DUP2-W-092916												
ICS-DMCMTWB-W-092916	0.50 U	1.0 U	2.3	5.2	0.20 U	0.20 U	0.20 U	0.20 U	2.1	1.2	0.20 U	0.20 U
ICS-DMCMTWB-W-092916												
ICS-HCB1-W-093016	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.03 J
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWC-W-092916	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DMCMTWC-W-092916												
ICS-DOFMW1-W-092616	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.50 U	1.0 U	7.9	39	0.20 U	0.20 U	0.20 U	0.20 U	4.4	7.0	0.20 U	0.20 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.50 U	1.0 U	0.30	0.75	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.12 J	0.20 U	0.20 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.50 U	1.0 U	0.06 J	0.19 J	0.20 U	0.20 U	0.20 U	0.20 U	0.05 J	0.04 J	0.20 U	0.20 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.50 U	1.0 U	0.17 J	0.06 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.34	0.09 J	0.20 U	0.20 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.50 U	1.0 U	0.17 J	0.07 J	0.20 U	0.20 U	0.20 U	0.20 U	0.34	0.10 J	0.20 U	0.03 J
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.50 U	1.0 U	0.20 U	0.13 J	0.20 U	0.20 U	0.20 U	0.20 U	0.40	0.20 U	0.20 U	0.20 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116	0.50 U	1.0 U	0.05 J	0.45	0.20 U	0.20 U	0.20 U	0.20 U	0.24	0.09 J	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	1,2,3-Trichloro- propane 96-18-4 µg/L	trans-1,4-Dichloro-2- butene 110-57-6 µg/L	1,3,5-Trimethyl- benzene 108-67-8 µg/L	1,2,4-Trimethyl- benzene 95-63-6 µg/L	1,2-Dibromo- ethane 106-93-4 µg/L	Bromochloro- methane 74-97-5 µg/L	2,2-Dichloro- propane 294-20-7 µg/L	1,3-Dichloro- propane 142-28-9 µg/L	Isopropyl- benzene 98-82-8 µg/L	n-Propyl- benzene 103-65-1 µg/L	Bromo- benzene 108-86-1 µg/L	2-Chloro- toluene 95-49-8 µg/L
ICS-MWDp(MW23)-W-100116	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.50 U	1.0 U	0.04 J	0.18 J	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.05 J	0.20 U	0.20 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGI(MW32)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGI(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816	0.50 U	1.0 U	0.20 U	0.03 J_B	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB1-W-092816												
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trip Blank	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116	0.50 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

Field I.D.	4-Chloro- toluene 106-43-4 µg/L	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L
ICS-DMCMWA-W-092916	0.20 U	0.10 J	0.66	0.65	0.55	0.50 U	0.50 U	0.5	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.20 U	0.09 J	0.64	0.60	0.56	0.50 U	0.50 U	0.7	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.20 U	0.06 J	0.57	1.0	0.51	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
ICS-DMCMWC-W-092916	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.20 U	0.20 U	1.5	1.5	1.0	0.28 J	0.50 U	0.5	0.2 U	0.2 U	1.2	1.5
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.20 U	0.20 U	0.04 J	0.15 J	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.05 J	0.2 J
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.20 U	0.20 U	0.03 J	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.20 U	0.20 U	0.04 J	0.04 J	0.03 J	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.20 U	0.03 J	0.05 J	0.04 J	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.5	0.2 U	0.2 U	0.07 J	0.2
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116	0.20 U	0.03 J	0.11 J	0.08 J	0.20 U	0.50 U	0.50 U					
ICS-MWDu(MW22)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	4-Chloro- toluene 106-43-4 µg/L	<i>tert</i> -Butyl- benzene 98-06-6 µg/L	<i>sec</i> -Butyl- benzene 135-98-8 µg/L	4-Isopropyl- toluene 99-87-6 µg/L	n-Butyl- benzene 104-51-8 µg/L	1,2,4-Trichloro- benzene 120-82-1 µg/L	1,2,3-Trichloro- benzene 87-61-6 µg/L	Phenol 108-95-2 µg/L	2-Chloro- phenol 95-57-8 µg/L	Benzyl alcohol 100-51-6 µg/L	2-Methyl- phenol 95-48-7 µg/L	4-Methyl- phenol 106-44-5 µg/L
ICS-MWDp(MW23)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
ICS-MWHI(MW24)-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
ICS-MWJu(MW27)-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.20 U	0.03 J	0.05 J	0.07 J	0.03 J	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.03 J	0.2 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKL(MW35)-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWKL(MW35)-W-092816												
ICS-MWIL(MW36)-W-092716	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-MWIL(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
ICS-RB1-W-092816	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-RB1-W-092816												
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
Trip Blank	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U					
ICS-RB2-W-100116	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	N-Nitroso-di-n-propylamine 621-64-7 µg/L	Hexachloro-ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl-phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro-phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3-methylphenol 59-50-7 µg/L	2-Methyl-naphthalene 91-57-6 µg/L	2,4,6-Trichloro-phenol 88-06-2 µg/L	2,4,5-Trichloro-phenol 95-95-4 µg/L
ICS-DMCMWA-W-092916	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	19	1.0 U	14	1.0 U	1.0 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	17	1.0 U	13	1.0 U	1.0 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.5	1.0 U	1.3	1.0 U	1.0 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 J_B	1.0 U	0.2 U	1.0 U	1.0 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 J_B	1.0 U	0.014 J_B	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.2 U	0.2 U	0.2 U	0.2 U	3.5	2.0 U	3.0	23	1.0 U	49	0.6 J	0.4 J
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.6	1.0 U	0.3	1.0 U	1.0 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.5 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.018 J_{RB}	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	2.0 U	1.0 U	0.076	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.077	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.8 J_B	1.0 U	0.018 J_B	1.0 U	0.2 U	1.0 U	1.0 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 J_B	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	N-Nitroso-di-n-propylamine 621-64-7 µg/L	Hexachloro-ethane 67-72-1 µg/L	Nitrobenzene 98-95-3 µg/L	Isophorone 78-59-1 µg/L	2,4-Dimethyl-phenol 105-67-9 µg/L	Benzoic acid 65-85-0 µg/L	2,4-Dichloro-phenol 120-83-2 µg/L	Naphthalene 91-20-3 µg/L	4-Chloro-3-methylphenol 59-50-7 µg/L	2-Methyl-naphthalene 91-57-6 µg/L	2,4,6-Trichloro-phenol 88-06-2 µg/L	2,4,5-Trichloro-phenol 95-95-4 µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHI(MW24)-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.023	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.8 J_B	1.0 U	0.041	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWEu(MW28)-W-093016												
ICS-MWfu(MW30)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWfu(MW30)-W-092816												
ICS-MWfI(MW31)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWfI(MW31)-W-092816												
ICS-MWGI(MW32)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWGI(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.6 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	2.0 U	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.7 J_B	1.0 U	0.010 U	1.0 U	0.2 U	1.0 U	1.0 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	1.1 J	1.0 U	0.011	1.0 U	0.2 U	1.0 U	1.0 U
ICS-RB1-W-092816												
Trip Blank												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.3 J	1.0 U	0.010 J	1.0 U	0.2 U	1.0 U	1.0 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_B = estimate; associated value is likely associated with contribution from sampling/laboratory background or method blank.

J_R = estimate; associated value is likely biased low due to noncompliant recovery of performance indicators.

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzofuran 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L
ICS-DMCMWA-W-092916	0.2 U	0.2 U	0.11	5.9	0.6	1.0 U	1.0 U	0.2 U	0.2 U	1.3	0.2 U	0.025 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.2 U	0.2 U	0.081	6.1	0.6	1.0 U	1.0 U	0.2 U	0.2 U	1.3	0.2 U	0.016 J
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.2 U	0.2 U	0.043	4.0	0.081	1.0 U	1.0 U	0.2 U	0.2 U	0.8	0.2 U	0.025 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.2 U	0.2 U	0.010 U	0.005 J	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916	0.2 U	0.2 U	0.010 U	0.007 J	0.2 U	1.0 U	1.0 U	0.2 U	0.2 U	0.006 J	0.2 U	0.025 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U	0.003 J	0.2 U	0.025 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.2 U	0.2 U	0.10	0.8	0.30	1.0 U	1.0 U	0.2 U	0.2 U	1.1	0.2 U	0.025 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.2 U	0.2 U	0.015	0.4	0.021	1.0 U	1.0 U	0.2 U	0.2 U	0.023	0.1 J	0.025 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U	0.010 U	0.2 U	0.025 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U	0.010 U	0.2 U	0.025 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U	0.010 U	0.2 U	0.025 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.09 J	0.2 U	0.004 J	0.2 U	0.031
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.2 U	0.2 U	0.009 J	0.20	0.008 J	1.0 U	1.0 U	0.2 J	0.2 U	0.020	0.2 U	0.025 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.2 U	0.2 U	0.011	0.20	0.010 J	1.0 U	1.0 U	0.2 J	0.2 U	0.031	0.2 U	0.025 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.2 U	0.2 U	0.010 J	0.014	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.013	0.2 U	0.025 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116	0.2 U	0.2 U	0.006 J	3.4	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.017 J
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	2-Chloro- naphthalene 91-58-7 µg/L	Dimethyl- phthalate 131-11-3 µg/L	Acenaph- thylene 208-96-8 µg/L	Acenaphthene 83-32-9 µg/L	Dibenzofuran 132-64-9 µg/L	2,6-Dinitro- toluene 606-20-2 µg/L	2,4-Dinitro- toluene 121-14-2 µg/L	Diethyl- phthalate 84-66-2 µg/L	4-Chlorophenyl- phenylether 7005-72-3 µg/L	Fluorene 86-73-7 µg/L	N-Nitrosodi- phenylamine 86-30-6 µg/L	Pentachloro- phenol 87-86-5 µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHl(MW24)-W-092716	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWHl(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716	0.2 U	0.2 U	0.010 U	0.19	0.037	1.0 U	1.0 U	0.1 J	0.2 U	0.11	0.2 U	0.025 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.2 U	0.2 U	0.010 U	0.047	0.008 J	1.0 U	1.0 U	0.2 U	0.2 U	0.018	0.2 U	0.025 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.028
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKl(MW35)-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWKl(MW35)-W-092816												
ICS-MWIl(MW36)-W-092716	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.1 J	0.2 U	0.010 U	0.2 U	0.025 U
ICS-MWIl(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-RB1-W-092816												
Trip Blank												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116	0.2 U	0.2 U	0.010 U	0.010 U	0.010 U	1.0 U	1.0 U	0.2 U	0.2 U	0.010 U	0.2 U	0.025 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

Field I.D.	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L
ICS-DMCMWA-W-092916	1.3	1.5 J _Q	0.4	0.2 U	0.13	0.21	0.2 U	0.031	0.2	0.051	0.2 U	0.029
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	1.2	1.4 J _Q	0.4	0.2 U	0.15	0.20	0.2 U	0.030	0.7	0.045	0.2 U	0.024
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.076	1.2 J _Q	0.011	0.2 U	0.031	0.028	0.2 U	0.004 J	0.3	0.006 J	0.2 U	0.005 J
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.004 J	0.2 U	0.004 J	0.2 U	0.008 J	0.010	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916	0.005 J	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.004 J	0.2 U	0.010 U	0.2 U	0.003 J	0.010 U	0.2 U	0.010 U	2.3	0.010 U	0.2 U	0.010 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	1.4	1.6	0.5	0.2 U	0.3	0.2	0.2 U	0.020	0.2 U	0.034	0.2 U	0.015
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.009 J	0.2 U	0.007 J	0.2 U	0.007 J	0.004 J	0.2 U	0.010 U	0.9	0.010 U	0.2 U	0.010 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.004 J	0.09 J	0.010 U	0.5	0.022	0.027	0.2 U	0.010 U	0.4	0.010 U	0.010 U	0.010 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.003 J	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2	0.010 U	0.2 U	0.010 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	3.1	0.010 U	0.2 U	0.010 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.3	0.010 U	0.2 U	0.010 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.007 J	0.2 U	0.003 J	0.2 U	0.011	0.007 J	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.009 J	0.2 U	0.004 J	0.2 U	0.012	0.007 J	0.2 U	0.010 U	0.2 J _B	0.010 U	0.2 U	0.010 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.015	0.2 U	0.009 J	0.2 U	0.012	0.014	0.2 U	0.009 J	0.2 U	0.010	0.2 U	0.018
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116	0.003 J	0.2 U	0.010 U	0.2 U	0.004 J	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

Field I.D.	Phenanthrene 85-01-8 µg/L	Carbazole 86-74-8 µg/L	Anthracene 120-12-7 µg/L	Di-n-butyl- phthalate 84-74-2 µg/L	Fluoranthene 206-44-0 µg/L	Pyrene 129-00-0 µg/L	Butylbenzyl- phthalate 85-68-7 µg/L	Benzo(a)- anthracene 56-55-3 µg/L	bis (2-Ethylhexyl)- phthalate 117-81-7 µg/L	Chrysene 218-01-9 µg/L	Di-n-octyl- phthalate 117-84-0 µg/L	total Benzo- fluoranthenes µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHI(MW24)-W-092716	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716	0.077	0.2 U	0.007 J	0.2 U	0.018	0.013	0.2 U	0.010 U	5.1	0.010 U	0.7	0.010 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.011	0.2 U	0.005 J	0.2 U	0.009 J	0.009 J	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFe(MW30)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWFe(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGI(MW32)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWGI(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 J_B	0.010 U	0.2 U	0.010 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-RB1-W-092816												
Trip Blank												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U	0.2 U	0.010 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_Q = estimate; due to noncompliant CCV check.

U = nondetected at the associated lower reporting limit.

Remedial Investigation
ICS / [former] NW Cooperage, Seattle, WA
Groundwater Analyses, September-October 2016

<u>Field I.D.</u>	Benzo(a)- pyrene 50-32-8 <u>µg/L</u>	Indeno(1,2,3- cd)pyrene 193-39-5 <u>µg/L</u>	Dibenz(a,h)- anthracene 53-70-3 <u>µg/L</u>	Benzo(g,h,i)- perylene 191-24-2 <u>µg/L</u>	LPAH <u>µg/L</u>	HPAH <u>µg/L</u>	alpha-BHC 319-84-6 <u>µg/L</u>	beta-BHC 319-85-7 <u>µg/L</u>	delta-BHC 319-86-8 <u>µg/L</u>	gamma-BHC (Lindane) 58-89-9 <u>µg/L</u>	Heptachlor 76-44-8 <u>µg/L</u>	Aldrin 309-00-2 <u>µg/L</u>
ICS-DMCMWA-W-092916	0.019	0.008 J	0.010 U	0.013	28	0.48	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.015	0.005 J	0.010 U	0.010 J	26	0.47	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.010 U	0.010 U	0.010 U	0.010 U	5.4	0.074	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.010 U	0.010 U	0.010 U	0.010 U	0.023	0.018	0.00063 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916	0.010 U	0.010 U	0.010 U	0.010 U	0.032	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.0025 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.007 J	0.004 J	0.010 U	0.007 J	27	0.59	0.010 U	0.020 U	0.00063 U	0.010 U	0.020 U	0.010 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.010 U	0.010 U	0.010 U	0.010 U	0.016	0.011	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.010 U	0.010 U	0.010 U	0.010 U	1.0	0.049	0.00063 U	0.030 U	0.010 U	0.00063 U	0.00063 U	0.00063 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.0016 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.022	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.31	0.018	0.0013 U	0.00063 U	0.00063 U	0.0062 U	0.00063 U	0.00063 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.33	0.019	0.00063 U	0.00063 U	0.013 U	0.0075 U	0.00063 U	0.00063 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.009 J	0.009 J	0.007 J	0.009 J	0.079	0.097	0.00063 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.010 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116	0.010 U	0.010 U	0.010 U	0.010 U	3.4	0.010 U	0.0029 U	0.0014 J_p	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Benzo(a)- pyrene 50-32-8 µg/L	Indeno(1,2,3- cd)pyrene 193-39-5 µg/L	Dibenz(a,h)- anthracene 53-70-3 µg/L	Benzo(g,h,i)- perylene 191-24-2 µg/L	LPAH µg/L	HPAH µg/L	alpha-BHC 319-84-6 µg/L	beta-BHC 319-85-7 µg/L	delta-BHC 319-86-8 µg/L	gamma-BHC (Lindane) 58-89-9 µg/L	Heptachlor 76-44-8 µg/L	Aldrin 309-00-2 µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHI(MW24)-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWHI(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.41	0.031	0.00063 U	0.0016 U	0.00063 U	0.00063 U	0.0016 U	0.00063 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.010 U	0.010 U	0.010 U	0.010 U	0.13	0.018	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.010 U	0.00063 U
ICS-MWEu(MW28)-W-093016												
ICS-MWFu(MW30)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.0016	0.00063 U	0.0021	0.00063 U	0.00063 U
ICS-MWFu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGI(MW32)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWGI(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKI(MW35)-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWKI(MW35)-W-092816												
ICS-MWII(MW36)-W-092716	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-MWII(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816	0.010 U	0.010 U	0.010 U	0.010 U	0.011	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-RB1-W-092816												
Trip Blank												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116	0.010 U	0.010 U	0.010 U	0.010 U	0.010	0.010 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
ICS-RB2-W-100116												

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081A).

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L
ICS-DMCMWA-W-092916	0.00063 U	0.00063 U	0.0013 U	0.016	0.0013 U	0.0013 U	0.064	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DMCMWA-W-092916												
ICS-DUP2-W-092916	0.00063 U	0.00063 U	0.0013 U	0.015	0.0013 U	0.0013 U	0.058	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DUP2-W-092916												
ICS-DMCMWB-W-092916	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DMCMWB-W-092916												
ICS-HCB1-W-093016	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-HCB1-W-093016												
ICS-HCB2R-W-093016												
ICS-DMCMWC-W-092916	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DMCMWC-W-092916												
ICS-DOFMW1-W-092616	0.00063 U	0.013 U	0.0054 U	0.0024	0.0013 U	0.0013 U	0.0024 J_p	0.0013 U	0.014 U	0.0063 U	0.007 U	0.007 U
ICS-DOFMW1-W-092616												
ICS-SAMW1-W-093016	0.040 U	0.00063 U	0.010 U	0.058 J_p	0.010 U	0.50 U	0.010 U	0.055 U	0.070 U	0.30 U	0.0013 U	0.015 U
ICS-SAMW1-W-093016												
ICS-DOFMW2-W-092616	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW2-W-092616												
ICS-SAMW2-W-093016	0.00063 U	0.00063 U	0.0013 U	0.010 U	0.0013 U	0.0013 U	0.0044	0.0013 U	0.010 U	0.0063 U	0.0013 U	0.0013 U
ICS-SAMW2-W-093016												
ICS-DOFMW3-W-092616	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW3-W-092616												
ICS-SAMW3-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-SAMW3-W-092716												
ICS-DOFMW4-W-092616	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW4-W-092616												
ICS-DOFMW5-W-092616	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW5-W-092616												
ICS-DOFMW6-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW6-W-092716												
ICS-DOFMW7-W-092716	0.00063 U	0.0018 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW7-W-092716												
ICS-DUP1-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DUP1-W-092716												
ICS-DOFMW8-W-093016	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-DOFMW8-W-093016												
ICS-MWCp(MW20)-W-100116												
ICS-MWDu(MW22)-W-100116	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWDu(MW22)-W-100116												

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	Heptachlor epoxide 1024-57-3 µg/L	Endosulfan I 959-98-8 µg/L	Dieldrin 60-57-1 µg/L	4,4'-DDE 72-55-9 µg/L	Endrin 72-20-8 µg/L	Endosulfan II 33213-65-9 µg/L	4,4'-DDD 72-54-8 µg/L	Endosulfan sulfate 1031-07-8 µg/L	4,4'-DDT 50-29-3 µg/L	Methoxychlor 72-43-5 µg/L	Endrin ketone 53494-70-5 µg/L	Endrin aldehyde 7421-93-4 µg/L
ICS-MWDp(MW23)-W-100116												
ICS-MWHl(MW24)-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWHl(MW24)-W-092716												
ICS-MWAp(MW25)-W-100116												
ICS-MWJu(MW27)-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0026 J_p	0.0013 U	0.061 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWJu(MW27)-W-092716												
ICS-MWEu(MW28)-W-093016	0.00063 U	0.00063 U	0.0013 U	0.020 U	0.0013 U	0.0013 U	0.010	0.0013 U	0.010 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWEu(MW28)-W-093016												
ICS-MWfu(MW30)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWfu(MW30)-W-092816												
ICS-MWFl(MW31)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWFl(MW31)-W-092816												
ICS-MWGl(MW32)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWGl(MW32)-W-092816												
ICS-MWGu(MW33)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWGu(MW33)-W-092816												
ICS-MWKu(MW34)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWKu(MW34)-W-092816												
ICS-MWKl(MW35)-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-MWKl(MW35)-W-092816												
ICS-MWIl(MW36)-W-092716	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0017	0.0063 U	0.0013 U	0.0013 U
ICS-MWIl(MW36)-W-092716												
ICS-MWBp(MW38)-W-100116												
Trip Blank												
Trip Blank												
ICS-RB1-W-092816	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-RB1-W-092816												
Trip Blank												
Trip Blank												
Trip Blank												
Trip Blank												
ICS-RB2-W-100116	0.00063 U	0.00063 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0063 U	0.0013 U	0.0013 U
ICS-RB2-W-100116												

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081A).

U = nondetected at the associated lower reporting limit.

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	<i>trans</i> - Chlordane 5103-74-2 µg/L	<i>cis</i> - Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-DMCMWA-W-092916	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.015 U	0.035 J_p	0.036 J_p	0.010 U	0.010 U	0.071
ICS-DMCMWA-W-092916													
ICS-DUP2-W-092916	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.013 U	0.028 J_p	0.024 J_p	0.010 U	0.010 U	0.052
ICS-DUP2-W-092916													
ICS-DMCMWB-W-092916	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.013	0.007 J	0.010 U	0.010 U	0.020
ICS-DMCMWB-W-092916													
ICS-HCB1-W-093016	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.048	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.048
ICS-HCB1-W-093016													
ICS-HCB2R-W-093016													
ICS-DMCMWC-W-092916	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DMCMWC-W-092916													
ICS-DOFMW1-W-092616	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.049	0.10 U	0.11	0.010 U	0.010 U	0.16
ICS-DOFMW1-W-092616													
ICS-SAMW1-W-093016	0.50 U	0.00063 U	0.13 U	0.017 U	0.010 U	0.010 U	2.1	0.010 U	0.69	0.48	0.010 U	0.010 U	3.2
ICS-SAMW1-W-093016													
ICS-DOFMW2-W-092616	0.00063 U	0.00063 U	0.13 U	0.0019	0.50 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOFMW2-W-092616													
ICS-SAMW2-W-093016	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.15	0.010 U	0.14	0.11	0.010 U	0.010 U	0.40
ICS-SAMW2-W-093016													
ICS-DOFMW3-W-092616	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOFMW3-W-092616													
ICS-SAMW3-W-092716	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-SAMW3-W-092716													
ICS-DOFMW4-W-092616	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0017 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOFMW4-W-092616													
ICS-DOFMW5-W-092616	0.00063 U	0.00063 U	0.13 U	0.50 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOFMW5-W-092616													
ICS-DOFMW6-W-092716	0.0040	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.035 U	0.010 U	0.010 U	0.007 J	0.010 U	0.010 U	0.035 U
ICS-DOFMW6-W-092716													
ICS-DOFMW7-W-092716	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.043	0.010 U	0.013	0.003 J	0.010 U	0.010 U	0.059
ICS-DOFMW7-W-092716													
ICS-DUP1-W-092716	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.039	0.010 U	0.012	0.003 J	0.010 U	0.010 U	0.054
ICS-DUP1-W-092716													
ICS-DOFMW8-W-093016	0.00063 U	0.00063 U	0.13 U	0.010 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-DOFMW8-W-093016													
ICS-MWCp(MW20)-W-100116						0.010 U	0.010 U	0.039	0.015 U	0.004 J	0.010 U	0.010 U	0.043
ICS-MWDu(MW22)-W-100116	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.004 J	0.010 U	0.010 U	0.010 U
ICS-MWDu(MW22)-W-100116													

Remedial Investigation

ICS / [former] NW Cooperage, Seattle, WA

Groundwater Analyses, September-October 2016

Field I.D.	<i>trans</i> - Chlordane 5103-74-2 µg/L	<i>cis</i> - Chlordane 5103-71-9 µg/L	Toxaphene 8001-35-2 µg/L	Hexachloro- benzene 118-74-1 µg/L	Hexachloro- butadiene 87-68-3 µg/L	Aroclor 1016 12674-11-2 µg/L	Aroclor 1242 53469-21-9 µg/L	Aroclor 1248 12672-29-6 µg/L	Aroclor 1254 11097-69-1 µg/L	Aroclor 1260 11096-82-5 µg/L	Aroclor 1221 11104-28-2 µg/L	Aroclor 1232 11141-16-5 µg/L	total PCBs µg/L
ICS-MWDp(MW23)-W-100116						0.010 U	0.010 U	0.010 U	0.015 U	0.010	0.010 U	0.010 U	0.015 U
ICS-MWHI(MW24)-W-092716	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.003 J	0.010 U	0.010 U	0.010 U
ICS-MWHI(MW24)-W-092716													
ICS-MWAp(MW25)-W-100116													
ICS-MWJu(MW27)-W-092716	0.0021 J_p	0.00063 U	0.13 U	0.0082 U	0.0013 U	0.010 U	0.051 U	0.010 U	0.025 U	0.017	0.010 U	0.010 U	0.051 U
ICS-MWJu(MW27)-W-092716													
ICS-MWEu(MW28)-W-093016	0.00063 U	0.00063 U	0.13 U	0.010 U	0.0013 U	0.010 U	0.17	0.010 U	0.050 U	0.049	0.010 U	0.010 U	0.21
ICS-MWEu(MW28)-W-093016													
ICS-MWfu(MW30)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWfu(MW30)-W-092816													
ICS-MWFl(MW31)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWFl(MW31)-W-092816													
ICS-MWGl(MW32)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWGl(MW32)-W-092816													
ICS-MWGu(MW33)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWGu(MW33)-W-092816													
ICS-MWKu(MW34)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWKu(MW34)-W-092816													
ICS-MWKl(MW35)-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWKl(MW35)-W-092816													
ICS-MWIl(MW36)-W-092716	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-MWIl(MW36)-W-092716													
ICS-MWBp(MW38)-W-100116													
Trip Blank													
Trip Blank													
ICS-RB1-W-092816	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-RB1-W-092816													
Trip Blank													
Trip Blank													
Trip Blank													
Trip Blank													
ICS-RB2-W-100116	0.00063 U	0.00063 U	0.13 U	0.0013 U	0.0013 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
ICS-RB2-W-100116													

J = estimate associated with value less than the verifiable lower quantitation limit.

J_p = estimated value due to high variability exhibited between dual column responses on GC/ECD (M.8081A) or peak variability in mixtures (M.8082A).

U = nondetected at the associated lower reporting limit.

APPENDIX K
COMPARISON OF DISSOLVED AND TOTAL METALS CONCENTRATIONS

REMEDIAL INVESTIGATION REPORT
ICS/NWC RI/FS
SEATTLE, WASHINGTON
October 2025

**APPENDIX K
COMPARISON OF DISSOLVED AND TOTAL METALS
CONCENTRATIONS
REMEDIAL INVESTIGATION
ICS/NWC SITE, SEATTLE, WASHINGTON**

INTRODUCTION

The remedial investigation work plan (DOF 2012), required that both total and dissolved metals be analyzed. All samples were collected and analyzed in accordance with the approved work plan (and accompanying sampling and analysis plan) and the analytical results were validated by DMD Inc. (see Appendix J). Total metal analyses were conducted using non-filtered samples placed in containers containing the appropriate preservatives. Samples for dissolved metals analysis were field filtered using in-line 0.45 micron filters prior to placement in the containers with the preservatives.

Some solids (soil particulates) were entrained in most of the samples delivered to the laboratory for analysis. While sampling methods were used to minimize the entrainment of particulates, it is impractical to entirely eliminate particulates from groundwater samples delivered to the laboratory, especially in screening level samples from push-probes. The soil particulates contain metals that are naturally occurring and, in some cases, are present from facility operations (e.g. placement of fill soils with metal concentrations higher than background). In either case, laboratory preparation methods for groundwater samples will extract the metals dissolved in groundwater and from the particulates, and report them as a groundwater concentration. Depending on the metal and other factors, the total concentration is often biased high and is not representative of the concentrations with the potential to migrate in groundwater to surface water.

To assess the contribution of particulates to the reported metal concentrations in the total metal analytical results, dissolved vs. total metal concentrations were compared for samples collected in 2012, 2015 and 2016. Push-probe analytical results are summarized in attached Table K.1 while monitoring well sample analytical results are summarized in Table K.2. Screening levels and sample statistics are summarized in the tables. Comparisons were made for arsenic, total chromium ($\text{Cr}^{+3} + \text{Cr}^{+6}$), copper, lead, nickel, and zinc concentrations for push-probe and monitoring well groundwater samplesⁱ.

ⁱ Comparisons for antimony, beryllium, cadmium, and silver were not made because of the large number of non-detects in the sample sets. Mercury was included in Tables K.3 and K.4 but was not plotted because of the large number of non-detects. These metals were detected more frequently in the total concentration samples as compared to the dissolved concentration samples. Average concentrations for those constituents listed in Table K.3 and K.4 were calculated using non-detects at the indicated reporting level.

AVERAGE CONCENTRATIONS OF TOTAL AND DISSOLVED METALS

A general indication of the sample bias caused by particulates can be assessed by comparing the simple average concentration of total and dissolved metal concentrations. Table K.3 presents a comparison for push-probe samples summarized in attached Table K.1. As summarized below, concentration increases between dissolved and total metal concentrations in the push-probe samples ranged between approximately 40% (arsenic) and 2,680% (lead) of the dissolved sample concentration. The number of non-detects also increased between the dissolved and total metal concentrations with comparable reporting limits. The average push-probe sample turbidity was 161 NTUs and ranged from 6.6 to 586 NTUs.

Table K.3. Average Push-Probe Metal Concentrations

Metal	Number Samples	Total Conc. (ug/l)	Dissolved Conc. (ug/l)	% Increase (dissolved vs. total)
Arsenic	28	6.6 (nd=1)	4.7 (nd=6)	+40
Lead	28	13.9 (nd=2)	<0.5 (nd=21)	+2680
TChromium	28	21.3 (nd=1)	4.9 (nd=12)	+335
Mercury	28	46.6 (nd=17)	<20 (nd=27)	+133
Nickel	28	11.7 (nd=1)	4.6 (nd=0)	+154
Copper	28	19.7 (nd=2)	<2.5 (nd=14)	+688
Zinc	28	41.8 (nd=6)	12.3 (nd=18)	+240

Notes: (nd=#) – Number of non-detects; Average sample turbidity = 161 NTUs

A comparison of total vs dissolved sample concentrations for the monitoring well samples is presented below in Table K.4 using data summarized in attached Table K.2. The percent increase between total and dissolved average concentrations ranged between 10% (arsenic) and 280% (lead). The average monitoring well sample turbidity was 13.6 NTUs and ranged from 2.2 to 121 NTUs.

Table K.4. Average Monitoring Well Metal Concentrations

Metal	Number Samples	Total Conc. (ug/l)	Dissolved Conc. (ug/l)	% Increase (dissolved vs. total)
Arsenic	82	2.2 (nd=1)	2.0 (nd=1)	+10
Lead	82	1.9 (nd=7)	0.5 (nd=22)	+280
TChromium	82	15.3 (nd=1)	13 (nd=1)	+18
Mercury	82	18.9 (nd=42)	12.9 (nd=53)	+47
Nickel	82	2.9 (nd=0)	2.4 (nd=2)	+21
Copper	82	4.9 (nd=7)	3.4 (nd=16)	+44
Zinc	80-81	10.9 (nd=13)	8.6 (nd=19)	+27

Notes: (nd=#) – Number of non-detects; Average sample turbidity = 13.6 NTUs

The smaller differences between the push-probe and monitoring well average metal concentrations were caused by the substantial decline in the turbidity of the well samples as compared to the push-probe samples. The average turbidity of the push-probe samples

was 161 NTUs while that for the well samples was 13.6 NTUs. This represents a decline of over 90% in the turbidity of the samples between the two sample sets and clearly illustrates the effect of particulates on metal concentrations in groundwater samples.

Figure K-1 graphically illustrates the impact of turbidity on the metal sample resultsⁱⁱ. The graphs are plots of dissolved metal vs. total metal concentrations. The purpose of the figure is to show how actual total vs dissolved concentrations compare in samples from probes and monitoring wells (if they are equal there is no bias from turbidity). The line shown on each graph are the points where the concentrations are equal. Samples that plot above the line indicate total concentrations are higher than the dissolved concentrations, indicating impacts from turbidity. In general, more of the probe samples plot above the line and at further distances indicating greater impact as compared to the monitoring well samples. Arsenic appears to be least impacted as compared to the other metals which is consistent with the geochemistry of arsenic and our experience.

COMPARISON OF METALS CONCENTRATIONS AND TURBIDITY

Turbidity is a field measure of the cloudiness of a fluid caused by suspended solids. It was measured in the field during groundwater sampling to assist in determining when to collect a sample and to assist in the evaluation of metals concentration data.

Figures K-2 to K-6 present plots of the following:

- The difference between total and dissolved metal concentrations vs turbidity (top graph).
- Average-total less average-dissolved metal concentrations for the following range (sample groups) of turbidities (bottom graph):
 - o > 250 NTUs
 - o >100 NTUs to 250 NTUs
 - o >50 NTUs to 100 NTUs
 - o >25 NTUs to 50 NTUs
 - o < or equal to 25 NTUs

The purpose of these plots is to show that larger differences between total and dissolved concentrations occur in samples with higher turbidity, regardless of whether the samples are from wells or probes. The plots also graphically illustrate that the differences are larger for the probe samples as compared to the well samples.

Metal concentration differences plotted against turbidity display a large degree of variability (common for environmental samples). Even with the variability, the plots

ⁱⁱ In preparing the plots, samples where metals were not detected because of elevated reporting limits were not plotted. Some of the higher total concentrations are not shown (e.g. total copper at 116 ug/l; lead at 197 ug/l) to improve clarity.

show the difference between total and dissolved metals increases as the turbidity increases. To smooth out some of the variability, average differences were plotted by average turbidity for the turbidity ranges listed above (Figures K-2 to K-7). The plots show that the difference between total/dissolved metal concentrations increases as average turbidity increases.

Attachments

Table K.1 – Push-Probe Metals Data

Table K.2 – Monitoring Well Metals Data

Figure K-1 – Total vs. Dissolved Metals Concentrations

Figure K-2 – Total vs. Dissolved Arsenic

Figure K-3 – Total vs. Dissolved Copper

Figure K-4 – Total vs. Dissolved Total Chromium

Figure K-5 – Total vs. Dissolved Lead

Figure K-6 – Total vs. Dissolved Nickel

Figure K-7 – Total vs. Dissolved Zinc

Table K.1 - Push-Probe Metals Data

ICS/NW Cooperage Site
Seattle, Washington

Location	Date	Screen Depth	pH	Turbidity	Arsenic		Cadmium		Total Chromium		Copper		Lead		Mercury		Nickel		Zinc		
						7440-38-2		7440-43-9		7440-47-3		7440-50-8		7439-92-1		7439-97-6		7440-02-0		7440-66-6	
		(feet)			Std. Units	NTU	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L
Screening Level (SL)			-----	-----	8	8	1.2	1.2	27	27	3.1	3.1	8.1	8.1	25	25	8.2	8.2	81	81	
Number of Samples			28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	
Concentration Average			7	161	4.7	6.6	<0.2	<0.3	4.9	21.3	<2.5	19.7	<0.5	13.9	<20	46.6	4.6	11.7	12.3	41.8	
Highest Concentration			8	586	29	28	<0.5	1.2	36	121	27	116	5	197	26	218	18	46	30	320	
Exceedance Frequency (%)			-----	-----	18	29	0	0	3.6	29	7.1	79	0	25	3.6	32	18	39	0	14	
Number Locations > SL			-----	-----	5	8	0	0	1	8	2	21	0	7	1	9	5	11	0	4	
Highest Exceedance Factor (EF)			-----	-----	3.6	3.5	<1	1.0	1.3	4.5	8.7	37	0.6	24	1.1	8.7	2.2	5.6	0.4	4.0	
P11	11/17/14	6-10	6.8	22.8	29	28	<0.2	<0.2	3	3	0.6	1.7	<0.1	1.5	<20	<20	1.6	1.7	4	5	
P12	11/17/14	5-9	6.8	40.1	28	27	<0.5	<0.5	22	20	3	5	0.4	1.1	<20	<20	5	6	<10	<10	
P13	11/13/14	10-15	6.8	73	11	11	<0.2	<0.2	8	8	0.8	4.3	0.1	0.7	<20	<20	3.5	3.5	9	10	
P14	11/14/14	10-15	6.7	44.2	0.4	0.8	<0.1	<0.1	<2.0	5	<0.5	2.0	0.3	7.0	<20	<20	1.5	1.8	6	12	
P15	11/14/14	3-8	6.6	9.8	12	13	<0.1	<0.1	10	10	<0.5	2.2	0.1	3.3	<20	<20	4.8	5.1	<4	7	
P16	12/10/14	9-14	7.0	575	2.4	5.4	<0.1	<0.1	<1	17	<0.5	24	<0.1	13	<20	52	3.9	14	<4	37	
P18A	12/16/14	25-30	7.0	275	2	5	<0.1	0.2	5	45	0.5	31	<0.1	39	<20	211	4.4	18	<4	80	
P18B	12/16/14	45-50	6.9	51.9	<2	3	<0.5	<0.5	<2.0	11	<2	7	<0.5	7.9	<20	<20	12	14	<20	<20	
P20	11/12/14	10-15	6.8	77	1.6	3.6	<0.1	<0.1	<0.5	6	1.0	14	<0.1	1.6	<20	<20	2.0	14	<4	20	
P21A	12/8/14	25-30	6.9	190	1.0	1.2	<0.1	<0.1	3	11	<0.5	9.4	<0.5	5	<20	33	4.1	8.3	6	18	
P21B	12/8/14	45-50	6.8	119	<2	3	<1.0	<1.0	<5	30	<5	18	<1	9	<20	76	9	18	<40	40	
P23	11/12/14	10-15	6.8	122	3.3	4.1	<0.1	<0.1	<0.5	2.1	<0.5	4	<0.1	0.6	<20	<20	1.4	5	5	10	
P26	11/13/14	10-15	7.0	255	15	14	<0.5	<0.5	<2.0	3	3	4	<0.5	0.6	<20	<20	6	6	<20	<20	
P27A	11/11/14	15-20	7.2	74.8	3	3	<0.2	<0.2	1	8	2	12	<0.2	1.8	<20	<20	2	7	<10	20	
P27B	11/11/14	45-50	7.2	372	2	11	<0.2	1.2	<1	57	2	116	<0.2	197	<20	182	14	46	30	320	
P28	12/15/14	25-30	6.8	229	<1	3	<0.2	<0.2	2	32	1	14	<0.2	1.6	<20	23	3	8	<10	20	
P29	12/10/14	29-34	6.8	401	2	12	<0.2	0.3	3	81	1	66	0.4	62	<20	218	3	39	<10	130	
P30	12/9/14	25-30	7.4	182	5	8	<0.5	<0.5	36	38	27	30	5.0	5.7	26	48	18	19	40	40	
P31	12/9/14	25-30	6.9	65	<1	<1	<0.2	<1.0	<5	6	<1	1	<0.2	<1	<20	<20	2	3	<10	90	
P32A	12/15/14	25-30	6.6	312	<0.5	5.1	<0.1	0.1	7.3	121	0.6	52	<0.1	8.6	<20	35	2.0	23	6	59	
P32B	12/15/14	35-40	6.8	183	2	2	<0.2	<0.2	2	22	<1	21	<0.2	2.8	<20	<20	2	8	<10	40	
P33A	12/8/14	26-30	6.7	586	0.3	0.8	<0.1	<0.1	<2.0	10	0.6	7.2	<0.5	5.1	<20	22	3.8	7.8	8	29	
ICS-P34 (a)	6/9/15	10-14	7.9	78	0.3	0.9	<0.1	<0.1	0.8	1.8	<0.5	6.6	<0.1	2.1	<20	<20	0.9	1.3	<4	4	
ICS-P34(a)	6/9/15	20-24	7.5	33	<0.5	0.6	<0.2	<0.2	3	3	<1	<1	<0.2	0.4	<20	<20	1	<1	<10	<10	
ICS-P35(a)	6/9/15	10-14	6.7	6.6	0.9	1.0	<0.2	<0.2	<1	<1	<1	<1	<0.2	<0.2	<20	<20	2	2	<10	<10	
ICS-P35(a)	6/8/15	20-24	6.8	9	2.0	10.8	<0.2	<0.2	6	32	10	69	1.4	8.5	<20	65	11	33	30	80	
ICS-P36(a)	6/8/15	10-14	6.6	6.9	1.3	2.7	<0.2	<0.2	2	5	<1	9	<0.2	0.8	<20	<20	2	5	<10	<10	
ICS-P36(a)	6/8/15	20-14	6.5	127	0.5	3.0	<0.2	<0.2	<1	8	<1	20	<0.2	2.1	<20	<20	2	8	<10	20	

Notes: (a) - Off-site push-probe
< - Not detected at the indicated reporting limit
Less than values were assumed at the reporting limit in calculating concentration averages
- Concentration exceeds screening level
Bold value = Detected concentration

TABLE K.2 - Monitoring Well Metals Data

Location	Date	Screen Depth	Field Parameters		Arsenic		Cadmium		Total Chromium		Copper		Lead		Mercury		Nickel		Zinc	
			pH	Turbidity	7440-38-2		7440-43-9		7440-47-3		7440-50-8		7439-92-1		7439-97-6		7440-02-0		7440-66-6	
		(feet)	Std. Units	NTU	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L
Screening Level (SL)			-----	-----	8	8	1.2	1.2	27	27	3.1	3.1	8.1	8.1	25	25	8.2	8.2	81	81
Number of Samples			82	82	82	82	81	82	82	82	82	82	82	82	82	82	82	82	81	80
Concentration Average			6.8	13.6	2.0	2.2	<0.2	<0.2	13	15.3	3.4	4.9	0.5	1.9	12.9	18.9	2.4	2.9	8.6	10.9
Highest Concentration			8.7	121	10.1	9.9	0.09	0.20	75	84	19	24	4.5	23	17	140	11	17	48	60
Exceedance Frequency (%)			-----	-----	3.7	4.9	0	0	15	16	22	40	0	7.3	0	12.2	2.4	6.1	0	0
Number Locations > SL			-----	-----	1	2	0	0	3	4	7	15	0	4	0	8	2	3	0	0
Highest Exceedance Factor			-----	-----	1.3	1.2	0.08	0.17	2.8	3.1	6.1	7.7	0.6	2.9	0.7	5.6	1.3	2.1	0.6	0.7
DOF-MW-1	11/8/12	12-17	7.0	13.4	2	2	-----	<1	<5	<5	<5	4	<1	2	<0.1	<0.1	8	8	<40	<40
DOF-MW-1	11/11/15		7.5	4.4	4	6	<1.0	0.2	5	24	1.1	22	1	20	9.5	77	2	12	4.5	40
DOF-MW-1	3/22/16		6.5	121	4	9	<0.5	0.2	7	26	0.5	24	0.2	15	4.0	58	6	17	3	60
DOF-MW-1	9/26/16		6.5	7.2	1.7	1.9	<0.2	<0.5	3.8	4.5	<1	2.2	<0.2	0.62	<20	<20	7.6	8.6	2	<20
DOF-MW-2	11/8/12	15-20	6.5	9.8	2.6	4.3	<0.1	<0.1	47.2	68.3	5.2	23	0.3	1.1	<0.1	<0.1	1.7	2.1	<4	7
DOF-MW-2	11/11/15		7.5	5.8	3.9	4.2	0.01	0.01	66.9	65.7	15	15	1.0	1.0	14	15	1.5	1.8	3.8	5
DOF-MW-2	3/22/16		6.6	5.7	4.1	4	<0.2	0.01	69	76	15	16	1.1	1.2	12	14	1	1.4	4	3
DOF-MW-2	9/26/16		6.6	4	3.8	3.6	<0.2	<0.2	62	69	15	16	1.1	1.0	<20	<20	1.5	1.5	4	4
DOF-MW-3	11/8/12	17-22	6.5	10.5	2.0	3.1	<0.1	<0.1	28.3	37.1	1.7	5.3	<0.1	0.7	<0.1	<0.1	1.4	1.4	<4	4
DOF-MW-3	11/20/15		7.2	10	5.3	5.1	<0.2	<0.2	62	75	9	10	0.7	0.7	13	14	2	2	3.3	3
DOF-MW-3	3/24/16		6.5	4.9	6.0	6	0.04	0.02	75	82	11	11	0.8	1.8	15	15	2	2	4	5
DOF-MW-3	9/26/16		6.5	2.5	5.5	5.8	<0.2	<0.2	74	84	11	11	0.94	0.88	<20	<20	1.7	2.0	5	3
DOF-MW-4	11/8/12	17-22	6.3	10.3	2	3.6	<0.1	<0.1	46.0	55.5	7.4	15	0.4	0.9	<0.1	<0.1	1.5	1.7	5	5
DOF-MW-4	11/11/15		7.3	6.5	2.9	3	<0.1	0.01	48.8	46.4	15	16	1.0	0.9	12	14	1.3	1.3	3.3	3
DOF-MW-4	3/29/16		6.3	4.5	2.8	3	0.01	0.01	67	64	14	16	0.9	0.9	10	22	1.3	1.3	3	3
DOF-MW-4	9/26/16		6.4	2.7	3.3	2.9	<0.2	<0.2	59	64	19	18	1.2	1.1	<20	<20	1.4	1.2	5	5
DOF-MW-5	11/8/12	17-22	6.5	11.2	<0.5	0.7	<0.1	<0.1	10.9	13.6	2.1	7.0	0.1	0.3	<0.1	<0.1	0.8	1.0	<4	<4
DOF-MW-5	11/20/15		7.2	3.5	0.5	0.5	<0.1	<0.1	8.9	11	2.7	3.7	0.2	0.2	<20	<20	0.47	0.6	1.1	1
DOF-MW-5	3/29/16		6.3	4.3	0.5	0.6	0.02	0.02	12	12	2.8	3	4.5	0.2	3	<20	0.50	0.4	1.3	1.0
DOF-MW-5	9/26/16		6.3	4.8	0.60	0.68	<0.2	<0.2	12	14	4.1	4.1	0.30	0.29	<20	<20	1	0.4	3	<8
DOF-MW-6	11/9/12	13-18	6.9	22.3	0.8	1.3	<0.1	<0.1	7.7	17	<1	6.6	0.1	1.4	<0.1	<0.1	1.7	2.3	<4	<4
DOF-MW-6	11/19/15		7.8	13.2	0.6	0.4	<0.1	0.01	7.6	9	1.9	2.5	0.1	0.2	3.3	3.8	0.8	0.8	48	52
DOF-MW-6	3/24/16		6.4	16.3	0.4	0.5	0.02	0.02	8	10	2	3	0.1	0.3	<20	<20	0.90	1	-----	-----
DOF-MW-6	9/27/16		6.5	4.3	0.45	0.41	<0.1	<0.1	7.8	7.0	1.7	1.7	0.15	0.17	<20	65	1.0	1.0	29	31
DOF-MW-7	11/9/12	13-18	6.2	5.9	1.6	1.4	<0.1	<0.1	10	14	1.8	3.6	<0.1	0.4	<0.1	<0.1	2	2.4	<4	<4
DOF-MW-7	11/23/15		6.5	3	1.0	0.9	<0.1	<0.1	6.1	7	0.25	0.3	0.1	0.02	<20	<20	1.4	1.5	0.96	0.5
DOF-MW-7	3/25/16		6.1	2.8	1.1	1.2	<0.2	<0.1	7	6.3	0.1	0.1	0.02	0.04	<20	<20	1	1.4	0.6	<4
DOF-MW-7	9/27/16		6.2	11.4	0.96	0.98	<0.1	<0.1	4.8	4.6	<5	<0.5	<0.1	0.15	<20	<20	2	1.4	<4	1
DOF-MW-8	11/9/12	13-18	6.4	48.8	6	5.6	<0.1	<0.1	2	5	0.6	3.4	0.5	13.5	<0.1	<0.1	7	7.6	<4	11
DOF-MW-8	11/20/15		6.8	15.6	8.8	9.9	<0.1	<0.1	1.7	3	0.26	1.0	0.2	2.8	<20	15	4.5	5.2	0.6	3
DOF-MW-8	3/22/16		6.4	16.1	10.1	9	0.02	0.01	4	2.6	0.2	0.8	0.0	2.7	<20	11	5	5	1	1
DOF-MW-8	9/30/16		6.4	25.7	9.5	9.6	<0.1	<0.1	1.4	2.3	<0.5	1.1	<0.1	3.1	<20	<20	4.7	5.1	1	3

TABLE K.2 - Monitoring Well Metals Data

Location	Date	Screen Depth	Field Parameters		Arsenic		Cadmium		Total Chromium		Copper		Lead		Mercury		Nickel		Zinc	
			pH	Turbidity	7440-38-2		7440-43-9		7440-47-3		7440-50-8		7439-92-1		7439-97-6		7440-02-0		7440-66-6	
			(feet)	Std. Units	NTU	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L
Screening Level (SL)			-----	-----	8	8	1.2	1.2	27	27	3.1	3.1	8.1	8.1	25	25	8.2	8.2	81	81
HC-B1	11/13/12	16-21	8.0	5.1	4	4	<0.5	<0.5	6	6	<2	<2	<0.5	<0.5	<0.1	<0.1	6	7	<20	<20
HC-B1	11/19/15		8.3	5.9	0.45	0.3	0.05	<1	2.8	3	0.3	<5	0.06	0.04	<20	<20	0.3	0.3	1.1	<40
HC-B1	3/24/16		7.7	4.6	0.8	0.8	0.05	0.05	4	6	0.3	0.5	0.2	0.3	3	<20	0.40	0.4	<20	5
HC-B1	9/30/16		7.5	6.8	0.64	0.5	<1.0	<2.0	2.4	2.3	<5	<10	<1.0	<2.0	<20	<20	0.50	2.4	<40	<80
HC-B2(R)	11/11/15	4.5-9.5	7.4	15.9	2.7	2.6	0.03	0.04	0.5	0.3	0.4	0.4	0.03	0.2	<20	3.1	2.3	2.3	9	10
HC-B2(R)	3/23/16		6.1	8.1	0.1	0.5	0.1	0.1	0.2	1.4	2.7	3.6	0.02	5.9	3.0	20	2.3	2.5	16	19
HC-B2R	9/30/16		ISV	ISV	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SA-MW1	11/23/15	4-24	7.6	16.8	3.6	4.1	<0.1	0.02	13.5	20	1.8	3.3	1.0	2.0	16.6	51.5	10	10	2.3	5
SA-MW1	3/24/16		8.7	15.4	2.3	2	<0.2	<0.2	13	15	1	3	0.7	1.8	6	15	2	3	4	5
SA-MW1	9/30/16		8.6	5	4.2	4.1	<0.1	<0.1	25	29	1.5	2.7	1.6	2.4	<20	<20	3.2	3.4	6.9	8.6
SA-MW2	11/9/12	2-24	6.7	5.1	0.5	<0.5	<0.1	<0.1	2.5	5	<2	1.0	<0.1	0.6	<0.1	<0.1	4.7	4.1	<4	<4
SA-MW2	11/20/15		6.5	5.2	1	2	0.05	<0.5	3	3	0.4	1.0	0.1	0.6	<20	4.1	3	4	1.6	2
SA-MW2	3/29/16		6.4	5.3	3.7	4	0.01	0.02	5	6	0.3	0.7	0.1	0.8	<20	6.0	2.7	3	0.6	4
SA-MW2	9/30/16		6.4	5.7	1.3	1.5	<1.0	0.04	2.5	3.1	<5	0.54	<1	0.96	<20	<20	1.5	1.8	<40	3
SA-MW3	11/13/12	2-24	5.9	37.1	4	3	<0.5	<0.5	4	4	4	4	<0.5	<0.5	<0.1	<0.1	11	10	30	-----
SA-MW3	11/19/15		7.9	64.4	0.3	0.7	0.2	0.2	0.7	1.0	4.3	5	0.01	0.05	6.8	7.3	2.0	3	7	12
SA-MW3	3/28/16		6.8	20.6	0.4	0.7	0.02	0.04	1	2	4	5	0.08	0.2	9.0	10	0.8	0.9	9	4
SA-MW3	9/27/16		6.5	31	0.41	0.62	0.09	0.12	3.3	1.7	9.2	7.4	<0.5	0.12	<20	36	2.6	2.6	5.9	6.4
MW-Du	11/18/15	11-21	7.6	16.3	1.4	1.6	0.01	<0.1	8.3	10	3.1	4	0.7	1.0	5.9	6.6	1.7	2.1	5	6
MW-Du	3/28/16		6.4	16.6	1.8	2	0.0	0.01	10	13	3	4	0.3	1.2	4	17	0.80	1.0	3	2
MW-Du	10/1/16		6.4	5.6	1.8	2.1	<0.1	<0.1	11	12	4.1	4.7	0.29	0.62	<20	<20	0.74	1.3	1	5.2
MW-Eu	11/19/15	4.5-14.5	8.3	11.1	2	3	<1	0.05	1.6	13	0.5	8	1.0	23.4	4.4	48.7	3	8	3.4	27
MW-Eu	3/24/16		6.8	17.5	3	3	0.1	0.05	4	9	0.4	2	0.1	9.4	5	15	2.0	3	<40	16
MW-Eu	9/30/16		6.8	19	2.8	2.4	<1.0	<1.0	2.3	2.1	<5	<5	<1	<1	<20	<20	0.8	1.4	<40	<40
MW-Fu	11/11/15	4.5-14.5	7.3	1.3	0.7	0.7	0.03	0.02	0.25	0.2	2.2	2.2	0.01	0.01	5	<20	3.0	3	1.4	2
MW-Fu	3/23/16		6.4	13	0.2	0.2	0.02	0.02	0.20	0.20	2.1	1.9	0.01	0.01	<20	<20	1.3	1.3	1	0.7
MW-Fu	9/28/16		6.5	52	0.36	0.36	0.06	0.04	0.35	0.37	3.3	3.1	<0.1	<0.1	<20	<20	3.4	3.3	2	2
MW-FL	11/10/15	19.5-29.5	7.3	13	1.0	1.3	<0.2	0.01	19	21	0.8	2.1	0.09	0.4	2.7	6.4	1.0	3.1	0.96	2
MW-FL	3/23/16		6.6	4	0.9	1.0	<0.5	0.1	20	21	0.9	4	0.1	0.3	4.0	5.0	1.0	1.0	1	7
MW-FL	9/28/16		6.6	6	0.75	0.75	<0.2	<0.1	14	12	<1	0.75	<0.2	0.08	<20	49	0.82	1.4	<8	1
MW-Gu	11/10/15	4.5-14.5	7.1	20.5	0.8	0.9	<0.1	0.01	1.2	2	0.17	0.6	0.07	0.2	<20	5.9	0.7	1.8	1.9	3
MW-Gu	3/23/16		6.5	11.1	1.8	1.8	<0.2	0.01	3	3.3	0.8	1.3	0.3	0.5	3	<20	1	1.3	1	2
MW-Gu	9/28/16		6.4	6.3	0.71	0.55	<0.1	<0.1	0.85	0.80	<10	1.5	<0.1	0.14	<20	<20	<10	1.1	1	1
MW-GL	11/10/15	19.6-29.6	7.3	27	0.6	0.7	<0.5	0.01	1.4	2	0.18	1.0	0.03	0.1	<20	2.7	0.52	0.9	3.1	1
MW-GL	3/23/16		6.7	1.1	0.8	1	0.05	0.05	3	4	0.3	0.4	0.05	0.2	<20	<20	0.40	0.4	<20	6
MW-GL	9/28/16		6.5	2.7	1	0.6	<1.0	<1.0	2.5	0.90	<5	<10	<1.0	<1.0	<20	<20	<5	<10	<40	<40
MW-HL	11/18/15	19.6-29.6	7.5	6	0.25	0.3	<0.5	<0.2	2	2	0.35	0.4	1.0	1.1	7	6.7	0.28	0.7	2.6	3
MW-HL	3/29/16		6.3	10.4	0.2	0.4	<0.2	<0.5	2.0	3	0	0.7	0.04	0.3	<20	10	0.20	0.4	3	6
MW-HL	9/27/16		6.3	4.2	0.16	0.19	<0.1	<0.1	2	1.0	<2.5	2.4	<0.5	0.1	<20	<20	<2.5	0.23	1	1

TABLE K.2 - Monitoring Well Metals Data

Location	Date	Screen Depth	Field Parameters		Arsenic		Cadmium		Total Chromium		Copper		Lead		Mercury		Nickel		Zinc	
			pH	Turbidity	7440-38-2		7440-43-9		7440-47-3		7440-50-8		7439-92-1		7439-97-6		7440-02-0		7440-66-6	
			(feet)	Std. Units	NTU	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. µg/L	total µg/L	diss. ng/L	total ng/L	diss. µg/L	total µg/L	diss. µg/L
Screening Level (SL)			-----	-----	8	8	1.2	1.2	27	27	3.1	3.1	8.1	8.1	25	25	8.2	8.2	81	81
MW-IL	11/20/15	24.5-34.5	7	10.6	0.4	0.4	<1.0	<0.5	3	4	0.4	0.8	0.1	0.3	<20	5.1	0.5	0.5	1.6	1
MW-IL	3/28/16		6.4	9.3	0.7	0.8	<0.5	0.05	5	6	0.3	0.6	0.1	0.5	13	37	1	1	11	11
MW-IL	9/27/16		6.3	3.3	0.33	0.31	<0.1	0.1	3.2	1.9	<2.5	<0.5	<0.5	0.07	<20	140	0.60	0.56	1	1
MW-Ju	11/20/15	5-15	7	43	2.0	2.2	0.01	0.02	2.5	3	1.2	2.0	2.4	2.8	15	13	4.6	5	2.6	3
MW-Ju	3/28/16		6.3	6	3.3	3	<0.2	0.0	2	2	1	3	1.3	4.4	7	13	3.0	3	19	30
MW-Ju	9/27/16		6.3	22	1.2	2.5	<0.1	0.12	2	3.4	<2.5	5.0	<0.5	9.8	<20	59	1	2.9	1	48
MW-Ku	11/10/15	4.5-14.5	6.5	14.9	0.4	0.5	0.02	0.03	0.42	0.6	3.0	3.3	0.02	0.05	<20	<20	3.6	3.6	2.7	3
MW-Ku	3/22/16		6.4	12.2	0.5	0.7	0.1	0.07	0.5	0.9	2.7	3	0.01	0.2	<20	<20	3.1	3	10	11
MW-Ku	9/28/16		6.5	12.7	1.1	1.2	<0.2	0.04	1.5	1.4	1.5	2.0	<0.2	0.07	<20	<20	2.8	3.9	5	3
MW-KL	11/10/15	19.7-29.7	7.5	22.8	0.3	0.5	<0.2	0.01	3	3	0.7	1.5	0.6	0.8	3.6	5.8	0.6	1.0	1.8	18
MW-KL	3/22/16		6.8	2.2	0.5	0.3	<0.5	0.05	3	3	0.20	0.40	0.05	0.20	<20	5.0	0.5	0.5	<20	3
MW-KL	9/28/16		6.7	2.7	0.6	0.30	<1.0	<1.0	3.6	1.3	<5	1.2	<1.0	<1.0	<20	<20	0.9	1.3	17	1

Notes: < - Not detected at indicated reporting limit
Less than values were assumed at the reporting limit in calculating concentration averages
- Concentration exceeds screening level
Bold value = Detected concentration

