FARALLON CONSULTING

Volume 2
Appendices

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY

BLOCK 38 WEST SITE
500 THROUGH 536 WESTLAKE AVENUE NORTH
SEATTLE, WASHINGTON

Agreed Order No. DE 17963
Facility Site Identification No. 62773
Cleanup Site Identification No. 15008

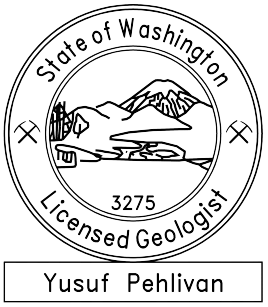
Farallon PN: 397-019

December 20, 2024

Prepared by:

Greg Peters
Project Scientist

Yusuf Pehlivan, L.G.
Associate Geologist



Reviewed by:

Suzy Stumpf, P.E.
Principal Engineer

For:
City Investors IX LLC
505 5th Avenue South
Seattle, Washington 98104

Submitted by:
Farallon Consulting, L.L.C.
13555 Southeast 36th Street, Suite 320
Bellevue, Washington 98006

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BORING LOGS

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

2014 BORING LOGS

Log of Boring: F-MW-130

Client: Washington Builders LLC
Project: Block 43
Location: Block 38, Seattle, WA
Farallon PN: 397-010
Logged By: Dincer Kayhan

Date/Time Started:	7/21/14 @ 0945	**Sampler Type:**	PE Bags
Date/Time Completed:	7/22/14 @	**Drive Hammer (lbs.):**	Auto
Equipment:	Spider 1576	**Depth of Water ATD (ft bgs):**	5.7
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	60.0
Drilling Foreman:	Zane Huckins	**Total Well Depth (ft bgs):**	55
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.8': Asphalt (Cored).	AC							Concrete
		1.1-5.7': Wood debris mixed with black silty sand/sandy silt.	FILL					Air knife from 0.0-5.7' bgs.		
5		5.7-6.7': SILT (100% Silt), brown with alternating zones of black, wet, no odor.	FILL			1/1/1	0.6	SS-6.0 SPT		Water Level
		6.7-8.0': SILT (100% silt), alternating colors between brown, gray, and light gray, wet, organic odor, debris includes glass shards.	FILL		100		2.1	SS-5.0-7.5		
		8.0-8.9': Sandy SILT with gravel (70% silt, 15% sand, 15% gravel), fine to medium sand, coarse gravel, gray, no odor.	ML							
10		8.9-10.8': SILT (95% silt, 5% sand), fine sand, gray, wet, no odor.	ML				2.6	SS-7.5-10.0		Grout with Bentonite
		10.8-12.7': Sandy SILT (60% silt, 40% sand), fine sand, gray, wet, no odor.	ML			7/14/12	3.1	SS-11.0 SPT		
							5.2	SS-10.0-12.5		
		12.7-14.3': Silty SAND (70% sand, 30% silt), fine sand, coarse gravel <5%, gray, no odor, loose, moist.	SM		96					
							4.0	SS-12.5-14.8		
		14.3-14.8': SILT (95% silt, 5% sand), fine sand, gray, wet, no odor.	ML							
15		14.8-15.0': No recovery.								
		15.0-16.0': SILT (95% silt, 5% sand), fine sand, gray, wet, no odor.	ML			3/6/20	NM	SS-15.0-SPT		
		16.0-20.0': Silty SAND (70% sand, 30% silt), fine sand, loose, wet, strong moth ball-like odor.	SM		100		2.2	SS-15.0-17.5		
20								F-MW-130-GW1-072114 @ 1420		

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 45.0-55.0

Filter Pack: 10/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 23
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA, Y: NA

Log of Boring: F-MW-130

Client: Washington Builders LLC
Project: Block 43
Location: Block 38, Seattle, WA
Farallon PN: 397-010
Logged By: Dincer Kayhan

Date/Time Started:	7/21/14 @ 0945	**Sampler Type:**	PE Bags
Date/Time Completed:	7/22/14 @	**Drive Hammer (lbs.):**	Auto
Equipment:	Spider 1576	**Depth of Water ATD (ft bgs):**	5.7
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	60.0
Drilling Foreman:	Zane Huckins	**Total Well Depth (ft bgs):**	55
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
20		20.0-21.2': Silty SAND (70% sand, 30% silt), fine sand, loose, wet, strong moth ball-like odor.	SM				27.7	F-MW-130-20.0-072114 @ 1300		
		21.2-23.5': SILT (90% silt, 5% sand, 5% gravel), fine sand, coarse gravel, gray, moist, no odor.	ML		70	4/6/5	NM	SS-21.0-SPT		
							4.6	SS-20.0-22.5		
							2.7	SS-22.5-23.5		
		23.5-25.0': No recovery.								
25		25.0-25.4': SILT (90% silt, 5% sand, 5% gravel), fine sand, coarse gravel, gray, moist, no odor.	ML							
		25.4-30.0': Silty SAND (60% sand, 40% silt), fine to medium sand, gray, moist, no odor, unit is more dense than previous silty sands.	SM		100	14/21 /47	NM	SS-26.0-SPT		
							2.2	SS-25.0-27.5		
		sand increased to 80% sand and 20% silt from 28.0-30.0' bgs, (zones of light brown toward 30.0' bgs).								
30							2.3	SS-27.5-30.0		Grout with Bentonite
		30.0-40.0': Well graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist, no odor.	SW-SM		100	5/4/1	NM	SS-31.0-SPT		
							2.9	SS-30.0-32.5		
35							3.2	SS-32.5-35.0		
					100		3.8	SS-35.0-37.5		
							2.9	SS-37.5-40.0		
40										

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 Sand	**Ground Surface Elevation (ft):**	23
Casing Diameter (inches):	2	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: F-MW-130

Client: Washington Builders LLC
Project: Block 43
Location: Block 38, Seattle, WA
Farallon PN: 397-010
Logged By: Dincer Kayhan

Date/Time Started:	7/21/14 @ 0945	**Sampler Type:**	PE Bags
Date/Time Completed:	7/22/14 @	**Drive Hammer (lbs.):**	Auto
Equipment:	Spider 1576	**Depth of Water ATD (ft bgs):**	5.7
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	60.0
Drilling Foreman:	Zane Huckins	**Total Well Depth (ft bgs):**	55
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Boring/Well Construction Details
40		Moisture content increased from previous 30.0-35.0' interval but still classified as moist.	SM			26.7	F-MW-130-40.0-072114 @ 1655 SS-40.7	Bentonite Seal
		40.0-40.7': Silty SAND (80% sand, 20% silt), fine to medium sand, gray, moist, no odor.						
		40.7-45.0': No recovery. Soil was not solid enough to collect due to water injection to combat heaving sands.		14				Sand Pack
45		45.0-49.5': Silty SAND (80% sand, 20% silt), fine to medium sand, gray, moist, no odor.	SM	90		173	F-MW-130-47.5-072214 @ 1000	
		49.5-50.0': No recovery.						
50		50.0-55.0': Well graded GRAVEL with silt and sand (60% gravel, 30% sand, 10% silt), fine to coarse sand and gravel, gray, wet, no odor, large cobbles present, natural wood debris present (bark and tree branch).	GW-GM	100		88.4	F-MW-130-50.0-072214 @ 1005	Screen
						8.5	SS-50.0-52.5	
						8.3	SS-52.5-55.0	
55		55.0-56.7: Well graded GRAVEL with silt and sand (60% gravel, 30% sand, 10% silt), fine to coarse sand and gravel, gray, wet, no odor.	GW-GM				F-MW-130-55.0-072214 @ 1325	Sand Pack
		56.7-60.0': Gravelly SILT (50% silt, 40% gravel, 10% sand), fine to coarse gravel and sand, gray, wet, no odor, cobbles present, gradational contact with unit above.	ML	100		12.8	SS-55.0-57.5	
60					10/18 /20	6.7 NM	SS-57.5-60.0 SS-60.0-SPT	Bentonite Seal

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 Sand	**Ground Surface Elevation (ft):**	23
Casing Diameter (inches):	2	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA		**Y:** NA

2018 BORING LOGS

Log of Boring: FB-01

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/21/2018 @ 1126	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/21/2018 @ 1540	**Drive Hammer (lbs.):**	140
Equipment:	MiniTrack	**Depth of Water ATD (ft bgs):**	8.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.0': Concrete. Hand auger to clear for utilities.	CO							Concrete
		1.0'-5.0': Well graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine gravel, brown, moist, no odor.	SW-SM				1.0			
5		5.0-6.5': Silty SAND (50% sand, 40% silt, 10% gravel), fine to coarse sand, fine gravel, dark brown, very loose, moist, no odor.	SM		80	3 2 1	0.5	FB-01-5.0-082118 @ 1140	X	Water Level
10		10.0-11.5': No soil samples collected. Temporary well installed at approximately 12.5 ft bgs.			NA	NA	NA	FB-01-082118 @1245	X	
15		15.0-15.8': SILT (90% silt, 10% sand), fine sand, brown, wet, stiff, no odor.	ML		100	2 4 8	0.0	FB-01-15.0-082118 @1420	X	Bentonite
		15.8-16.5': Silty SAND (70% sand, 30% silt), fine sand, gray, wet, medium dense, no odor.	SM							
20		20.0-21.5': Poorly-graded SAND (95% sand, 5% silt), fine sand, grayish brown, wet, dense, no odor.	SP		100	12 19 21	0.0	FB-01-20.0-082118 @ 1446		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-01

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/21/2018 @ 1126	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/21/2018 @ 1540	**Drive Hammer (lbs.):**	140
Equipment:	MiniTrack	**Depth of Water ATD (ft bgs):**	8.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		25.0-26.5': SILT (90% silt, 10% sand), fine sand, gray, wet,stiff, no odor.	ML		100	3 4 5	0.0	FB-01-25.0-082118 @ 1500		
30		30.0-31.5': Poorly graded SAND (95% sand, 5% silt), medium sand, gray, wet, dense, no odor.	SP		100	14 20 25	0.0	FB-01-30.0-082118 @ 1515	X	
35		35.0-36.5': Silty SAND (60% sand, 40% silt), fine sand, gray, moist, very dense no odor.	SM		100	17 35 26	0.0	FB-01-35.0-082118 @ 1530		Bentonite
40		40.0-41.5': Poorly graded SAND (95% sand, 5% silt), fine sand, dark gray, very dense, moist, no odor.	SP		100	12 15 50 5	0.0	FB-01-40.0-082118 @ 1540		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-02

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/20/2018 @ 1045	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/20/2018 @ 1545	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	10.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.7': Concrete, hand auguer to clear for utilities.	CO							Concrete
		2.5-3.5': Well graded GRAVEL with silt and sand (50% gravel, 40% sand,10% silt), fine to coarse sand, fine gravel, dark brown, moist, no odor. (Fill).	FILL				0.5	FB-02-3.0-082018 @1155		
5		5.0-6.5': Well graded GRAVEL with silt and sand (50% gravel, 40% sand, 10% silt), fine to coarse sand, fine gravel, dark brown, moist, loose, no odor. Wood debris present. (Fill).	FILL		100	11 5 3	0.9	FB-02-5.0-082018 @1220	X	
10		10.0-11.5': Sandy SILT (70% silt, 30% sand), fine to medium sand, dark brown, wet, very soft, no odor. Mottling present.	ML		100	1 1 1	0.2	FB-02-10.0-082018 @1255	X	Water Level
15		15.0-16.5': SILT with sand (75% silt, 25% sand), fine to medium sand, grayish brown, moist, stiff, no odor.	ML		100	4 4 6	0.5	FB-02-15.0-082018 @1245		Bentonite
20		20.0-21.5': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, medium dense, no odor.	SP-SM		100	14 11 5	0.2	FB-02-20.0-082018 @1310		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-02

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/20/2018 @ 1045	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/20/2018 @ 1545	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	10.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		25.0-26.5': Silty SAND (80% sand, 20% silt), fine to medium sand, gray, wet, dense, slight petroleum-like odor.	SM		100	16 20 20	0.4	FB-02-25.0-082018 @1430	X	
30		30.0-31.5': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist to wet, very stiff, slight petroleum-like odor.	ML		100	12 16 16	0.7	FB-02-30.0-082018 @1454		
35		35.0-36.5': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist to wet, medium dense, no odor.	SP-SM		100	5 8 12	0.6	FB-02-35.0-082018 @1520	X	Bentonite
40		40.0-41.5': No Recovery. Heaving sands prevented drilling beyond 40.0 ft bgs.			0			No Sample		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-03

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/23/2018 @ 1200	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/23/2018 @ 1540	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	17.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.6': Concrete, asphalt fill material. Hand auger to clear for utilities.	CO							Concrete
5		5.0-6.5': SILT with sand (80% silt, 10% sand, 10% gravel), fine sand, fine gravel, gray, moist, medium stiff, organic odor. Some charcoal and wood debris. (Fill).	FILL		100	3 3 3	0.1	FB-03-5.0-082318 @1250		
10		10.0-11.5': SILT (100% silt), gray, moist, medium stiff, no odor.	ML		100	3 3 3	0.2	FB-03-10.0-082318 @1310	X	Bentonite
15		15.0-16.5': Sandy SILT (60% silt, 40% sand), fine sand, gray, wet, medium stiff, no odor.	ML		100	2 3 5	0.2	FB-03-15.0-082318 @1325	X	Water Level
20		20.5-21.5': No soil sample. Temporary well installed for reconnaissance groundwater sampling.			NA	NA	NA	FB-03-082318 @ 14:00	X	

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-03

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/23/2018 @ 1200	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/23/2018 @ 1540	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	17.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		25.0-26.5': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, gray, wet, very dense, no odor.	SP-SM		100	19 22 33	0.2	FB-03-25.0-082318 @1500	X	
30		30.0-31.5': Poorly graded SAND (100% sand), fine to medium sand, grayish brown, wet, dense, no odor.	SP		100	10 21 27	0.3	FB-03-30.0-082318 @1520		Bentonite
35		35.0-36.5': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, medium dense, no odor.	SP-SM		100	14 21 13	0.3	FB-03-35.0-082318 @1530	X	
40		40.0-41.5': Silty SAND (70% sand, 30% silt), fine sand, grayish brown, wet, medium dense, no odor.	SM		100	11 16 20	0.1	FB-03-40.0-082318 @1540		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-04

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/21/2018 @ 0645	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/21/2018 @ 0900	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	17.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	33.0
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.0': Asphalt. Hand auger to clear for utilities.	AC							Concrete
		2.0-3.0': SILT with sand (80% silt, 20% sand), fine sand, dark brown, moist, petroleum-like odor. Peat and orgranic material present. (Fill).	FILL				0.5	FB-04-3.0-082118 @0645		
5		5.0-6.5': SILT with sand (80% silt, 20% sand), fine sand, dark brown, moist, very soft, no odor. Debris and organic material present. (Fill).	FILL		100	1 1 1	0.9	FB-04-5.0-082118 @0650	X	
10		10.0-11.5': SILT with sand (80% silt, 20% silt), fine to medium sand, dark brown, moist to wet, stiff, no odor. Debris present. (Fill).	FILL		100	1 5 10	0.2	FB-04-10.0-082118 @0710	X	Bentonite
15		15.0-16.5': Silty SAND (80% sand, 20% silt), fine to medium sand, gray, wet, loose, no odor.	SM		100	3 2 4	0.5	FB-04-15.0-082118 @0735	X	Water Level
20		20.0-21.5': Poorly graded sand (100% sand), fine to medium sand, gray, wet, dense, no odor.	SP		100	7 15 28	0.2	FB-04-20.0-082118 @0745	X	
25		25.0-26.5': SILT with sand (60% silt, 40% sand), fine sand, gray, wet, very stiff, no odor.	ML		100	10 11 17	0.4	FB-04-25.0-082118 @0815		Bentonite
30		30-31.5': Poorly graded SAND (100% sand), fine to medium sand, gray, wet, dense, no odor.	SP		100	9 14 30	0.7	FB-04-30.0-082118 @0850	X	
35		Refusal at 33.0' bgs due to heaving sands.								

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-05

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/22/2018 @ 0815	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/22/2018 @ 1140	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	17.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Concrete. Hand auger to clear for utilities.	CO							Concrete
		0.5-5.0': Silty SAND (80% sand, 20% silt), fine to medium sand, dark brown, moist, no odor. (Fill).	FILL							
5		5.0-6.5': Silty SAND (50% sand, 45% silt, 5% gravel), fine to medium sand, fine gravel, dark brown, moist, loose, no odor. (Fill).	FILL		100	1 2 3	0.5	FB-05-5.0-082218 @0840	X	
10		10.0-11.5': SILT (90% silt, 10% sand), fine sand, gray, moist, medium stiff, no odor. Wood chips and organic matter present. (Fill).	FILL		100	2 2 3	0.6	FB-05-10.0-082218 @0855		Bentonite
15		15.0-16.5': SILT (95% silt, 5% sand), fine sand, gray, moist, very stiff, no odor.	ML		100	7 10 13	1.0	FB-05-15.0-082218 @0910	X	
								FB-04-082218 @0950	X	Water Level
20		20.0-20.6': SILT (100% silt), gray, wet, hard, no odor.	ML		100	14 21 24	0.6	FB-05-20.0-082218 @0930	X	
		20.6-21.5': Silty SAND (80% sand, 20% silt), medium sand, gray, wet, dense, no odor.	SM							

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-05

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started:	08/22/2018 @ 0815	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/22/2018 @ 1140	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	17.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	41.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		25.0-26.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist, very dense, no odor.	SP-SM		100	17 13 50-6"	0.7	FB-04-25.0-082218 @1110		
30		30-31.5': Poorly-graded SAND (100% sand), fine to medium sand, grayish brown, wet, very dense, no odor.	SP		100	16 25 35	0.4	FB-04-30.0-082218 @1120		Bentonite
35		35-36.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine to medium sand, grayish brown, wet, very dense, no odor.	SP-SM		100	24 28 32	0.7	FB-04-35.0-082218 @1130	X	
40		40.0-41.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine to medium sand, grayish brown, wet, dense, no odor.	SP-SM		100	11 18 30	0.6	FB-04-40.0-082218 @1140		
45										

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FB-06

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started:	08/22/2018 @ 0610	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/22/2018 @ 0730	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	16.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	26.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Concrete. Hand auger to clear for utilities.	CO							Concrete
		0.5-2.5': SILT with sand (80% silt, 15% sand, 5% gravel), fine sand, fine gravel, dark brown, moist, petroleum-like odor. (Fill).	FILL				6.9	FB-05-2.5-082218 @0610	X	
5		5.0-6.5': Sandy SILT (60% silt, 40% sand), fine sand, dark brown, moist, very soft, petroleum-like odor. Wood debris. (Fill).	FILL		100	1 1 1	2.4	No Sample		
10		10.0-11.5': SILT (90% silt, 10% sand), fine sand, dark brown, moist, medium stiff, no odor.	ML		100	1 2 3	0.4	FB-05-10.0-082218 @0640	X	Bentonite
15		15.0-16.5': SILT (95% silt, 5% sand), fine sand, brown, moist, medium stiff, no odor.	ML		100	3 3 3	0.4	FB-05-15.0-082218 @0655		Water Level
20		20.0-21.5': Sandy SILT (60 silt, 40% sand), fine sand, gray, moist to wet, hard, no odor.	ML		100	13 20 23	0.4	FB-05-20.0-082218 @0715	X	
25		25.0-26.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, very dense, no odor.	SM		100	14 22 30	0.6	FB-05-25.0-082218 @0730	X	

Well Construction Information

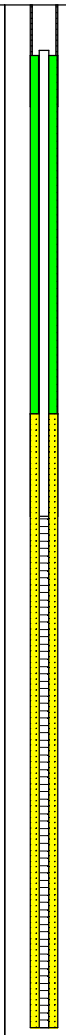
Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	NA	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	NA	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite		**Y:** NA

Log of Boring: FMW-132

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/24/2018 @ 1330	**Sampler Type:**	1.5 Split spoon
Date/Time Completed:	08/24/2018 @ 1530	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	7.5
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	10.0
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	10.0
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0	0.0-1.0': Concrete, tile and asphalt material.	CO					
	1.0-2.5': Poorly graded SAND with gravel (80% sand,15% gravel, 5% silt), medium to coarse sand, fine gravel, brown, dry, no odor. (Fill).	FILL			0.3	FMW-132-2.5-082418@1320	
5	5.0-6.5': Sandy SILT (60% sand, 30% silt, 10% gravel), fine sand, fine gravel, brown, dry, very loose, no odor. Fill material consisting of wood & glass debris. Some organic matter present. (Fill).	FILL	100	3 2 1	0.5	FMW-132-5.0-082418@1320	X
10	Drilling crew encountered unidentified hard object while attempting to sample at 10.0 ft bgs. Farallon decided to stop drilling operations and install monitoring well at 10.0 ft bgs.		NA	NA	NA	FMW-132-10.0-082418@1835	X



Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Silica/Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	1.0	**Surface Seal:**	Grout/Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite/Grout	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	5.0-10.0	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: FMW-133

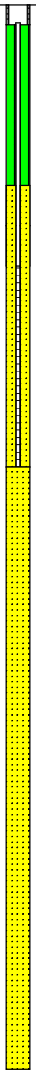
Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started:	08/24/2018 @ 1745	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/24/2018 @ 1902	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	9.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	26.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	11.5
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed
0	0.0-1.5': Concrete. Hand auger to clear for utilities.	CO					
	2.5-5.0': Poorly graded SAND with gravel (70% sand, 25% gravel, 5% silt), medium sand, fine gravel, dark brown, dry to moist, no odor. (Fill).	FILL					
5	5.0-6.5': No Recovery.		0	1 2 1	NA	No Sample	
10	10.0-11.5': SILT (90% silt, 10% sand), fine sand, brown, moist to wet, very soft, no odor. Wood debris present. (Fill).	FILL	100	1 1 1	0.5	FMW-133-10.0-082418@1835	X
15	15.0-16.5': Silty SAND (85% sand, 15% silt), fine sand, gray, moist, stiff, no odor.	SM	100	4 5 6	0.3	FMW-133-15.0-082418@1849	
20	20.0-21.5': Poorly graded SAND (95% sand, 5% silt), medium to coarse sand, gray, wet, medium dense, wet, no odor.	SP	100	6 8 11	0.4	FMW-133-20.0-082418@1852	X
25	25.0-26.5': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, gray, wet, very dense, no odor.	SP	100	18 21 30	0.4	FMW-133-25.0-082418@1902	



Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Silica/Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	1.0	**Surface Seal:**	Grout/Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.01	**Annular Seal:**	NA	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	6.5 - 11.5	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: FMW-134

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started:	08/24/2018 @ 0700	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/24/2018 @ 1030	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	13.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	20.0
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	17.0
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Concrete. Hand auger to clear for utilities.	CO							Monument
		0.5-2.5': Sandy SILT (50% silt, 40% sand, 10% gravel), fine to coarse sand, fine gravel, dark brown, moist, organic odor.	ML							
5		5.0-6.5': SILT (90% silt, 10% sand), fine sand, brown, moist to wet, medium stiff, organic odor. Organic matter present.	ML		100	2 1 4	0.1	FMW-134-5.0-082318@0710	X	Bentonite
10		10.0-11.0': SILT (90% silt, 10% sand), fine sand, gray, medium stiff, moist, no odor.	ML		100	2 3 5	0.0	FMW-134-10.0-082318@0720		
		11.0-11.5': Poorly-graded SAND (100% sand), fine to medium sand, gray, loose, moist, no odor.	SP							Sand Pack Water Level
15		15.0-16.5': Silty SAND (85% sand, 15% silt), fine to medium sand, grey, wet, medium dense, no odor.	SM		100	8 11 11	0.3	FMW-134-15.0-082318@0730	X	Pre-Packed Screen
										Sand Pack
20		20.0-21.5': Poorly graded SAND (100% sand), medium sand, grey, wet, medium dense, wet, no odor.	SP-SM		100	10 13 17	0.1	FMW-134-20.0-082318@0750		
25		Refusal at 25.0' bgs due to heaving sands.								

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Silica/Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	1.0	**Surface Seal:**	Grout/Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite/Grout	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	12.0-17.0	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: FMW-135

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/24/2018 @ 0700	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/24/2018 @ 0950	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	8.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	51.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	12.0
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.6': Concrete. Hand auger to clear for utilities.	CO							Monument
5		5.0-6.0': Silty SAND (60% sand, 30% silt,10% gravel), fine to coarse sand, fine gravel, brown, moist to wet, very loose, no odor. (Fill).	FILL		100	1 1 2	0.1	FMW-135-5.0-082418@0735	X	Bentonite
		6.0-6.5': SILT (90% silt, 10% sand), fine sand, grayish brown, moist to wet, soft, no odor. (Fill).	FILL							Sand Pack
10		10.0-11.5': Poor recovery. Wood debris throughout entire core sample. (Fill).	FILL		NA	9 6 5	0.5	No Sample		Water Level Pre-Packed Screen
15		15.0-15.9': SILT (100% silt), dark brown, moist, medium stiff, no odor.	ML		100	2 3 4	3.5	FMW-135-15.0-082418@0750	X	
		15.9-16.5': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, loose, no odor.	SM							
20		20.0-20.8': Poorly-graded SAND (100% sand), medium to coarse sand, gray, wet, loose, organic odor.	SP		100	1 4 3	1.2	FMW-135-20.0-082418@0810		
		20.8-21.5': SILT (90% silt, 10% sand), medium sand, gray, moist to wet, medium stiff, organic odor.	ML							
25		25.0-26.5': Silty SAND (55% sand, 40% silt, 5% gravel), fine sand, fine gravel, gray, wet, loose, organic odor.	SM		100	2 4 6	1.0	FMW-135-25.0-082418@0823	X	

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Silica/Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	1.0	**Surface Seal:**	Grout/Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite/Grout	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	7.0-12.0	**Boring Abandonment:**	NA		**Y:** NA

FARALLON CONSULTING

Log of Boring: FMW-135

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/24/2018 @ 0700	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/24/2018 @ 0950	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	8.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	51.5
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	12.0
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
30		30.0-31.5': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, medium dense, no odor.	SM		100	9 13 15	1.1	FMW-135-30.0-082418@0835	X	
35		35.0-36.5': Silty SAND (60% sand, 40% silt), fine sand, gray, moist, dense, no odor.	SM		100	15 21 24	0.9	FMW-135-35.0-082418@0850	X	
40		40.0-41.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, grayish brown, moist, very dense, no odor.	SP-SM		100	22 32 38	1.0	FMW-135-40.0-082418@0915		
45		45.0-46.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, grayish brown, moist, very dense, no odor.	SP-SM		100	19 26 32	0.9	FMW-135-45.0-082418@0930		
50		50.0-51.5': Well-graded SAND with gravel (70% sand, 25% gravel, 5% silt), fine to coarse sand, fine gravel, moist to wet, dense, no odor.	SW		100	15 21 18	1.0	FMW-135-50.0-082418@0950	X	

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 1.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 7.0-12.0

Filter Pack: Silica/Sand
Surface Seal: Grout/Concrete
Annular Seal: Bentonite/Grout
Boring Abandonment: NA

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA, Y: NA

Log of Boring: FMW-136

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, WA
Farallon PN: 397-019
Logged By: Greg Peters

Date/Time Started:	08/22/2018 @ 1310	**Sampler Type:**	1.5 Split Spoon
Date/Time Completed:	08/22/2018 @ 1400	**Drive Hammer (lbs.):**	140
Equipment:	Mini-track	**Depth of Water ATD (ft bgs):**	18.0
Drilling Company:	Geologic Drilling	**Total Boring Depth (ft bgs):**	40.0
Drilling Foreman:	Blaine Gibson	**Total Well Depth (ft bgs):**	NA
Drilling Method:	Hollow Stem Auger		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Concrete. Hand auger to clear for utilities.	CO							Monument
5		5.0-6.5': Sandy SILT (70% silt, 30% sand), fine to medium sand, dark brown, moist, soft, no odor. Wood debris and organic matter present. (Fill).	FILL		100	1 2 2	0.7	FMW-136-5.0-082218@1315		
10		10.0-11.5': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist, stiff, no odor.	ML		100	3 6 5	0.8	FMW-136-10.0-082218@1320	X	Bentonite
15		15.0-16.5': Silty SAND (60% sand, 40% silt), fine sand, gray, moist, medium dense, no odor.	SM		100	8 10 14	0.6	FMW-136-15.0-082218@1330		Water Level
20		20.0-21.5': Silty SAND (80% sand, 20% silt), fine to medium sand, grayish brown, moist to wet, medium dense, no odor.	SM		100	18 13 12	0.8	FMW-136-20.0-082218@1345	X	
25		25.0-26.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, grayish brown, wet, medium dense, no odor.	SP-SM		100	4 10 16	1.3	FMW-136-25.0-082218@1355		Sand Pack
30		30.0-31.5': Poorly-graded SAND (100% sand), fine sand, grayish brown, wet, dense, no odor.	SP		100	6 12 19	1.0	FMW-136-30.0-082218@1400	X	
35		No sample recovery beyond 30.0' bgs due to heaving sands.								Pre-Packed Screen
40										

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Silica/Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	1.0	**Surface Seal:**	Grout/Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite/Grout	**Surveyed Location:**	**X:** NA
Screened Interval (ft bgs):	30.0- 40.0	**Boring Abandonment:**	NA		**Y:** NA

Log of Boring: FMW-137

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-061

Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 1145	**Sampler Type:**	PE Bag
Date/Time Completed:	11/17/18 @ 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	15.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	90.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	85.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Concrete.	CO							Concrete
		0.5-5.0': Air knife to clear for utilities. Silty SAND (60% sand, 20% silt, 10% gravel), medium to coarse sand, fine gravel, brown, moist, no odor (Fill Material).	SM							
5		5.0-9.0': Silty SAND (75% sand, 20% silt, 5% gravel), fine to medium sand, fine gravel, moist, no odor.	SM		80		0.1	Soil Screen @ 5.0' BGS		
		9.0-10.0': No recovery.								
10		10.0-10.6': Wood debris.	WD		12					Bentonite
		10.6-15.0': No recovery.								
15		15.0-18.0': Silty SAND (60% sand, 40% silt), fine to medium sand, brown, moist to wet, no odor. Wood debris at 16.0' BGS	SM		60					Water Level
		18.0-20.0': No recovery.								
20										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	72.0-85.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-137

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 1145	**Sampler Type:**	PE Bag
Date/Time Completed:	11/17/18 @ 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	15.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	90.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	85.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
20		20.0-22.0': Sandy SILT (70% silt, 30% sand), fine sand, dark brown, moist to wet, organic odor, debris throughout.	ML		100		6.5	Soil Screen @ 20.0' BGS		
		22.0-25.0': Silty SAND (80% sand, 20% silt), medium sand, gray, moist to wet, no odor, wood debris.	SM							
25		25.0-27.0': Silty SAND (60% sand, 40% silt), fine sand, gray, moist to wet.	SM		80					
		27.0-29.0': Silty SAND (80% sand, 20% silt), fine to medium sand, gray, moist to wet, no odor.	SM							
		29.0-30.0': No recovery.								
30		30.0-35.0': Silty SAND (70% sand, 30% silt), fine sand, gray, wet, no odor.	SM		100		0.3	Soil Screen @ 30.0' BGS		
35		35.0-40.0': Silty SAND (60% sand, 40% silt), fine sand, gray, moist, no odor.	SM		100					Bentonite
40										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	72.0-85.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

FARALLON CONSULTING

Log of Boring: FMW-137

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-061

Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 1145	**Sampler Type:**	PE Bag
Date/Time Completed:	11/17/18 @ 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	15.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	90.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	85.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
40		40.0-42.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist, no odor.	SP-SM		100		0.3	Soil Screen @ 40.0' BGS		
		42.0-45.0': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor.	SM							
45		45.0-50.0': Silty SAND (85% sand, 15% silt), fine to medium sand, grayish-brown, moist, no odor.	SM		100					
50		50.0-55.0': Silty SAND (80% sand, 20% silt), fine to medium sand, grayish-brown, moist to wet, no odor.	SM		100		3.2	Soil Screen @ 50.0' BGS		
55		55.0-60.0': Silty SAND (80% sand, 20% silt), fine to medium sand, grayish-brown, moist to wet, no odor.	SM		100					
60										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	72.0-85.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-137

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 1145	**Sampler Type:**	PE Bag
Date/Time Completed:	11/17/18 @ 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	15.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	90.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	85.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
60		60.0-70.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish-brown, moist, no odor.	SP-SM		100		1.3	Soil Screen @ 60.0' BGS		Bentonite
70		70.0-72.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish brown, moist, no odor.	SP-SM		100		0.3	Soil Screen @ 70.0' BGS		Screen
		72.0-75.0': Poorly graded SAND with silt (80% sand, 10% gravel, 10% silt), medium sand, fine gravel, grayish-brown, moist, no odor.	SP-SM							Sand Pack
75		75.0-80.0': Poorly graded SAND (95% sand, 5% silt), medium sand, gray, moist to wet, no odor.	SP		100					
80										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	72.0-85.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-137

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-061

Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 1145	**Sampler Type:**	PE Bag
Date/Time Completed:	11/17/18 @ 1400	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	15.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	90.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	85.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
80		80.0-85.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, gray, moist to wet, no odor.	SP		100		0.5	Soil Screen @ 80.0' BGS		Screen
85		85.0-90.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, gray, moist to wet, no odor.	SP		100					Sand Pack
90							0.2	Soil Screen @ 90.0' BGS		
95										
100										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 72.0-85.0

Filter Pack: 12/20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: X: NA Y: NA
Unique Well ID:

Log of Boring: FMW-138

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 0900	**Sampler Type:**	PE Bag
Date/Time Completed:	11/4/18 @ 0900	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	20.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	100.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	100.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Boring/Well Construction Details
0	0.0-0.4': Concrete.	CO					Concrete
	0.4-5.0': Air knife to clear for utilities. Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine gravel, brown, moist, no odor. Concrete, asphalt and brick debris throughout (Fill Material). Concrete layer at 2.5'.	SW-SM					
5	5.0-8.0': Silty SAND with gravel (60% sand, 20% gravel, 20% silt), fine to coarse sand, fine gravel, brown, moist, no odor. Concrete, asphalt, and brick debris throughout (Fill Material).	SM	60		0.0	Soil Screen @ 5.0' BGS	
	8.0-10.0': No recovery.						
10	10.0-12.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine sand and gravel, gray, moist, no odor. Debris at 12.0'.	SM	100		0.0	Soil Screen @ 10.0' BGS	Bentonite
	12.0-15.0': Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine to coarse sand and gravel, grayish-brown, moist, no odor. Wood debris throughout.	SM					
15	15.0-20.0': Silty SAND (70% sand, 30% silt), fine sand, grayish-brown, moist, organic odor. Wood debris throughout.	SM	100				Water Level
20							

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	90.0-100.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-138

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 0900	**Sampler Type:**	PE Bag
Date/Time Completed:	11/4/18 @ 0900	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	20.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	100.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	100.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Boring/Well Construction Details
20	20.0-25.0': SILT with sand (80% silt, 20% sand), fine sand, dark brown, moist to wet, organic odor. Organic and wood material throughout.	ML	100		17.3	Soil Screen @ 20.0' BGS	
25	25.0-25.6': Silty SAND (80% sand, 20% silt), medium sand, dark brown, moist to wet, organic odor. Organic and wood material throughout.	SM	100		19.3	Soil Screen @ 25.0' BGS	
	25.6-27.6': SILT (90% silt, 10% sand), fine sand, gray, moist, no odor.	ML					
	27.6-30.0': Silty SAND (70% sand, 25% silt, 5% gravel), medium to coarse sand, fine gravel, gray, moist, no odor.	SM					
30	30.0-31.0': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor.	SM	70		3.6	Soil Screen @ 30.0' BGS	Bentonite
	31.0-33.5': Poorly graded SAND (90% sand, 5% silt, 5% gravel), medium sand, grayish-brown, moist, no odor.	SP					
	33.5-35.0': No recovery.						
35	35.0-39.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish-brown, moist, no odor.	SP-SM	80		1.0	Soil Screen @ 35.0' BGS	
	39.0-40.0': No recovery.				0.4	Soil Screen @ 39.0' BGS	
40							

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	90.0-100.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-138

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 0900	**Sampler Type:**	PE Bag
Date/Time Completed:	11/4/18 @ 0900	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	20.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	100.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	100.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
40		40.0-45.0': Poorly graded SAND (90% sand, 5% silt, 5% gravel), medium sand, fine gravel, grayish brown, moist, no odor.	SP		100					
45		45.0-50.0': Poorly graded SAND (85% sand, 10% gravel, 5% silt), medium sand, fine gravel, grayish-brown, moist, no odor.	SP							
50		50.0-52.0': Silty SAND with gravel (60% sand, 20% silt, 20% gravel), medium to coarse sand, fine to coarse gravel, brown, wet, no odor. Cobbles present.	SM		100		0.4	Soil Screen @ 50.0' BGS		Bentonite
		52.0-55.0': Sandy SILT with gravel (60% silt, 25% sand, 15% gravel), fine to coarse sand, fine gravel, brown, moist to wet, no odor. Cobbles present.	ML							
55		55.0-60.0': Sandy SILT (70% silt, 25% sand, 5% gravel), fine sand and gravel, brown, wet, no odor.	ML				0.3	Soil Screen @ 55.0' BGS		
60										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	90.0-100.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-138

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 0900	**Sampler Type:**	PE Bag
Date/Time Completed:	11/4/18 @ 0900	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	20.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	100.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	100.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
60		60.0-64.0': Sandy SILT (70% silt, 25% sand, 5% gravel), fine sand and gravel, brown, wet, no odor.	ML		100		1.0	Soil Screen @ 60.0' BGS		
		64.0-65.0': Gravelly SILT with sand (50% silt, 30% gravel, 20% sand), fine to coarse sand and gravel, gray, moist, no odor. Cobbles present.	ML							
65		65.0-68.0': Sandy SILT (70% silt, 25% sand, 5% gravel), fine sand and gravel, brown, wet, no odor.	ML				0.2	Soil Screen @ 65.0' BGS		
		68.0-70.0': Sandy SILT (70% silt, 20% sand, 10% gravel), fine sand and gravel, gray, moist, no odor.	ML							
70		70.0-80.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist to wet, no odor.	SP-SM		100		0.1	Soil Screen @ 70.0' BGS		Bentonite
75										
80										

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	90.0-100.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

Log of Boring: FMW-138

Client: City Investors LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-061
Logged By: Greg Peters

Date/Time Started:	11/3/18 @ 0900	**Sampler Type:**	PE Bag
Date/Time Completed:	11/4/18 @ 0900	**Drive Hammer (lbs.):**	NA
Equipment:	Sonic/Geoprobe	**Depth of Water ATD (ft bgs):**	20.0
Drilling Company:	Holocene	**Total Boring Depth (ft bgs):**	100.0
Drilling Foreman:	Zach Bailey	**Total Well Depth (ft bgs):**	100.0
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
80		80.0-90.0': Poorly graded SAND (98% sand, 2% silt), medium sand, gray, moist to wet, no odor.	SP		100		0.3	Soil Screen @ 80.0' BGS		Bentonite
85										
90		90.0-100.0': Poorly graded SAND (98% sand, 2% silt), medium sand, gray, moist to wet, no odor.	SP		100		0.4	Soil Screen @ 90.0' BGS		Sand Pack
95										Screen
100							0.4	Soil Screen @ 100.0' BGS		

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	12/20 Sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** X: NA	Y: NA
Screened Interval (ft bgs):	90.0-100.0	**Boring Abandonment:**	NA	**Unique Well ID:**	

2019 BORING LOGS

FARALLON CONSULTING

Log of Test Pit: DW-5

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 1215
Date/Time Completed: 1/26/19 @ 1300
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 2.9
Total Excavation Depth (ft bgs): 3.2

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.8': Concrete.	CO				
		0.8-3.2': Well graded SAND with silt and gravel, fine to coarse sand, fine and coarse gravel, brown, moist, wet at 2.9' bgs, no odor. Railroad tie and woody debris found at 3.2' bgs. Water fills test pit.	SW-SM				
5							

FARALLON CONSULTING

Log of Test Pit: DW-6

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 1345
Date/Time Completed: 1/26/19 @ 1400
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): NE
Total Excavation Depth (ft bgs): 3.5

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-3.5': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, trace rock, brick, metal and wood debris. 3.5' bgs old metal pope encountered, unable to advance further.	SW-SM				
5							

FARALLON CONSULTING

Log of Boring: FB-07

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 1335
Date/Time Completed: 12/21/19 1435
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 5.0
Total Boring Depth (ft bgs): 32.5
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.5': Fill material consisting of brick and wood debris.	FILL		50					
		2.5-5.0': No recovery.								
5		5.0-6.5': Organic FILL (60% soil, 40% wood), abundant wood debris, dark reddish brown, wet, organic odor.	FILL		72		0.5	FB-07-5.0		Water Level
		6.5-8.3': SILT (100% silt), brown, moist, slight organic odor.	ML							
		8.3-8.6': PEAT (100% organic), dark brown, moist, organic odor.	PT							
		8.6-10.0': No recovery.								
10		10.0-11.1': Organic FILL (60% soil, 40% wood), abundant wood debris, dark brown, wet, organic odor.	FILL		56		0.5	FB-07-10.0		Bentonite
		11.1-11.5': SILT (100% silt), gray, moist, no odor.	ML							
		11.5-12.0': Sandy SILT (70% silt, 30% sand), fine sand, gray, moist, no odor.	ML							
		12.0-12.8': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP							
		12.8-15.0': No recovery.								
15		15.0-16.7': Sandy SILT (70% silt, 30% sand), fine sand, gray, wet, no odor.	ML		70					
		16.7-17.3': SILT (100% silt), gray, moist, no odor.	ML							
		17.3-18.5': Sandy SILT (70% silt, 30% sand), fine sand, gray, wet, no odor.	ML				0.4			
		18.5-20.0': No recovery.								
20										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-07

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 1335
Date/Time Completed: 12/21/19 1435
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 5.0
Total Boring Depth (ft bgs): 32.5
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		20.0-21.7': Silty SAND (80% sand, 20% silt), fine sand, gray, wet, no odor.	SM		100					
		21.7-22.7': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP							
		22.7-24.4': Silty SAND (80% sand, 20% silt), fine sand, gray, wet, no odor.	SM							
		24.4-25.0': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP				0.3	FB-07-24.0	X	
25					100					Bentonite
		27.3-28.0': SILT (100% silt), light brown, wet, no odor.	ML							
		28.0-32.5': Poorly graded SAND (100% sand), fine sand, light brown, wet, no odor.	SP				0.4	FB-07-29.0	X	
30					100					
							0.3	FB-07-31.5	X	
35										
40										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-08

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 1115
Date/Time Completed: 12/21/19 1215
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 5.0
Total Boring Depth (ft bgs): 31.5
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.5': Pea gravel fill.	FILL	50					
		0.5-1.6': Fill material consisting of brick, rocks, sand, and silt (40% sand, 40% gravel, 20% silt), fine to coarse sand and gravel, reddish brown, wet, no odor.	FILL						
		1.6-2.5': Silty GRAVEL (60% gravel, 40% silt), fine gravel, black, wet, no odor. (Fill)	FILL			0.2	FB-08-2.5	X	
		2.5-5.0': No recovery.							
5		5.0-7.0': Well graded GRAVEL with sand (50% gravel, 45% sand, 5% silt), fine to coarse sand and gravel, brown, wet, no odor. (Fill)	FILL	86					Water Level
		7.0-8.0': Sandy SILT (60% silt, 40% sand), fine and medium sand, gray, wet, no odor. (Fill)	FILL						
		8.0-8.3': Wood debris, reddish brown. (Fill)	FILL			0.2	FB-08-8.0	X	
		8.3-8.8': Wood debris, grayish brown. (Fill)	FILL						
		8.8-9.3': Organic FILL (60% soil, 40% wood), abundant wood/mulch, reddish brown, moist, organic odor.	FILL						
10		9.3-10.0': No recovery.	FILL	100					Bentonite
		10.0-12.0': Wood debris, grayish brown. (Fill)							
		12.0-12.9': Organic FILL (50% soil, 50% wood), abundant wood/mulch, dark brown, organic odor.	FILL						
		12.9-13.6': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor. (Fill)	FILL			0.5	FB-08-13.0	X	
		13.6-14.3': Organic FILL (70% soil, 30% wood), some wood/mulch, reddish brown, moist, organic odor.	FILL / SP						
15		14.3-15.0': Poorly graded SAND (100% sand), fine and medium sand, grayish brown, wet, no odor.	SP	70					
		15.0-15.9': Poorly graded SAND (95% sand, 5% silt), fine and medium sand, grayish brown, wet, no odor.	ML						
		15.9-16.7': SILT (100% silt), gray, wet, no odor.	ML						
		16.7-17.2': Sandy SILT (70% silt, 30% sand), fine sand, gray, wet, no odor.	SP			0.4	FB-08-18.0	X	
		17.2-18.5': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.							
20		18.5-20.0': No recovery.							

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-08

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 1115
Date/Time Completed: 12/21/19 1215
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 5.0
Total Boring Depth (ft bgs): 31.5
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
	20.0-21.0': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP	100				
	21.0-22.0': Sandy SILT (70% silt, 30% sand), fine and medium sand, gray, wet, no odor.	ML					
	22.0-25.0': Sandy SILT (60% silt, 40% sand), fine and medium sand, gray, wet, no odor.	ML		0.4	FB-08-23.0		
25	25.0-27.0': Poorly graded SAND (95% sand, 5% silt), fine and medium sand, gray, wet, no odor.	SP	100				Bentonite
	27.0-28.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor.	SP-SM					
	28.0-30.0': Poorly graded SAND (95% sand, 5% silt), fine and medium sand, gray, wet, no odor.	SP		0.5			
30	30.0-31.5': Sandy SILT (50% silt, 50% sand), fine sand, gray, wet, no odor.	ML	100	0.2	FB-08-30.5	X	
35							
40							

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-09

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 0945
Date/Time Completed: 12/21/19 1050
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 3.0
Total Boring Depth (ft bgs): 33.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Lithologic Description	USCS	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-0.5': Pea gravel fill.	FILL	60				
	0.5-1.0': Silty SAND (70% sand, 30% silt), fine and medium sand, abundant wood debris, brown, moist, no odor. (Fill)	FILL					
	1.0-2.3': Well graded SAND with gravel (70% sand, 30% gravel), fine and coarse sand, fine gravel, interbedded brown, gray, and black, dry, no odor. (Fill)	FILL					
	2.3-3.0': Silty SAND (70% sand, 30% silt), fine and medium sand, abundant wood debris, reddish brown, moist, no odor. (Fill)	FILL					Water Level
	3.0-5.0': No recovery.						
5	5.0-7.0': Well graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine to coarse sand, fine gravel, reddish brown, wet, no odor. (Fill)	FILL	60				
	7.0-8.0': Organic FILL (60% soil, 40% wood), abundant wood debris, dark brown, moist, organic odor.	FILL					
	8.0-10.0': No recovery.			0.3			
10	10.0-11.0': Wood debris (70% wood, 30% silt), grayish brown, wet, organic odor. (Fill)	FILL	66				Bentonite
	11.0-13.3': Organic FILL (60% soil, 40% wood), abundant wood debris, dark reddish brown, moist, organic odor.	FILL		0.4	FB-09-11.0	X	
	13.3-15.0': No recovery.						
15	15.0-16.4': Organic FILL (60% soil, 40% wood), abundant wood debris, dark reddish brown, moist, organic odor.	FILL	88	0.4	FB-09-15.0		
	16.4-19.4': Silty SAND (60% sand, 40% silt), fine and medium sand, grayish brown and browinsh gray, wet, no odor.	SM		0.3			
20	19.4-20.0': No recovery.						

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-09

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Y. Pehlivan

Date/Time Started: 12/21/19 0945
Date/Time Completed: 12/21/19 1050
Equipment: Geoprobe 7822DT
Drilling Company: AEC
Drilling Foreman: Chris Mainard
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 3.0
Total Boring Depth (ft bgs): 33.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		20.0-20.8': Silty SAND (70% sand, 30% silt), fine and medium sand, grayish brown, wet, no odor.	SM		60					
		20.8-23.0': Well-graded SAND with silt (90% sand, 10% silt), fine to coarse sand, grayish brown, wet, no odor.	SW-SM				0.9			
		23.0-25.0': No recovery.								
25		25.0-26.0': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP		100					Bentonite
		26.0-28.5': SILT (100% silt), gray, wet, no odor.	ML							
		28.5-29.0': SILT with sand (75% silt, 15% sand, 10% gravel), fine and medium sand, fine gravel, gray, wet, no odor.	ML							
		29.0-30.0': Poorly graded SAND (100% sand), fine sand, gray, wet, no odor.	SP				0.4			
30		30.0-31.4': Poorly graded SAND (100% sand), fine and medium sand, gray, wet, no odor.	SP		100					
		31.4-33.0': Sandy SILT (70% silt, 30% sand), fine sand, gray, wet, no odor.	ML							
							0.4	FB-09-33.0	X	
35										
40										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NM
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FMW-144

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/20/19 0910
Date/Time Completed: 12/20/19 1230
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 15.0
Total Boring Depth (ft bgs): 33.0
Total Well Depth (ft bgs): 43.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.0': Fill consisting of concrete, asphalt, wood, and metal debris.	FILL		80					Concrete
		2.0-4.0': Silty SAND (70% sand, 20% silt, 10% gravel), grayish brown, fine to coarse sand, moist, no odor. (Fill)	FILL							
		4.0-5.0': No recovery.								
5		5.0-9.0': Well graded SAND with silt and gravel (80% sand, 10% silt, 10% gravel), fine to coarse sand and gravel, grayish brown, moist, no odor, some wood debris. (Fill)	FILL		80					
		9.0-10.0': No recovery.					1.2	FMW-144-9.0	X	
10		10.0-12.5': SILT with sand (80% silt, 20% sand), fine sand, gray, moist, no odor.	ML		100					Bentonite
		12.5-15.0': Silty SAND (80% sand, 20% silt), fine and medium sand, gray, moist, no odor.	SM							
15		15.0-20.0': Sandy SILT (70% silt, 30% sand), fine sand, gray, wet, no odor.	ML		100					Water Level
20		20.0-25.0': Silty SAND (60% sand, 40% silt), fine sand, gray, wet, no odor.	SM		100					
25										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 38.0-43.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 29.70
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 301

FARALLON CONSULTING

Log of Boring: FMW-144

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/20/19 0910
Date/Time Completed: 12/20/19 1230
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 15.0
Total Boring Depth (ft bgs): 33.0
Total Well Depth (ft bgs): 43.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		25.0-30.0': Silty SAND (80% sand, 20% silt), fine sand, gray, moist to wet, no odor.	SM		100		0.0			
30		30.0-35.0': Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, grayish brown, moist, no odor.	SP-SM		100		0.0			Bentonite
35		35.0-40.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish brown, moist, no odor.	SP-SM		100		0.0			Sand Pack
40		40.0-43.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish brown, moist, no odor.	SP-SM		100					Well Screen
45										
50										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 38.0-43.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 29.70
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 301

FARALLON CONSULTING

Log of Boring: FMW-145

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/20/19 1245
Date/Time Completed: 12/20/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 10.0
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': No recovery.			0					Concrete
5		5.0-10.0': No recovery.			0					Bentonite
10		10.0-15.0': Silty SAND (60% sand, 20% silt, 10% gravel), fine sand and gravel, brown, moist to wet, some wood debris, slight hydrocarbon-like odor. (Fill)	FILL		100		1.2	FMW-145-13.0	X	Water Level
15		15.0-19.0': Silty SAND (60% sand, 40% silt), fine sand, brownish gray, moist to wet, some organic material, hydrocarbon-like odor.	SM		80		0.8	FMW-145-18.0	X	
20		19.0-20.0': No recovery.								

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0
Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA
Ground Surface Elevation (ft): 23.0
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 302

FARALLON CONSULTING

Log of Boring: FMW-145

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/20/19 1245
Date/Time Completed: 12/20/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 10.0
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		20.0-25.0': Silty SAND (60% sand, 40% silt), fine and medium sand, gray, moist to wet, no odor.	SM		100		0.2	FMW-145-23.0	X	
		25.0-30.0': Silty SAND (80% sand, 20% silt), fine and medium sand, gray, moist to wet, no odor.	SM		100		0.2	FMW-145-28.0	X	Bentonite
30		30.0-36.0': Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, moist, no odor.	SP-SM		100		0.1	FMW-145-33.0	X	Sand Pack
35										Well Screen
40										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 23.0
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 302

FARALLON CONSULTING

Log of Boring: FMW-146

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 0945
Date/Time Completed: 12/21/19 1145
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 25
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.0': Fill consisting of concrete and asphalt debris.	FILL		100					Concrete
		2.0-10.0': PEAT (70% organics, 30% silt), abundant wood debris, dark brown, moist, organic odor. (Fill)	FILL				0.4			
5										Bentonite
10		10.0-15.0': Silty SAND (60% sand, 40% silt), fine and medium sand, gray, moist, organic odor.	SM		100		1.0	FMW-146-13.0	X	
15		15.0-20.0': Silty SAND (70% sand, 30% silt), fine and medium sand, gray, moist, organic odor.	SM		100		0.5	FMW-146-18.0	X	
20										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 23.65
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 303

FARALLON CONSULTING

Log of Boring: FMW-146

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 0945
Date/Time Completed: 12/21/19 1145
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 25
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		20.0-25.0': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		100					Bentonite
30		25.0-30.0': Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, gray, moist to wet, no odor.	SP-SM		100					Water Level
35		30.0-36.0': Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, grayish brown, moist, no odor.	SP-SM		100					Sand Pack
40										Well Screen

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 23.65
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 303

FARALLON CONSULTING

Log of Boring: FMW-147

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 1328
Date/Time Completed: 12/21/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 10.0
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Poorly graded SAND with gravel (60% sand, 40% gravel), coarse sand, fine gravel, brown, moist, no odor.	SP		100					Concrete
		3.0-10.0': Organic FILL (60% soil, 30% wood, 10% gravel), abundant wood debris, dark brown, moist, organic odor.	FILL							
5										
							0.4	FMW-147-8.5	X	Bentonite
10		10.0-20.0': Silty SAND (80% sand, 20% silt), fine and medium sand, gray, moist to wet, no odor.	SM		100					Water Level
							0.2	FMW-147-13.5	X	
15										
20										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 23.50
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 304

FARALLON CONSULTING

Log of Boring: FMW-147

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 1328
Date/Time Completed: 12/21/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 10.0
Total Boring Depth (ft bgs): 36.0
Total Well Depth (ft bgs): 36.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
25		20.0-30.0': Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, gray, moist to wet, no odor.	SP-SM		100		0.2	FMW-147-23.5	X	Bentonite
30		30.0-36.0': Poorly graded SAND (95% sand, 5% gravel), medium sand, fine gravel, grayish brown, moist, no odor.	SP		100		0.1	FMW-147-30.5	X	Sand Pack Well Screen
35										
40										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-36.0
Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA
Ground Surface Elevation (ft): 23.50
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 304

FARALLON CONSULTING

Log of Boring: FMW-148

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/22/19 1300
Date/Time Completed: 12/22/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 25.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-10.0': Fill consisting of concrete, asphalt, and gravel debris.	FILL		100					Bentonite
10		10.0-15.0': SILT (60% silt, 30% organics, 10% sand), fine sand, dark brown, moist, organic odor.	ML		100					
15		15.0-20.0': SILT (70% silt, 20% organics, 10% sand), moist, organic odor.	ML		100		0.1	FMW-148-17.0		
20		20.0-23.0': PEAT (80% organics, 20% silt), brown, moist, organic odor.	PT		100		0.3	FMW-148-22.0		
		23.0-25.0': Silty SAND (70% sand, 30% silt), fine and medium sand, gray, moist, no odor.	SM							
25		25.0-30.0': Silty SAND (80% sand, 20% silt), fine and medium sand,	SM		100					Water Level

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA
Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite
Ground Surface Elevation (ft): 37.43
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FMW-148

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/22/19 1300
Date/Time Completed: 12/22/19 1600
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 25.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		gray, moist to wet, no odor.					0.1	FMW-148-27.0	X	
30		30.0-40.0': Poorly graded SAND with SILT (90% sand, 10% silt), fine and medium sand, gray, moist to wet, no odor.	SP-SM		100					Bentonite
40		40.0-50.0': Poorly graded SAND (100% sand), medium sand, brown, moist, no odor.	SP		100					
50										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: NA
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 37.43
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: NA

Log of Boring: FMW-149

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

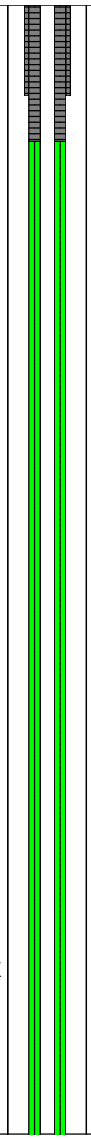
Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 1600
Date/Time Completed: 12/22/19 1215
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 49.0
Total Well Depth (ft bgs): 49.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-10.0': Fill consisting of concrete, asphalt, and gravel debris.	FILL		100					Concrete
10		10.0-15.0': Silty SAND (70% sand, 20% silt, 10% gravel), fine to coarse sand, grayish brown, moist, no odor. (Fill)	FILL		100		0.2			Bentonite
15		15.0-20.0': SILT with sand (70% silt, 15% sand, 15% organics), fine sand, moist, grayish brown, organic odor, some wood debris. (Fill)	FILL		100		0.3	FMW-149-16.0		
20		20.0-25.0': Silty SAND (70% sand, 30% silt), fine and medium sand, gray, moist to wet, no odor.	SM		100		0.0	FMW-149-21.0	X	Water Level
25										



Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 44.0-49.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 36.00
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 305

Log of Boring: FMW-149

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G. Peters

Date/Time Started: 12/21/19 1600
Date/Time Completed: 12/22/19 1215
Equipment: TSi 150
Drilling Company: AEC
Drilling Foreman: Andrew Flagan
Drilling Method: Sonic

Sampler Type: 10' Core Barrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 49.0
Total Well Depth (ft bgs): 49.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
30		25.0-30.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, gray, moist to wet, no odor.	SP-SM		100					
		30.0-40.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, grayish brown, wet, no odor.	SP-SM		100		0.4	FMW-149-31.0	X	Bentonite
35							0.0	FMW-149-36.0		
40		40.0-45.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, brown, moist, no odor.	SP-SM		100		0.1	FMW-149-41.0	X	
							0.2	FMW-149-43.5	X	
45		45.0-49.0': Poorly graded SAND with gravel (80% sand, 15% gravel, 5% silt), coarse sand, fine gravel, gray, moist to wet, no odor.	SP		100					Sand Pack Well Screen
50										

Well Construction Information

Monument Type: Flush
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 44.0-49.0

Filter Pack: 12/20 Silica Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA

Ground Surface Elevation (ft): 36.00
Top of Casing Elevation (ft): NM
Surveyed Location: **X:** NM **Y:** NM
Unique Well ID: BLY 305

FARALLON CONSULTING

Log of Test Pit: NGas-1

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 1100
Date/Time Completed: 1/26/19 @ 1140
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 3.0
Total Excavation Depth (ft bgs): 3.0

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.7': Concrete.	CO				
		0.7-1.8': Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine gravel, brown, moist, no odor. Geotextile fabric at 1.5' bgs.	SW-SM				
		1.8-3.0': Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine to coarse sand, fine gravel, dark brown, moist, wet at 3.0' bgs, no odor. Gas line encountered at 3.0' bgs. Water fills test pit.	SM				
5							

FARALLON CONSULTING

Log of Test Pit: NGas-2

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 0900
Date/Time Completed: 1/26/19 @ 1100
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 4.5
Total Excavation Depth (ft bgs): 5.1

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-4.5': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% sand), fine to coarse sand, fine and coarse gravel, dark brown, moist, no odor, trace brick fragments.	SW-SM				
		4.5-5.0': Poorly graded gravel (100% gravel), fine fravel, gray, wet, utilities backfill.	GP				
5		5.0-5.1': Rotting wood. Water fills testpit.	WD				

FARALLON CONSULTING

Log of Test Pit: PH-1

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 0925
Date/Time Completed: 1/26/19 @ 1000
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 3.5
Total Excavation Depth (ft bgs): 4.0

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.6': Concrete.	CO				
		0.6-4.0': Poorly graded SAND (95% sand, 5% gravel), fine and medium sand, fine gravel, grayish brown, moist, wet at 3.5' bgs, no odor. Water fills test pit, unable to log below water.	SP				
					0.0	PH-1-4.0-012619	
5							

FARALLON CONSULTING

Log of Test Pit: PH-2

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started:	1/26/19 @ 0900	**Sampler Type:**	Hand Auger
Date/Time Completed:	1/26/19 @ 1100	**Depth of Water (ft bgs):**	4.5
Equipment:	Airknife	**Total Excavation Depth (ft bgs):**	5.1
Excavation Company:	APS		
Excavation Foreman:	NA		
Excavating Method:	Airknife		

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-4.5': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% sand), fine to coarse sand, fine and coarse gravel, dark brown, moist, wet at 4.5' bgs, no odor, trace brick fragments. Gas line found at 4.5' bgs.	SW-SM				
		4.5-5.0': Poorly graded GRAVEL (100% gravel), fine gravel, gray, wet, utilitiy backfill.	GP				
5		5.0-5.1': Rotting wood.	WD				

FARALLON CONSULTING

Log of Test Pit: PH-4

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/26/19 @ 1115
Date/Time Completed: 1/26/19 @ 1200
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): NE
Total Excavation Depth (ft bgs): 5.0

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-3.0': Well-graded SAND with silt and gravel (50% sand, 40% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, drk brown, moist, trace concrete blocks, brick, wood, plastic and metal debris.	SW-SM				
		3.0-4.0': Fill (100% gravel), fine gravel, gray, moist. Gas line at 3.5' bgs,	FILL				
		4.0-5.0': SILT with sand and gravel (70% silt, 15% sand, 15% gravel) fine and medium sand, fine gravel, dark brown, moist, no odor.	ML		12.3	PH-4-4.5-012619	X
5							

FARALLON CONSULTING

Log of Test Pit: PH-11

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started:	1/26/19 @ 1230	**Sampler Type:**	Hand Auger
Date/Time Completed:	1/26/19 @ 1320	**Depth of Water (ft bgs):**	4.2
Equipment:	Airknife	**Total Excavation Depth (ft bgs):**	4.2
Excavation Company:	APS		
Excavation Foreman:	NA		
Excavating Method:	Airknife		

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.9': Concrete.	CO				
		0.9-3.8': Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand, fine and coarse gravel, dark brown, moist, trace rocks, brick, wood, and metal debris.	SW-SM				
		3.7-4.2': Utility Conduits.					
		4.2-4.4': Wood, wet. Unable to advance further.	WD				
5							

FARALLON CONSULTING

Log of Test Pit: PH-11A

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/19/19 @ 1240
Date/Time Completed: 1/19/19 @ 1310
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 4.5
Total Excavation Depth (ft bgs): 4.5

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-4.0': Silty SAND with gravel (50% sand, 35% silt, 15% gravel), fine and medium sand, fine gravel, dark brown, moist, no odor.	SM				
		4.0-4.5': Sandy SILT (60% silt, 40% sand), fill, wood fragements, dark brown, wet, no odor.	ML		4.1	PH-11A-4.0-091919	X
5							

FARALLON CONSULTING

Log of Test Pit: PH-12

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/19/19 @ 0930
Date/Time Completed: 1/19/19 @ 1015
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 4.0
Total Excavation Depth (ft bgs): 4.0

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.9': Concrete.	CO				
		0.9-1.5': Well-graded GRAVEL with silt and sand (70% gravel, 20% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, dry, no odor. Geotextile fabric at 1.5' bgs.	GW-GM				
		1.5-3.0': Concrete/rock blocks.	CO				
		3.0-4.0': Sandy SILT (60% silt, 40% sand), fine and medium sand, dark brown, moist, wet at 4.0 bgs, petroleum-like odor, trace organic plant matter. Water fills pothole at 4.0' bgs.	ML				
					127.5	PH-12-4.0-011919	X
5							

FARALLON CONSULTING

Log of Test Pit: PH-13

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/12/19 @ 0840
Date/Time Completed: 1/12/19 @ 1015
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Pothole Digger
Depth of Water (ft bgs): 3.0
Total Excavation Depth (ft bgs): 5.0

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.7': Concrete.	CO				
		0.7-1.5': Fill (70% sand, 30% gravel), fine and medium sand, fine and coarse gravel, grayish brown, dry to moist, no odor.	FILL				
		1.5-4.0': Poorly graded SAND (90% sand, 10% gravel), fine and medium sand, fine gravel, dry, wet at 3.0' bgs, no odor, well cemented. Well-graded gravel in hole to 3.0'bgs. 4.0-5.0' bgs not logged due to water.	SP		0.0	PH-13-3.0-011218	X
5							

FARALLON CONSULTING

Log of Test Pit: PH-13A

Client: Vulcan
Project: Block 38W
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Yusuf Pehlivan

Date/Time Started: 1/19/19 @ 0845
Date/Time Completed: 1/19/19 @ 0910
Equipment: Airknife
Excavation Company: APS
Excavation Foreman: NA
Excavating Method: Airknife

Sampler Type: Hand Auger
Depth of Water (ft bgs): 3.5
Total Excavation Depth (ft bgs): 3.5

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.9': Concrete.	CO				
		0.9-1.3': Well-graded GRAVEL with silt and sand (75% gravel, 15% sand, 10% silt), fine to coarse sand, fine and coarse gravel, brown, dry, no odor, road base. Geotextile fabric at 1.3' bgs.	GW-GM				
		1.3-3.5': Poorly graded SAND with gravel (85% sand, 15% gravel), medium and coarse sand, fine gravel. (Airknife operator says CDF). 3.0-5.0' bgs water fills test pit.	SP				
5							

FARALLON CONSULTING

Log of Test Pit: TP-1

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	10/30/19 @ 0800	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	10/30/19 @ 1145	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	14.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Fill

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Fill material consisting of concrete, metal and rubble debris.	FILL		0.0		
5		5.0-10.0': Poorly-graded SAND with gravel (80% sand, 15% gravel, 5% silt), medium to coarse sand, fine gravel, brown, moist, no odor, no staining. Wood debris.	SP		0.4	TP-1-5.0-103019	
10		10.0-10.5': Poorly-graded SAND (80% sand, 10% gravel, 10% silt), medium to coarse sand, brown, moist, no odor, no staining.	SP		0.3	TP-1-10.0-103019	X
		14.0-14.5': Silty SAND (70% sand, 25% silt, 5% gravel), fine to medium sand, brown, moist to wet, no odor, no staining.	SM		0.5	TP-1-14.0-103019	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-2

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	12/19/19 @ 0900	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/19/19 @ 1100	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	25.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	23.0
Excavating Method:	Excavator Bucket	**Backfill Material:**	Fill and Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Poorly-graded SAND (80% sand, 10% gravel, 10% silt), fine to medium sand, brown, moist, no odor.	SP		0.0	TP-2-20.0	X
5		5.0-5.5': Silty SAND (70% sand, 20% silt, 10% gravel), fine sand, grayish brown, moist, strong hydrocarbon odor. Oil staining, sheen on soil, wood debris throughout.	SM		38.6	TP-2-15.0	X
10		10.0-10.5': SILT with sand (80% silt, 20% sand), fine sand, gray, moist, no odor.	ML		0.2	TP-2-10.0	X
15		15.0-15.5': Poorly-graded SAND (90% sand, 10% silt), fine to medium sand, gray, moist, no odor.	SP		0.1	TP-2-5.0	X
20		20.0-25.0': Poorly-graded SAND (90% sand, 10% silt), fine to medium sand, gray, moist, no odor.	SP		0.3	TP-2-0.0	
25							

Log of Test Pit: TP-3

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	12/19/19 @ 0900	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/19/19 @ 1100	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	25.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	20.0
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (70% sand, 25% silt, 5% gravel), fine to medium sand, grayish brown, moist, no odor.	SM		0.0	TP-3-20.0	X
5		5.0-5.5': PEAT (80% peat, 20% silt), brown, moist, organic odor.	PT		0.2	TP-3-15.0	X
10		10.0-10.5': PEAT (80% peat, 20% silt), brown, moist, organic odor.	PT		0.3	TP-3-10.0	
15							

FARALLON CONSULTING

Log of Test Pit: TP-4

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: A. Burns

Date/Time Started:	12/21/19 1250	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/21/19 1315	**Depth of Water (ft bgs):**	5.0
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	10.5
Excavation Company:	Hos Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Fill material consisting of brick, concrete, rubble, and garbage.	FILL				
5		5.0-5.5': PEAT (100% organic), dark brown, wet, organic odor.	PT		0.5	TP-4-5	
10		10.0-10.5': SILT with sand (85% silt, 15% sand), fine sand, bluish gray, moist, no odor.	ML		0.2	TP-4-10	
15							

FARALLON CONSULTING

Log of Test Pit: TP-5

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: A. Burns

Date/Time Started:	12/21/19 1210	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/21/19 1230	**Depth of Water (ft bgs):**	5.0
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	10.5
Excavation Company:	Hos Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Fill material consisting of brick, concrete, rubble, and garbage.	FILL				
5		5.0-5.5': PEAT (100% organic), abundant wood debris, trace fine sand, dark brown, wet, organic odor.	PT		0.6	TP-5-5	
10		10.0-10.5': SILT (100% silt), bluish gray, moist, no odor.	ML		0.2	TP-5-10	
15							

FARALLON CONSULTING

Log of Test Pit: TP-6

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: A. Burns

Date/Time Started:	12/21/19 1232	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/21/19 1250	**Depth of Water (ft bgs):**	5.0
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	10.5
Excavation Company:	Hos Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-5.0': Fill material consisting of brick, concrete, rubble, and garbage.	FILL				
5		5.0-5.5': PEAT (100% organic), abundant wood debris, trace fine sand, dark brown and black, wet, petroleum-like odor.	PT		0.5	TP-6-5	
10		10.0-10.5': SILT (100% silt), bluish gray, moist, no odor.	ML		0.2	TP-6-10	
15							

FARALLON CONSULTING

Log of Test Pit: TP-7

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	12/23/19 @ 1000	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	12/23/19 @ 1030	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	10.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0							
		4.0-4.5': Peat (80% Peat, 20% silt), dark brown, moist, organic odor.	PT		0.0	TP-7-4.0	X
5							
10		10.0-10.5': SILT with sand (80% silt, 20% sand), brown, moist, organic odor.	ML		0.1	TP-7-10.0	
15							

2020 BORING LOGS

FARALLON CONSULTING

Log of Boring: FB-10

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/12/20 @ 1015
Date/Time Completed: 9/12/20 @ 1230
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.5': Poorly-graded SAND (90% sand, 5% gravel, 5% silt), fine sand, dark brown, moist, no odor. Concrete, wood and metal debris (Fill)	SP							
		2.5-5.0': SILT (80% silt, 10% sand, 10% organics), fine sand, dark brown, moist, no odor. Concrete, wood and metal debris. (FIll)	ML				0.0	FB-10-22.5	X	
5		5.0-6.0': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor. (FIll)	SM		66		0.0	FB-10-20.0	X	Bentonite
		6.0-8.3': SILT (90% silt, 10% sand), fine sand, light brown to dark brown, moist, no odor. Charcoal debris at 8.0' bgs. (Fill)	ML				0.0	FB-10-17.5	X	
		8.3-10.0': No recovery.								
10		10.0-116': SILT (90% silt, 10% sand), fine sand, gray, moist, no odor.	ML		80		0.0	FB-10-15.0		
		11.6-14.0': Silty SAND (85% sand, 15% silt), fine sand, grayish brown, moist, no odor.	SM							
		14.0-15.0': No recovery.					0.0	FB-10-10.0		
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 24.86
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-11

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/12/20 @ 1240
Date/Time Completed: 9/12/20 @ 1430
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.5': Well-graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand, dark brown, moist, no odor, wood, concrete, metal debris. (FIll)	SW-SM							
		1.5-5.0': ORGANIC SOIL (70% organics, 30% silt), dark brown, soft, moist, hydrocarbon-like odor. (Fill)	OL				0.0	FB-11-22.5		
5		5.0-10.0': SILT (100% silt), light brown, soft, moist, organic odor. Charcoal debris at 8.5' bgs. (Fill)	ML		100		64.2	FB-11-20.0	X	Bentonite
							0.0	FB-11-17.5	X	
10		10.0-12.0': SILT (90% silt, 10% sand), fine sand, gray, moist, no odor.	ML		100		0.1	FB-11-15.0		
		12.0-15.0': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM				0.3	FB-11-10.0		
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 23.88
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-12

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/13/20 @ 0930
Date/Time Completed: 9/13/20 @ 1030
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.0': Concrete. Air knife to clear for utilities.	CO							Concrete
		1.0-1.5': Poorly-graded SAND (90% sand, 10% gravel), fine sand, brown, moist, no odor. (Fill)	SP							
		1.5-5.0': ORGANIC SOIL (100% organic soil), dark brown, soft, organic odor. Wood chips, root debris, trace charcoal. (Fill)	OL				0.0	FB-12-21.5	X	
5		5.0-7.0': SILT (60% silt, 40% organics), dark brown, soft, moist, organic odor. Wood debris. (Fill)	ML		100		0.6	FB-12-20.0	X	Bentonite
		7.0-10.0': SILT (80% silt, 20% organics), light to dark brown, soft, moist, organic odor. Trace charcoal at 8.5' bgs. (Fill)	ML				1.0	FB-12-17.5	X	
10		10.0-12.0': SILT (100% silt), gray, moist, no odor.	ML		100		0.0	FB-12-15.0	X	
		12.0-15.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP-SM				0.0	FB-12-10.0		
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 22.79
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-13

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/12/20 @ 1220
Date/Time Completed: 9/12/20 @ 1600
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.0': Concrete. Air knife to clear for utilities.	CO							Concrete
		1.0-1.5': Well-graded SAND with gravel (70% sand, 25% gravel, 5% silt), fine to coarse sand, fine gravel, dark gray, moist, no odor. (Fill)	SW							
		1.5-5.0': ORGANIC SOIL (80% organics, 20% silt), dark brown, moist, organic odor. Wood debris. (Fill)	OL				0.1	FB-13-22.5	X	
5		5.0-10': SILT (60% silt, 40% organics), dark brown, soft, moist, organic odor. Wood debris. (Fill)	ML		100		2.7	FB-13-20.0	X	Bentonite
							1.1	FB-13-17.5	X	
10		10.0-15.0': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		100		0.3	FB-13-15.0	X	
							0.0	FB-13-10.0		
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 23.00
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-14

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/12/20 @ 1500
Date/Time Completed: 9/13/20 @ 1045
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.45': Concrete. Air knife to clear for utilities.	CO							Concrete
		0.45-1.5': Poorly-graded SAND with silt (80% sand, 10% silt, 10% gravel), fine sand, gray, moist, no odor. (Fill)	SP-SM							
		1.5-5.0': SIlty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor. (Fill)	SM				1.1	FB-14-22.5	X	
5		5.0-6.2': SILT (70% silt, 30% organics), brown, soft, moist, organic odor. Wood debris. (Fill)	ML		100		0.5	FB-14-20.0	X	Bentonite
		6.2-10.0': No recovery.					1.5	FB-14-17.5	X	
10		10.0-11.0': SILT (80% silt, 20% organics), dark brown, soft, moist, organic odor. Wood debris.	ML		100			FB-14-15.0		
		11.0-12.4': SILT (100% silt), gray, stiff, moist, no odor.	ML							
		12.4-14.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP-SM				0.0	FB-14-10.0		
		14.0-15.0': No recovery.								
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 23.81
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-15

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/13/20 @ 1045
Date/Time Completed: 9/13/20 @ 1105
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 15.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.25': Concrete. Air knife to clear for utilities.	CO							Concrete
		0.25-2.0': Poorly-graded SAND with gravel (80% sand, 20% gravel), fine to medium sand, fine gravel, dark gray, no odor. (Fill)	SP							
		2.0-5.0': Poorly-graded SAND (90% sand, 10% gravel), fine sand, grayish brown, moist, no odor. (Fill)	SP				1.5	FB-15-22.5	X	
5		5.0-7.0': Silty SAND (80% sand, 20% silt), fine sand, grayish brown, moist, no odor. (Fill)	SM		60		0.1	FB-15-20.0	X	Bentonite
		7.0-8.0': ORGANIC SOIL (90% organics, 20% silt), dark brown, moist, organic odor, strong petroleum-like odor. Wood debris. (Fill)	OL				1.0	FB-15-17.5	X	
		8.0-10.0': No recovery.								
10		10.0-14.0': SILT (60% silt, 40% organics), dark brown, soft, moist, organic odor.	ML		80		43.6	FB-15-15.0	X	
		14.0-15.0': No recovery.					0.1	FB-15-10.0		
15										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 24.91
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: FB-16

Client: City Investors IX
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 9/13/20 @ 1120
Date/Time Completed: 9/13/20 @ 1150
Equipment: Geoprobe
Drilling Company: AEC
Drilling Foreman: Levi
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 20.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.25': Concrete. Air knife to clear for utilities.	CO							Concrete
		0.5-5.0': Poorly-graded SAND (90% sand, 10% gravel), fine sand, brown, moist, no odor. (Fill)	SP				0.2	FB-16-22.5	X	
5		5.0-8.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, brown, moist, no odor. (Fill)	SP-SM		60		0.0	FB-16-20.0	X	Bentonite
							2.7	FB-16-17.5	X	
		8.0-10.0': No recovery.								
10		10.0-13.0': OGRANIC SOIL (90% organics, 10% silt), dark brown, moist, organic odor,.Wood debris. (Fill)	OL		100		2.0	FB-16-15.0		
		13.0-15.0': No recovery.								
15		15.0-18.5': ORGANIC SOIL (70% organics, 30% silt), dark brown, soft, moist, organic odor. Trace charcoal. (Fill)	OL				0.0	FB-16-10.0		
		18.5-20.0': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM							
20										

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Concrete
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): 27.50
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FMW-150

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started: 7/7/20 @ 0720
Date/Time Completed: 7/7/20 @ 0800
Equipment: FA130
Drilling Company: Malcom Drilling
Drilling Foreman: Chris Hansen
Drilling Method: Air Rotary

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 7.0
Total Well Depth (ft bgs): 7.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Poorly-graded SAND (100% sand), fine sand, gray-brown, moist, no odor.	SP							Concrete
										Bentonite
										Sand Pack
5		5.0-7.0': Poorly-graded SAND (100% sand), fine sand, gray, moist, no odor.	SP				0.0	FMW-152-(-11.0)		Screen
							0.0			

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.01
Screened Interval (ft bgs): -8.0 - (-13.0)
Filter Pack: 12/20 sand
Surface Seal: Concrete
Annular Seal: Concrete
Boring Abandonment: NA
Ground Surface Elevation (ft): 6.0
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

Log of Boring: FMW-151

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started: 6/29/20 @ 0800
Date/Time Completed: 6/29/20 @ 1230
Equipment: FA130
Drilling Company: Malcom Drilling
Drilling Foreman: Chris Hansen
Drilling Method: Air Rotary

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 7.0
Total Well Depth (ft bgs): 7.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Well-graded SAND (100% sand), fine to mediumsand, brown, moist, no odor.	SW							Concrete; Bentonite; Sand Pack
5		5.0-7.0': Well-graded SAND (100% sand), fine to mediumsand, brown, moist, no odor.	SW				0.0	FMW-151-(-11.0)		Screen
							0.0			

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.01
Screened Interval (ft bgs): -9.0 - (-14.0)
Filter Pack: 12/20 sand
Surface Seal: Concrete
Annular Seal: Concrete
Boring Abandonment: NA
Ground Surface Elevation (ft): 7.0
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FMW-152

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started: 6/25/20 @ 1030
Date/Time Completed: 6/25/20 @ 1200
Equipment: FA130
Drilling Company: Malcom Drilling
Drilling Foreman: Chris Hansen
Drilling Method: Air Rotary

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 7.0
Total Well Depth (ft bgs): 7.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.3': Concrete.	CO							Concrete
		0.3-5.0': Silty SAND (85% sand, 15% silt), fine sand, gray, moist, no odor.	SM							Bentonite
										Sand Pack
5		5.0-7.0": Poorly-graded SAND (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP				0.9	FMW-152-(-11.0)		Screen
							0.4	FMW-152-(-13.0)		

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.01
Screened Interval (ft bgs): -8.0 - (-13.0)
Filter Pack: 12/20 sand
Surface Seal: Concrete
Annular Seal: Concrete
Boring Abandonment: NA
Ground Surface Elevation (ft): 6.0
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FMW-153

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: Greg Peters

Date/Time Started: 7/7/20 @ 0830
Date/Time Completed: 7/7/20 @ 0900
Equipment: FA130
Drilling Company: Malcom Drilling
Drilling Foreman: Chris Hansen
Drilling Method: Air Rotary

Sampler Type: NA
Drive Hammer (lbs.): NA
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 7.0
Total Well Depth (ft bgs): 7.0

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Poorly-graded SAND (90% sand, 10% gravel), fine sand, fine gravel, gray, moist, no odor.	SP							Concrete
										Bentonite
										Sand Pack
5		5.0-7.0': Poorly-graded SAND with gravel (85% sand, 15% gravel), fine sand, medium gravel, gray, moist, no odor.	SP				0.0	FMW-153-(-11.0)		
										Screen
							0.1			

Well Construction Information

Monument Type: NA
Casing Diameter (inches): 2.0
Screen Slot Size (inches): 0.01
Screened Interval (ft bgs): -8.0 - (-13.0)
Filter Pack: 12/20 sand
Surface Seal: Concrete
Annular Seal: Concrete
Boring Abandonment: NA
Ground Surface Elevation (ft): 6.0
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Test Pit: TP-8

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	1/27/20 @ 1342	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	1/27/20 @ 1357	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	14.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (70% sand, 30% silt), brown	SM				
		3.0-3.5': Silty SAND (70% sand, 30% silt), brown, no odor	SM		0.5	TP-8-20.0	
5							
10		10.0-10.5': PEAT (100% Peat), moist, wood debris.	PT		1.7	TP-8-15.0	
15		15.0-15.5': Poorly-graded SAND (100% sand), gray, no odor.	SP		0.4	TP-8-10.0	
20							

FARALLON CONSULTING

Log of Test Pit: TP-9

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	1/27/20 @ 1400	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	1/27/20 @ 1430	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	12.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Coarse black material above pile caps.	OL				
		3.0-3.5': Poorly-graded SAND (100% sand), no odor, wood and brick debris.	SP		0.3	TP-9-20.0	
5							
10		10.0-10.5': PEAT (100% Peat), moist, wood debris.	PT		1.0	TP-9-15.0	
15		15.0-15.5': Poorly-graded SAND (100% sand), gray, no odor.	SP		0.7	TP-9-10.0	
20							

FARALLON CONSULTING

Log of Test Pit: TP-10

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/11/20 @ 0840	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/11/20 @ 0850	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (60% sand, 20% silt, 20% orgaincs), fine sand, brown, moist, no odor.	SM		0.5	TP-10-20.0	X
5		5.0-5.5': PEAT (100%), dark brown, moist, organic odor.	PT		0.2	TP-10-15.0	X
10		10.0-10.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		0.1	TP-10-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-11

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/4/20 @ 0920	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/11/20 @ 0945	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (70% sand, 20% silt, 10% gravel), medium to coarse sand, brown, moist, no odor.	SM		0.1	TP-11-20.0	X
5		5.0-5.5': PEAT (60% peat, 30% silt, 10% sand), fine sand, dark brown, moist, organic odor.	PT		0.5	TP-11-15.0	X
10		10.0-10.5': SILT (90% silt, 10% sand), gray, moist, no odor.	ML		0.1	TP-11-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-12

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/7/20 @ 1000	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/7/20 @ 1020	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (70% sand, 25% silt, 5% gravel), medium to coarse sand, brown, moist, no odor.	SM		0.1	TP-12-20.0	X
5		5.0-5.5': PEAT (80% peat, 20% silt), brown, moist, organic odor. Wood debris.	PT		0.2	TP-12-15.0	X
10		10.0-10.5': Poorly-graded SAND (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP		0.1	TP-12-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-13

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/7/20 @ 1030	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/7/20 @ 1050	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': Silty SAND (60% sand, 40% silt), fine sand, brown, moist, strong organic odor.	SM		4.8	TP-13-23.0	
		3.0-3.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		0.2	TP-13-20.0	X
5		5.0-5.5': PEAT (60% peat, 40% silt), gay-brown, moist, organic odor.	PT		0.4	TP-13-15.0	X
10		10.0-10.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SP		2.2	TP-13-10.0	
15							

FARALLON CONSULTING

Log of Test Pit: TP-14

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/14/20 @ 1100	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/14/20 @ 1120	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	19.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': SILT (60% silt, 40% organics), fine sand, brown, moist, strong organic odor.	ML		1.2	TP-14-20.0	X
5		5.0-5.5': Silty SAND (80% sand, 20% silt), fine sand, brown, no odor. Wood debris.	SM		0.3	TP-14-15.0	X
10		10.0-10.5': Silty SAND (70% sand, 30% silt), fine sand, gray, moist, no odor.	SM		0.3	TP-14-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-15

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/14/20 @ 1100	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/14/20 @ 1120	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	19.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': PEAT (80% peat, 20% organics), brown, moist, strong no odor.	PT		0.3	TP-15-20.0	X
5		5.0-5.5': Silty SAND (60% sand, 25% silt, 15% organics), fine sand, brown, no odor. Wood debris.	SM		0.3	TP-15-15.0	X
10		10.0-10.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		0.5	TP-15-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-16

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/14/20 @ 1135	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/14/20 @ 1145	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	19.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': SILT (70% silt, 30% organics), brown, moist, organic odor.	PT		0.8	TP-16-20.0	X
5		5.0-5.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		4.8	TP-16-15.0	X
10		10.0-10.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		1.0	TP-16-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-17

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/18/20 @ 1400	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/25/20 @ 1500	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': PEAT (80% peat, 20% organics), dark brown, moist, no odor.	PT		3.6	TP-17-20.0	X
5		5.0-5.5': Silty SAND (80% sand, 20% silt), fine sand, gray, moist, no odor.	SM		0.6	TP-17-15.0	X
10		10.0-10.5': Poorly-graded SAND (90% sand, 10% silt), fine sand, gray, moist, no odor.	SP		0.8	TP-17-10.0	X
15							

FARALLON CONSULTING

Log of Test Pit: TP-18

Client: City Investors IX, LLC
Project: Block 38 West
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started:	2/19/20 @ 1330	**Sampler Type:**	Excavator Bucket
Date/Time Completed:	2/19/20 @ 1350	**Depth of Water (ft bgs):**	NE
Equipment:	Excavator	**Total Excavation Depth (ft bgs):**	15.0
Excavation Company:	HOS Bros.	**Excavation Diameter (ft):**	NM
Excavation Foreman:	Glen Franklin	**Ground Surface Elevation (ft):**	NM
Excavating Method:	Excavator Bucket	**Backfill Material:**	Native

Depth (feet bgs)	Sample Interval	Lithologic Description	USCS	USGS Graphic	PID (ppm)	Sample ID	Sample Analyzed
0		0.0-0.5': ORGANICS (90% organics, 10% peat), brown, moist, no odor. Wood debris.	OL		1.4	TP-18-20.0	X
5		5.0-5.5': PEAT (80% peat, 10% organics), fine sand, gray, moist, no odor.	PT		1.6	TP-18-15.0	X
10		10.0-10.5': Poorly-graded SAND (100% sand), fine sand, gray, moist, no odor.	SP		0.6	TP-18-10.0	X
15							

2021 BORING LOGS

FARALLON CONSULTING

Log of Boring: FB-18

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 11/24/21 @ 1030
Date/Time Completed: 11/24/21 @ 1100
Equipment: Geoprobe
Drilling Company: Holt Services
Drilling Foreman: Mike Runnings
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 25.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Silty SAND ((80% sand, 15% silt, 5% gravel), fine sand, brown, moist, no odor, grayish black staining. Brick debris.	SM				0.0			Gravel
5		5.0-8.0': Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor, no staining.	SM		80		0.0			
		8.0-10.0': No recovery.								
10		10.0-12.5': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, brown, moist, no odor.	SP-SM		50		0.0			
		12.5-15.0': No recovery.								Bentonite
15		15.0-16.0': Poorly-graded SAND (100% sand), fine to medium sand, brown, moist to wet, no odor.	SP		100		0.7	FB-18-20.0	X	
		16.0-20.0': Peat (80% peat, 20% sand), fine sand, brown, moist, organic odor. Wood debris.	PT							
20		20.0-22.5': Peat (95% peat, 5% sand), fine sand, soft, brown, moist, organic odor. Wood debris.	PT		100		0.9	FB-18-15.0	X	
		22.5-25.0': SILT (90% silt, 10% sand), gray, stiff, moist, slight organic odor. Some wood debris.	ML							
25							0.8	FB-18-10.0		

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA

Filter Pack: NA
Surface Seal: Gravel
Annular Seal: NA
Boring Abandonment: Bentonite

Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

FARALLON CONSULTING

Log of Boring: FB-19

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington

Farallon PN: 397-019

Logged By: G.Peters

Date/Time Started: 11/24/21 @ 1100
Date/Time Completed: 11/24/21 @ 1215
Equipment: Geoprobe
Drilling Company: Holt Services
Drilling Foreman: Mike Runnings
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 25.0
Total Well Depth (ft bgs): NA

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Well-graded SAND ((90% sand, 5% silt, 5% gravel), fine to coarse sand, brown, moist, no odor, no staining.	SW				0.0			Gravel
5		5.0-7.0': Poorly-graded SAND (100% sand), fine sand, brown, moist, no odor, no staining.	SM		40		0.0			
		7.0-10.0': No recovery.								
10		10.0-12.0': Silty SAND (80% sand, 20% silt), medium sand, brown, moist, no odor, no staining.	SP-SM		40		0.0			
		12.0-15.0': No recovery.								Bentonite
15		15.0-18.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor, no staining.	SP-SM		100		0.7	FB-19-20.0	X	
		15.0-18.0': Peat (90% peat, 10% silt), brown, soft, moist, organic odor. Wood debris.	PT							
20		20.0-21.0': Peat (90% peat, 10% sand), fine sand, brown, soft, moist, organic odor. Some wood debris.	PT		100		0.9	FB-19-15.0	X	
		21.0-25.0': SILT (90% silt, 10% sand), fine sand, gray, stiff, moist, no odor, no staining, some wood debris.	ML							
25							0.6	FB-19-10.0		

Well Construction Information

Monument Type: NA
Casing Diameter (inches): NA
Screen Slot Size (inches): NA
Screened Interval (ft bgs): NA
Filter Pack: NA
Surface Seal: Gravel
Annular Seal: NA
Boring Abandonment: Bentonite
Ground Surface Elevation (ft): NA
Top of Casing Elevation (ft): NA
Surveyed Location: **X:** NA **Y:** NA
Unique Well ID: NA

2022 BORING LOGS

Log of Boring: FB-20

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: Suzy Stumpf

Date/Time Started:	2/5/2022 @ 900	**Depth to Water ATD (ft bgs):**	14.0
Date/Time Completed:	2/5/2022 @ 1020	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	NA
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Boring/Well Construction Details
0	0.0-0.1': Asphalt. Airknife to 5.0' bgs for utility clearance.	AC				Asphalt
	0.1-5.0': Poorly-graded SAND (90% sand, 5% silt, 5% gravel), fine sand, brown, moist, no odor, no staining. Concrete, wood, plastic, metal debris (Fill).	SP				
5	5.0-10.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, brown, moist, no odor, no staining. Brick debris (Fill).	SP-SM	100	0.0		
10	10.0-14.0': Poorly-graded SAND with silt (90% sand, 10% silt), fine sand, brown, moist, no odor, no staining. Brick debris (Fill).	SP-SM	100	0.0		
				0.0	FB-20-12.0	Bentonite
	14.0-15.0': Poorly-graded SAND (90% wood, 10% sand), fine sand, brown, wet, hydrocarbon-like odor. Sheen on soil and woody material.	SP				
15	15.0-20.0': Poorly-graded SAND (90% wood, 10% sand), fine sand, brown, wet, hydrocarbon-like odor. Sheen on soil & woody debris.	SP	100	0.0	FB-20-15.0	
				20.3	FB-20-17.0	
20	20.0-24.0': PEAT (100% Peat), brown, moist, organic odor, no staining.	PT		0.2	FB-20-22.0	
	24.0-25.0': SILT (100% silt), gray, moist, no odor, no staining.	ML				
25					FB-20-25.0	

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	NA	**Surface Seal:**	Asphalt	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	NA	**Annular Seal:**	NA	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite	**Unique Well ID:** NA	

FARALLON CONSULTING

Log of Boring: FB-21

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: Suzy Stumpf

Date/Time Started:	2/5/2022 @ 1030	**Depth to Water ATD (ft bgs):**	NE
Date/Time Completed:	2/5/2022 @ 1115	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	10.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	NA
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Lithologic Description	USCS	Blow Counts	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-0.4': Asphalt. Airknife to 5.0' bgs for utility clearance.	AC						Asphalt
	0.4-5.0': Silty SAND (80% sand, 20% silt), fine sand, dark brown, moist, no odor, no staining. Wood and charcoal debris (Fill).	SM			0.0	FB-21-3.0		
5	5.0-10.0': Poorly-graded SAND (100% sand), fine sand, brown, moist, no odor, no staining.	SP-SM		100	0.0	FB-21-5.0		Bentonite
10					0.0	FB-21-10.0		

Well Construction Information

Monument Type:	NA	**Filter Pack:**	NA	**Ground Surface Elevation (ft):**	NA
Casing Diameter (in):	NA	**Surface Seal:**	Asphalt	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (in):	NA	**Annular Seal:**	NA	**Surveyed Location: X:** NA	**Y:** NA
Screened Interval (ft bgs):	NA	**Boring Abandonment:**	Bentonite	**Unique Well ID:** NA	

FARALLON CONSULTING

Log of Boring: FMW-154

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: S. Stumpf

Date/Time Started:	2/5/2022 @ 1130	**Depth to Water ATD (ft bgs):**	10.0
Date/Time Completed:	2/5/2022 @ 1245	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	15.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	15.0
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Lithologic Description	USCS	Blow Counts	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0-0.4': Asphalt. Airknife to 5.0' bgs for utility clearance.	AC					
	0.4-5.0': Poorly graded SAND (90% sand, 10% gravel), fine sand, dark brown, moist, no odor, no staining. Wood, brick, and plastic debris (Fill).	SP					
5	5.0-10.0': PEAT (90% peat, 10% sand), fine sand, brown, moist, organic odor, no staining. Wood debris.	PT		100	0.0	FMW-154-5.0	
10	10.0-14.0': Well graded SAND with silt (60% sand, 20% peat, 10% silt, 10% gravel), fine to coarse sand, gray, wet, organic odor, no staining.	SW-SM		100	0.0	FMW-154-10.0	
	14.0-15.0': Poorly graded SAND (100% sand), fine to medium sand, gray, wet, no odor, no staining.	SP					
15					0.0	FMW-154-15.0	

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Sand pack	**Ground Surface Elevation (ft):**	23.22
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	22.80
Screen Slot Size (in):	0.010	**Annular Seal:**	Concrete	**Surveyed Location:** **X:** 1269430.17	**Y:** 231126.54
Screened Interval (ft bgs):	10.0-15.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BNW-075

FARALLON CONSULTING

Log of Boring: FMW-155

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: S. Stumpf

Date/Time Started:	2/5/2022 @ 1255	**Depth to Water ATD (ft bgs):**	8.5
Date/Time Completed:	2/5/2022 @ 1320	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	15.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	15.0
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Lithologic Description	USCS	Blow Counts	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0-0.75': Concrete. Airknife to 5.0' bgs for utility clearance.	CO					
	0.75-5.0': Well graded SAND (90% sand, 10% gravel), fine to coarse sand, brown, moist, no odor, no staining (Fill).	SW					
5	5.0-10.0': PEAT (100% peat), brown, wet, organic odor, no staining. Wood debris.	PT		100	0.0	FMW-155-5.0	
10	10.0-12.0': PEAT (80% peat, 10% sand, 10% silt), brown, wet, organic odor, no staining.	PT		100	0.0	FMW-155-10.0	
	12.0-15.0': Silty SAND (60% sand, 40% silt), fine sand, gray, wet, no odor, no staining.	SM					
15					0.0	FMW-155-15.0	

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Sand pack	**Ground Surface Elevation (ft):**	24.28
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	23.90
Screen Slot Size (in):	0.010	**Annular Seal:**	Concrete	**Surveyed Location:**	**X:** 1269433.30 **Y:** 231262.97
Screened Interval (ft bgs):	10.0-15.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BNW-074

FARALLON CONSULTING

Log of Boring: FMW-156

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: S. Stumpf

Date/Time Started:	2/5/2022 @ 1340	**Depth to Water ATD (ft bgs):**	10.0
Date/Time Completed:	2/5/2022 @ 1415	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	20.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	20.0
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0-0.75': Concrete. Airknife to 5.0' bgs for utility clearance.	CO				
	0.75-6.0': Well graded SAND (90% sand, 10% gravel), fine to coarse sand, brown, moist, no odor, no staining (Fill).	SW	100	0.0		
5	6.0-10.0': SILT with sand (60% silt, 20% sand, 20% wood), fine sand, gray, moist, organic odor, no staining. Wood debris.	ML				
10	10.0-12.5': Silty SAND (60% wood, 20% sand, 20% silt), fine sand, brown, moist to wet, no odor. Wood debris.	SM	100	0.0	FMW-156-10.0	
	12.5-15.0': PEAT (100% peat), brown, organic odor, wet, no staining.	PT				
15	15.0-17.0': Poorly graded SAND (80% wood, 20% sand), fine sand, grayish brown, wet, organic odor, no staining. Wood debris.	SP	100	0.0	FMW-156-15.0	
	17.0-20.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor, no staining.	SP-SM				
20					FMW-156-20.0	

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Sand pack	**Ground Surface Elevation (ft):**	26.01
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	25.70
Screen Slot Size (in):	0.010	**Annular Seal:**	Concrete	**Surveyed Location:**	**X:** 1269436.89 **Y:** 231342.09
Screened Interval (ft bgs):	15.0-20.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BNW-073

Log of Boring: FMW-157

Client: City Investors IX LLC
Project: Block 38 West Property
Location: Seattle, Washington
Farallon PN: 397-019
Logged By: G.Peters
Reviewed By: S. Stumpf

Date/Time Started:	2/5/2022 @ 1420	**Depth to Water ATD (ft bgs):**	9.0
Date/Time Completed:	2/5/2022 @ 1530	**Boring Diameter (in):**	8.0
Drilling Company:	Cascade Drilling	**Total Boring Depth (ft bgs):**	40.0
Drilling Method:	Sonic Drilling	**Constructed Well Depth (ft bgs):**	40.0
Drilling Equipment:	Terrasonic		
Drilling Operator:	Rico Rodriguez		
Sampler Type:	5' PE Bags		
Drive Hammer (lbs):	NA		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Blow Counts	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-0.75': Concrete. Airknife to 5.0' bgs for utility clearance.	CO							Concrete
		0.75-5.0': Well graded SAND (90% sand, 10% gravel), fine to coarse sand, brown, moist, no odor, no staining (Fill).	SW							
5		5.0-10.0': Sandy SILT (60% silt, 40% sand), fine sand, brown, moist, nodor, no staining.	ML			100	0.0			Bentonite
10		10.0-15.0': PEAT (100% peat), brown, moist, organic odor, no staining.	PT			100	0.0			Water Level
15		15.0-20.0': Silty SAND (80% sand, 20% silt), fine sand, grayish brown, moist, no odor, no staining.	SM			100	0.0			
20		20.0-25.0': No recovery.				0				Bentonite
25		25.0-30.0': Poorly graded SAND (100% sand), fine sand, gray, wet, no odor, no staining.	SP			100	0.0			
30		30.0-35.0': Poorly graded SAND (100% sand), fine sand, grayish brown, wet, no odor, no staining.	SP			100	0.0	FMW-157-30.0		Sand Pack
35		35.0-40.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, wet, no odor, no staining.	SP-SM			100	0.0	FMW-157-35.0		Well Screen
40							0.0	FMW-157-40.0		

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	Sand pack	**Ground Surface Elevation (ft):**	26.20
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	25.95
Screen Slot Size (in):	0.010	**Annular Seal:**	Concrete	**Surveyed Location:**	**X:** 1269437.13 **Y:** 231346.24
Screened Interval (ft bgs):	30.0-40.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BNW-072

2023 BORING LOGS

FARALLON CONSULTING

Log of Boring: FB-17

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA

Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/9/23 @ 1159	**Depth to Water ATD (ft bgs):**	22.5
Date/Time Completed:	5/9/23 @ 1227	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	25.0
Drilling Method:	Sonic		
Drilling Equipment:	D101		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Water Level	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0		0.0-3.0': Airknife to 3.0' bgs for utilities. Soil not logged.				100			
		3.0-10.0': Controlled Density Fill.	FILL						
5									
10		10.0-15.0': No Recovery.				30			
15		15.0-16.0': Silty SAND (55% sand, 35% silt, 10% gravel), fine to medium sand, fine gravel, gray-brown, dry, no odor, no staining. Concrete debris.	FILL						
		16.0-17.0': Poorly graded SAND with silt (75% sand, 15% silt, 10% gravel), fine sand, fine and coarse gravel, brown, dry, no odor, no staining.	FILL				0.9	FB-17-17.0	X
		17.0-18.0': SILT (90% silt, 5% sand, 5% gravel), gray, dry, no odor, no staining. Brick debris, wood debris.	FILL				1.0	FB-17-15.0	X
		18.0-20.0': No Recovery.							
20		20.0-22.5': PEAT (90% peat, 10% silt), dark brown, moist, strong sulfur-like odor, no staining.	FILL			100			
		22.5-25.0': SILT with sand (85% silt, 15% sand), gray, fine sand, wet, no odor, no staining.	FILL		▼		0.5	FB-17-10.0	X
25									

Completion Information

Temporary Well Casing Diameter (in):	NA	**Surface Seal:**	NA
Temporary Well Screened Interval (ft bgs):	NA	**Ground Surface Elevation (ft):**	32.43
Boring Abandonment:	NA	**Surveyed Location:** **X:** 1269316.42	**Y:** 231376.97

FARALLON CONSULTING

Log of Boring: FMW-158

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/11/23 @ 1157	**Depth to Water ATD (ft bgs):**	23.0
Date/Time Completed:	5/11/23 @ 1251	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	32.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	32.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.0': Airknife to 3.0' bgs for utilities. Well-graded SAND (85% sand, 10% gravel, 5% silt), fine to coarse sand, fine gravel, brown, dry, organic odor, no staining.	FILL		70				Concrete
		2.0-7.0': Silty SAND (60% sand, 30% silt, 10% gravel), fine to medium sand, fine gravel, gray-brown, dry, no odor, no staining.	FILL						
5		7.0-10.0': No Recovery.							
10		10.0-15.5': Silty SAND (60% sand, 30% silt, 10% gravel), fine to medium sand, fine gravel, gray-brown, dry, no odor, no staining. Wood debris, charcoal debris.	FILL		80				Bentonite
15		15.5-17.0': Organic SILT (55% silt, 40% peat, 5% sand), fine sand, dark brown, dry, slight petroleum-like odor, no staining, low plasticity. Wood debris.	FILL						Sandpack
		17.0-18.0': Elastic SILT (100% silt), gray, moist, slight sulfur-like odor, no staining, high plasticity. Wood debris.	MH			1.1	FMW-158-20.0	X	
		18.0-20.0': No Recovery.							Screen
20									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Silica Sand	**Ground Surface Elevation (ft):**	35.51
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	35.04
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** 1269311.57	**Y:** 231219.18
Screened Interval (ft bgs):	17.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-810

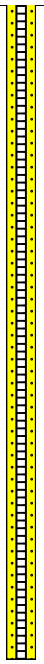
FARALLON CONSULTING

Log of Boring: FMW-158

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/11/23 @ 1157	**Depth to Water ATD (ft bgs):**	23.0
Date/Time Completed:	5/11/23 @ 1251	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	32.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	32.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
20	20.0-22.0': Poorly graded SAND with silt (85% sand, 10% silt, 5% gravel), fine to medium sand, brown, moist, slightly sweet odor, dark staining.	SP-SM	90			
	22.0-23.0': Poorly graded SAND with silt (90% sand, 10% silt), medium sand, gray, moist, slight sulfur-like odor, no staining.	SP-SM		1.3	FMW-158-15.0	X
	23.0-29.0': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist, no odor, no staining, low plasticity.	ML				
25				1.9	FMW-158-10.0	X
	29.0-30.0': No Recovery.					
30	30.0-32.0': Sandy SILT (60% silt, 40% sand), fine sand, gray, moist, no odor, no staining, low plasticity.	ML	100			
35						
40						



Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Silica Sand	**Ground Surface Elevation (ft):**	35.51
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	35.04
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** 1269311.57	**Y:** 231219.18
Screened Interval (ft bgs):	17.0-32.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-810

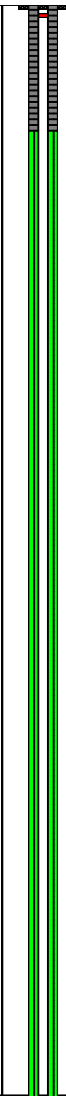
FARALLON CONSULTING

Log of Boring: FMW-159

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/8/23 @ 1040	**Depth to Water ATD (ft bgs):**	20.0
Date/Time Completed:	5/8/23 @ 1220	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	51.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	51.0
Drilling Equipment:	D101		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
0	0.0-2.5': Airknife to 5.0' bgs for utilities. Silty SAND (55% sand, 40% silt, 5% gravel), fine to coarse sand, dark brown, moist, no odor, no staining.	FILL	45			
	2.5-4.5': Silty SAND (80% sand, 15% silt, 5% gravel), fine sand, brown, dry, no odor, no staining. Charcoal debris.	FILL				
5	4.5-10.0': No Recovery.					
10	10.0-14.5': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, brown, moist, no odor, no staining.	FILL	85			
15	14.5-16.0': SILT with sand (75% silt, 25% sand), fine sand, gray-brown, slight petroleum-like odor, no staining.	FILL				
	16.0-18.5': PEAT (100% peat), dark brown, moist, slight sulfur-like odor, no staining. Wood debris.	FILL				
	18.5-20.0': No Recovery.					
20	20.0-23.0': SILT with sand (80% silt, 20% sand), fine sand, gray, wet, slight sulfur-like odor, no staining. Wood debris.	FILL	90	0.9	FMW-159-20.0	X
	23.0-26.0': SILT (100% silt), gray, moist, slight sulfur-like odor, no staining. Wood debris.	FILL				
25				2.1	FMW-159-15.0	X



Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Silica Sand	**Ground Surface Elevation (ft):**	36.48
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	36.15
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269311.66 **Y:** 231170.14
Screened Interval (ft bgs):	41.0-51.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-808

FARALLON CONSULTING

Log of Boring: FMW-159

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/8/23 @ 1040	**Depth to Water ATD (ft bgs):**	20.0
Date/Time Completed:	5/8/23 @ 1220	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	51.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	51.0
Drilling Equipment:	D101		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		26.0-29.0': SILT (95% silt, 5% sand), fine sand, gray, moist, no odor, no staining.	ML						Bentonite
		29.0-30.0': No Recovery.							
30		30.0-31.0': SILT (90% silt, 10% sand), fine sand, gray-brown, moist, no odor, no staining.	ML		95				
		31.0-35.0': Silty SAND (85% sand, 15% silt), fine sand, brown, moist, no odor, no staining.	SM						
35		35.0-39.5': Poorly graded SAND (100% sand), fine sand, brown, moist, no odor, no staining.	SP						
		39.5-40.0': No Recovery.							
40		40.0-49.5': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, brown with orange mottling, moist, no odor, no staining.	SP		100				Sandpack
45									Screen
50		49.5-51.0': Gravelly SILT (50% silt, 45% gravel, 5% sand), fine gravel, brown, wet, no odor, no staining.	ML						

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Silica Sand	**Ground Surface Elevation (ft):**	36.48
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	36.15
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269311.66	**Y:** 231170.14
Screened Interval (ft bgs):	41.0-51.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-808

Log of Boring: FMW-160

Client:	City Investors IX LLC	**Date/Time Started:**	5/5/23 @ 0957
Project:	Block 38 West	**Date/Time Completed:**	5/5/23 @ 1040
Location:	Seattle, WA	**Drilling Company:**	AEC
Farallon PN:	397-019	**Drilling Method:**	Sonic
Logged By:	A. Osman	**Drilling Equipment:**	D107
Reviewed By:	Y. Pehlivan	**Drilling Operator:**	Dan Rider
		Sampler Type:	5.0' PE Bags
		Depth to Water ATD (ft bgs):	22.0
		Boring Diameter (in):	3.75
		Total Boring Depth (ft bgs):	35.0
		Constructed Well Depth (ft bgs):	35.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.0': Silty SAND (75% sand, 25% silt), fine to medium sand, brown, moist, no odor, no staining.	FILL		30				Concrete
		2.0-3.0': SILT with sand (70% silt, 25% sand, 5% gravel), fine sand, light brown, dry, no odor, no staining.	FILL						
		3.0-10.0': No Recovery.							Bentonite
5									
10		10.0-13.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to medium sand, fine and coarse gravel, brown, moist, no odor, no staining. Charcoal debris at 13.0' bgs.	FILL		30				
		13.0-20.0': No Recovery.							
15									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	39.23
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	38.95
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269305.99	**Y:** 231030.33
Screened Interval (ft bgs):	20.0-35.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-239

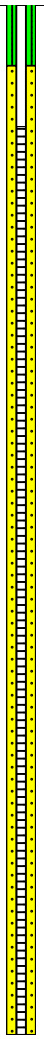
FARALLON CONSULTING

Log of Boring: FMW-160

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/5/23 @ 0957	**Depth to Water ATD (ft bgs):**	22.0
Date/Time Completed:	5/5/23 @ 1040	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	35.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	35.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
20	20.0-21.0': SILT (95% silt, 5% sand), gray-brown, moist, slight petroleum-like odor, no staining, medium plasticity. Wood debris.	FILL	90	1.0	FMW-160-20.0	X
	21.0-27.0': SILT (90% silt, 10% sand), fine sand, gray-brown with orange mottling, moist, no odor, no staining, medium plasticity.	ML		0.1	FMW-160-18.0	
25				0.0	FMW-160-15.0	X
	27.0-29.0': Silty SAND (85% sand, 15% silt), fine sand, brown, wet, no odor, no staining.	SM				
	29.0-30.0': No Recovery.					
30	30.0-34.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, brown with orange mottling at 33.0' bgs, wet, no odor, no staining.	SP-SM	80			
	34.0-35.0': No Recovery.					
35						



Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	39.23
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	38.95
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269305.99	**Y:** 231030.33
Screened Interval (ft bgs):	20.0-35.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-239

FARALLON CONSULTING

Log of Boring: FMW-161

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1136	**Depth to Water ATD (ft bgs):**	21.0
Date/Time Completed:	5/3/23 @ 1100	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	35.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	35.0
Drilling Equipment:	D107		
Drilling Operator:	Cole Pickering		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Airknife to 5.0' bgs for utilities. Soil not logged.			50				Concrete; Bentonite
5		5.0-7.0': Well-graded SAND (85% sand, 10% gravel, 5% silt), fine to coarse sand, fine gravel, dark brown, moist, no odor, no staining.	FILL						
		7.0-10.6': Silty SAND (60% sand, 35% silt, 5% gravel), fine sand, fine gravel, brown, moist, no odor, no staining.	FILL						
10		10.6-15.0': No Recovery.			36				
15		15.0-15.5': Silty SAND (60% sand, 35% silt, 5% gravel), fine sand, fine gravel, brown, moist, no odor, no staining.	FILL						
		15.5-16.5': SILT with sand (80% silt, 20% sand), fine sand, brown with orange mottling, moist, no odor, no staining, low plasticity.	FILL						
		16.5-17.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to medium sand, gray, dry, no odor, no staining.	FILL						

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.24
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	39.86
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269329.97 **Y:** 230983.90
Screened Interval (ft bgs):	20.0-35.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-237

FARALLON CONSULTING

Log of Boring: FMW-161

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1136	**Depth to Water ATD (ft bgs):**	21.0
Date/Time Completed:	5/3/23 @ 1100	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	35.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	35.0
Drilling Equipment:	D107		
Drilling Operator:	Cole Pickering		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		17.0-20.0': No Recovery.							Sandpack
20		20.0-22.0': SILT with sand (85% silt, 15% sand), fine sand, gray-brown, moist, no odor, no staining, medium plasticity. Wood debris.	FILL		85	0.0	FMW-161-20.0	X	Screen
		22.0-25.0': SILT (90% silt, 10% sand), fine sand, gray, moist, no odor, no staining, low plasticity. Wood debris.	ML			0.0	FMW-161-18.0		Water Level
25		25.0-28.5': Poorly graded SAND (95% sand, 5% silt), fine sand, gray-brown, moist, no odor, no staining.	SP			0.0	FMW-161-15.0	X	
		28.5-30.0': No Recovery.							
30		30.0-34.5': Poorly graded SAND (100% sand), fine sand, brown, wet, no odor, no staining.	SP		90				
		34.5-35.0': No Recovery.							
35									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.24
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	39.86
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269329.97 **Y:** 230983.90
Screened Interval (ft bgs):	20.0-35.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-237

FARALLON CONSULTING

Log of Boring: FMW-162

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1430	**Depth to Water ATD (ft bgs):**	9.0
Date/Time Completed:	5/4/23 @ 1308	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, dark brown, moist, slight organic odor, no staining.	FILL		30	0.2			Concrete
		3.0-10.0': No Recovery.							Bentonite
5									
									Water Level
10		10.0-12.0': Silty SAND (65% sand, 35% silt), fine sand, brown, moist, no odor, no staining.	FILL		80				
		12.0-16.0': Sandy SILT (65% silt, 35% sand), fine sand, gray, moist, slight petroleum-like odor, no staining, low plasticity, petroleum sheen.	FILL			60.6			
15		16.0-18.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray-brown, dry, slight petroleum odor, no staining. Wood debris.	FILL			1.1			
		18.0-20.0': No Recovery.							

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.35
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.09
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269335.12	**Y:** 230981.28
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-238

FARALLON CONSULTING

Log of Boring: FMW-162

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1430	**Depth to Water ATD (ft bgs):**	9.0
Date/Time Completed:	5/4/23 @ 1308	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)
20	20.0-21.0': PEAT (85% peat, 10% silt, 5% sand), dark brown, dry, slight petroleum-like odor, no staining. Wood debris.	FILL	80	1.5
	21.0-25.5': SILT (90% silt, 10% sand), fine sand, gray, moist, no odor, no staining, high plasticity.	ML		
25	25.5-28.0': Poorly graded SAND (95% sand, 5% silt), fine sand, gray, moist, no odor, no staining.	SP		
	28.0-30.0': No Recovery.			
30	30.0-39.0': Poorly graded SAND (100% sand), fine sand, orange-brown, moist, wet from 30.0-31.0' bgs, no odor, no staining.	SP	100	
35				

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.35
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.09
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269335.12	**Y:** 230981.28
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-238

FARALLON CONSULTING

Log of Boring: FMW-162

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1430	**Depth to Water ATD (ft bgs):**	9.0
Date/Time Completed:	5/4/23 @ 1308	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed
40	39.0-40.0': Sandy SILT (65% silt, 30% sand, 5% gravel), brown, moist, no odor, no staining.	ML				
	40.0-47.0': Well-graded SAND (100% sand), fine to coarse sand, brown, moist, no odor, no staining.	SW	100			
45						
	47.0-55.0': Silty GRAVEL with sand (40% gravel, 30% silt, 30% sand), fine and coarse gravel, fine to coarse sand, gray-brown, moist, no odor, no staining.	GM	100			
50						
55						

Boring/Well Construction Details: Sandpack; Screen

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.35
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.09
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269335.12 **Y:** 230981.28
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-238

FARALLON CONSULTING

Log of Boring: FMW-163

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 1054	**Depth to Water ATD (ft bgs):**	19.0
Date/Time Completed:	5/1/23 @ 1326	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	35.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	35.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		
Drive Hammer (lbs):	Auto		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	Sample ID
0	0.0-6.0': Airknife to 6.0' bgs for utilities. Soil not logged.			
5	6.0-7.5': Poorly graded SAND (90% sand, 10% silt), fine sand, dark brown, dry, no odor, no staining. Cobbles throughout, wood debris throughout.	FILL	80	
	7.5-10.0': Poorly graded SAND with silt (80% sand, 10% silt, 10% gravel), fine sand, fine gravel, light brown, dry, no odor, no staining.	FILL		
10	10.0-11.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, dark brown, dry, no odor, no staining.	FILL	100	
	11.0-17.0': Silty SAND (70% sand, 30% silt), fine sand, brown, gray @14.5' bgs, moist, strong petroleum-like odor, no staining. Wood debris.	FILL		
15			60	
	17.0-18.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray-brown, dry, no odor, no staining. Wood debris.	FILL		

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.66
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.29
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269369.25 **Y:** 230979.55
Screened Interval (ft bgs):	20.0-35.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-235

FARALLON CONSULTING

Log of Boring: FMW-163

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started: 5/1/23 @ 1054
Date/Time Completed: 5/1/23 @ 1326
Drilling Company: AEC
Drilling Method: Sonic
Drilling Equipment: D107
Drilling Operator: Dan Rider
Sampler Type: 5.0' PE Bags
Drive Hammer (lbs): Auto

Depth to Water ATD (ft bgs): 19.0
Boring Diameter (in): 3.75
Total Boring Depth (ft bgs): 35.0
Constructed Well Depth (ft bgs): 35.0

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	Blow Counts	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		18.0-20.0': No Recovery.								Water Level
20		20.0-22.0': SILT (90% silt, 10% sand), fine sand, gray, moist, slight sulfur odor, no staining, low plasticity. Wood debris.	ML			100	0.3	FMW-163-20.0	X	Sandpack
		22.0-25.0': Poorly graded SAND with silt (90% sand, 10% silt), fine sand, gray, moist, slight sulfur odor, no staining.	SP							Screen
25		25.0-35.0': Poorly graded SAND (100% sand), fine sand, moist, gray-brown, no odor, no staining.	SP			100	0.7	FMW-163-15.0	X	
30						100	0.1	FMW-163-10.0		
35							0.1	FMW-163-5.0		

Well Construction Information

Monument Type: Flush
Casing Diameter (in): 2.0
Screen Slot Size (in): 0.010
Screened Interval (ft bgs): 20.0-35.0
Filter Pack: 10/20 Colorado Silica
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: NA
Ground Surface Elevation (ft): 40.66
Top of Casing Elevation (ft): 40.29
Surveyed Location: **X:** 1269369.25 **Y:** 230979.55
Unique Well ID: BPA-235

FARALLON CONSULTING

Log of Boring: FMW-164

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 0955	**Depth to Water ATD (ft bgs):**	22.0
Date/Time Completed:	5/2/23 @ 1326	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-5.0': Airknife to 5.0' bgs for utilities. Soil not logged.							Concrete; Bentonite
5		5.0-8.0': SILT with sand (70% silt, 25% sand, 5% gravel), fine sand, gray-brown, moist, no odor, no staining, medium plasticity.	FILL		50				
		8.0-8.5': Concrete debris.	FILL						
		8.5-12.0': No Recovery.							
10		12.0-13.0': SILT with sand (70% silt, 25% sand, 5% gravel), fine sand, gray-brown, moist, no odor, no staining, medium plasticity.	FILL		69				
		13.0-13.5': Concrete debris.	FILL						
		13.5-14.5': SILT with sand (80% silt, 15% sand, 5% gravel), fine sand, gray, moist, no odor, no staining, medium plasticity.	FILL						
15		14.5-17.5': PEAT (100% peat), dark brown, moist, no odor, no staining. Wood debris.	FILL						
		17.5-20.0': No Recovery.							

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.53
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.18
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269410.55 **Y:** 230978.04
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-236

FARALLON CONSULTING

Log of Boring: FMW-164

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 0955	**Depth to Water ATD (ft bgs):**	22.0
Date/Time Completed:	5/2/23 @ 1326	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
20		20.0-25.0': PEAT (90% peat, 5% silt, 5% sand), gray-brown, moist, no odor, no staining. Wood debris, charcoal debris.	FILL		100				Water Level
25		25.0-30.0': SILT with sand (85% silt, 15% sand), fine sand, teal-gray, moist, no odor, no staining, low plasticity. Wood debris.	ML						
30		30.0-38.5': Poorly graded SAND (95% sand, 5% silt), fine sand, brown, moist, no odor, no staining.	SP		85				
35									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.53
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.18
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269410.55 **Y:** 230978.04
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-236

FARALLON CONSULTING

Log of Boring: FMW-164

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/1/23 @ 0955	**Depth to Water ATD (ft bgs):**	22.0
Date/Time Completed:	5/2/23 @ 1326	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	55.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	55.0
Drilling Equipment:	D107		
Drilling Operator:	Dan Rider		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		38.5-40.0': No Recovery.							
40		40.0-48.5': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, brown, wet, no odor, no staining.	SP		85				
45									Sandpack Screen
		48.5-50.0': No Recovery.							
50		50.0-52.0': Well-graded SAND with gravel (80% sand, 20% gravel), fine to coarse sand, fine and coarse gravel, brown, wet, no odor, no staining.	SW		80				
		52.0-54.0': SILT (90% silt, 5% sand, 5% gravel), brown, moist, no odor, no staining, low plasticity.	ML						
		54.0-55.0': No Recovery.							
55									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	40.53
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	40.18
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269410.55	**Y:** 230978.04
Screened Interval (ft bgs):	45.0-55.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPA-236

FARALLON CONSULTING

Log of Boring: FMW-165

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/9/23 @ 1159	**Depth to Water ATD (ft bgs):**	22.5
Date/Time Completed:	5/10/23 @ 1301	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	87.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	87.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-10.0': Concrete debris.	CO		100				Concrete
5									Bentonite
10		10.0-15.0': No Recovery.			30				
15		15.0-16.0': Silty SAND (55% sand, 35% silt, 10% gravel), fine to medium sand, fine gravel, gray-brown, dry, no odor, no staining. Concrete debris.	FILL						
		16.0-17.0': Poorly graded SAND with silt (75% sand, 15% silt, 10% gravel), fine sand, fine and coarse gravel, brown, dry, no odor, no staining.	FILL						
		17.0-18.0': SILT (90% silt, 5% sand, 5% gravel), gray, dry, no odor, no staining, medium plasticity. Brick debris, wood debris.	FILL						
		18.0-20.0': No Recovery.							
20		20.0-22.5': PEAT (90% peat, 10% silt), dark brown, moist, strong sulfur-like odor, no staining.	FILL		100				

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	32.43
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	32.11
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:** **X:** 1269316.42	**Y:** 231376.97
Screened Interval (ft bgs):	77.0-87.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-809

Log of Boring: FMW-165

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/9/23 @ 1159	**Depth to Water ATD (ft bgs):**	22.5
Date/Time Completed:	5/10/23 @ 1301	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	87.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	87.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Lithologic Description	USCS	% Recovery	PID (ppmv)	Sample ID
	22.5-25.0': SILT with sand (85% silt, 15% sand), gray, fine sand, wet at 22.5' bgs, no odor, no staining, medium plasticity.	FILL			
25	25.0-25.5': SILT with sand (70% silt, 25% sand, 5% gravel), fine to coarse sand, fine gravel, gray, wet, slight petroleum-like odor, no staining, medium plasticity. Wood debris.	FILL	90	1.8	
	25.5-29.5': SILT with sand (80% silt, 20% sand), fine sand, gray-brown, moist, strong sulfur-like odor, no staining, medium plasticity.	FILL		1.6	
30	29.5-30.0': No Recovery.				
	30.0-32.0': SILT with sand (85% silt, 15% sand), fine sand, gray, wet, slight sulfur-like odor, no staining, medium plasticity.	ML	100	1.0	
	32.0-36.0': Silty SAND (55% sand, 45% silt), fine sand, gray, moist, no odor, no staining.	SM			
35	36.0-40.0': Sandy SILT (65% silt, 35% sand), fine sand, gray, dry, no odor, no staining, low plasticity.	ML			
40	40.0-42.5': Well-graded SAND with silt (85% sand, 10% silt, 5% gravel), fine to coarse sand, fine gravel, gray, moist, no odor, no staining.	SW-SM	100		
	42.5-48.5': Sandy SILT (70% silt, 30% sand), fine sand, moist, gray, no odor, no staining, low plasticity.	ML			

Water Level

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	32.43
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	32.11
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1269316.42 **Y:** 231376.97
Screened Interval (ft bgs):	77.0-87.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-809

FARALLON CONSULTING

Log of Boring: FMW-165

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/9/23 @ 1159	**Depth to Water ATD (ft bgs):**	22.5
Date/Time Completed:	5/10/23 @ 1301	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	87.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	87.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
45									
		48.5-55.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray, moist, no odor, no staining.	SP-SM		90				
50									
55		55.0-56.0': Sandy SILT (60% silt, 40% sand), fine sand, brown, dry, no odor, no staining, low plasticity.	ML						
		56.0-59.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, brown, moist, no odor, no staining.	SP						
		59.0-60.0': No Recovery.							
60		60.0-63': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, brown, moist, no odor, no staining.	SP-SM		70				
		63.0-67.0': Poorly graded SAND (95% sand, 5% silt), fine to medium sand, brown, moist, no odor, no staining.	SP						
65									

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	32.43
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	32.11
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** 1269316.42	**Y:** 231376.97
Screened Interval (ft bgs):	77.0-87.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-809

FARALLON CONSULTING

Log of Boring: FMW-165

Client: City Investors IX LLC
Project: Block 38 West
Location: Seattle, WA
Farallon PN: 397-019
Logged By: A. Osman
Reviewed By: Y. Pehlivan

Date/Time Started:	5/9/23 @ 1159	**Depth to Water ATD (ft bgs):**	22.5
Date/Time Completed:	5/10/23 @ 1301	**Boring Diameter (in):**	3.75
Drilling Company:	AEC	**Total Boring Depth (ft bgs):**	87.0
Drilling Method:	Sonic	**Constructed Well Depth (ft bgs):**	87.0
Drilling Equipment:	D107		
Drilling Operator:	John Wright		
Sampler Type:	5.0' PE Bags		

Depth (ft bgs)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	PID (ppmv)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		67.0-70.0': No Recovery.							
70		70.0-73.0': Well-graded SAND with gravel (55% sand, 40% gravel, 5% silt), fine to coarse sand, fine gravel, brown, wet, no odor, no staining.	SW		90				
		73.0-78.0': Poorly graded SAND (95% sand, 5% silt), medium sand, brown with orange mottling, moist, no odor, no staining.	SP						
75									Sandpack
									Screen
		78.0-79.0': Poorly graded SAND with silt (90% sand, 10% silt), fine to medium sand, gray-brown, moist, no odor, no staining.	SP-SM						
		79.0-80.0': No Recovery.							
80		80.0-85.0': Poorly graded SAND (90% sand, 10% gravel), medium sand, fine and coarse gravel, brown, moist, no odor, no staining.	SP		71				
85		85.0-87.0': No Recovery.							

Well Construction Information

Monument Type:	Flush	**Filter Pack:**	10/20 Colorado Silica	**Ground Surface Elevation (ft):**	32.43
Casing Diameter (in):	2.0	**Surface Seal:**	Concrete	**Top of Casing Elevation (ft):**	32.11
Screen Slot Size (in):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location: X:** 1269316.42	**Y:** 231376.97
Screened Interval (ft bgs):	77.0-87.0	**Boring Abandonment:**	NA	**Unique Well ID:**	BPE-809

APPENDIX B
EJ SCREENING TOOL AND EHD MAP COMMUNITY REPORTS

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

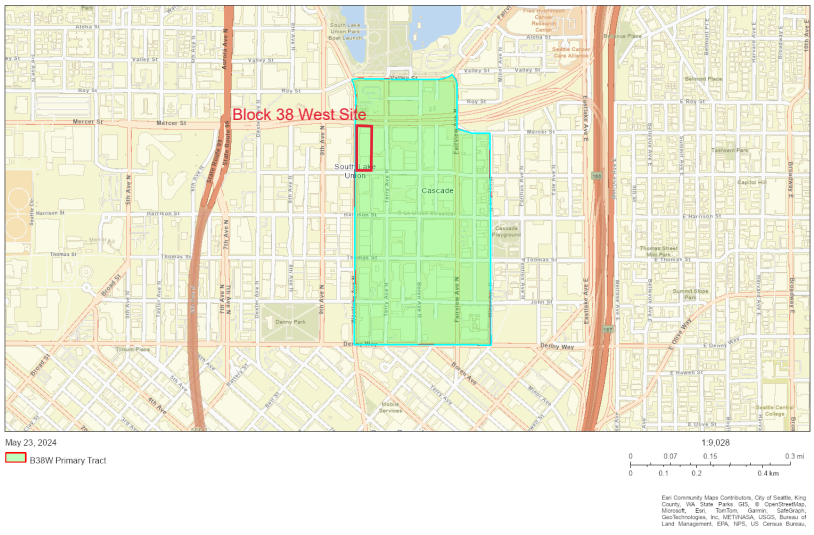
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Seattle, WA

Tract: 53033007303
Population: 2,700
Area in square miles: 0.12

A3 Landscape



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	61%
Spanish	3%
German or other West Germanic	2%
Russian, Polish, or Other Slavic	1%
Other Indo-European	8%
Korean	1%
Chinese (including Mandarin, Cantonese)	15%
Other Asian and Pacific Island	8%
Other and Unspecified	1%
Total Non-English	39%

COMMUNITY INFORMATION

- Low income: 15 percent
- People of color: 49 percent
- Less than high school education: 0 percent
- Limited English households: 8 percent
- Unemployment: 5 percent
- Persons with disabilities: 16 percent
- Male: 55 percent
- Female: 45 percent
- 81 years — Average life expectancy
- $97,816 — Per capita income
- Number of households: 1,844
- Owner occupied: 7 percent

BREAKDOWN BY RACE

- White: 51%
- Black: 2%
- American Indian: 0%
- Asian: 42%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 3%
- Hispanic: 2%

BREAKDOWN BY AGE

From Ages 1 to 4	1%
From Ages 1 to 18	5%
From Ages 18 and up	95%
From Ages 65 and up	19%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	17%
Speak Asian-Pacific Island Languages	83%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

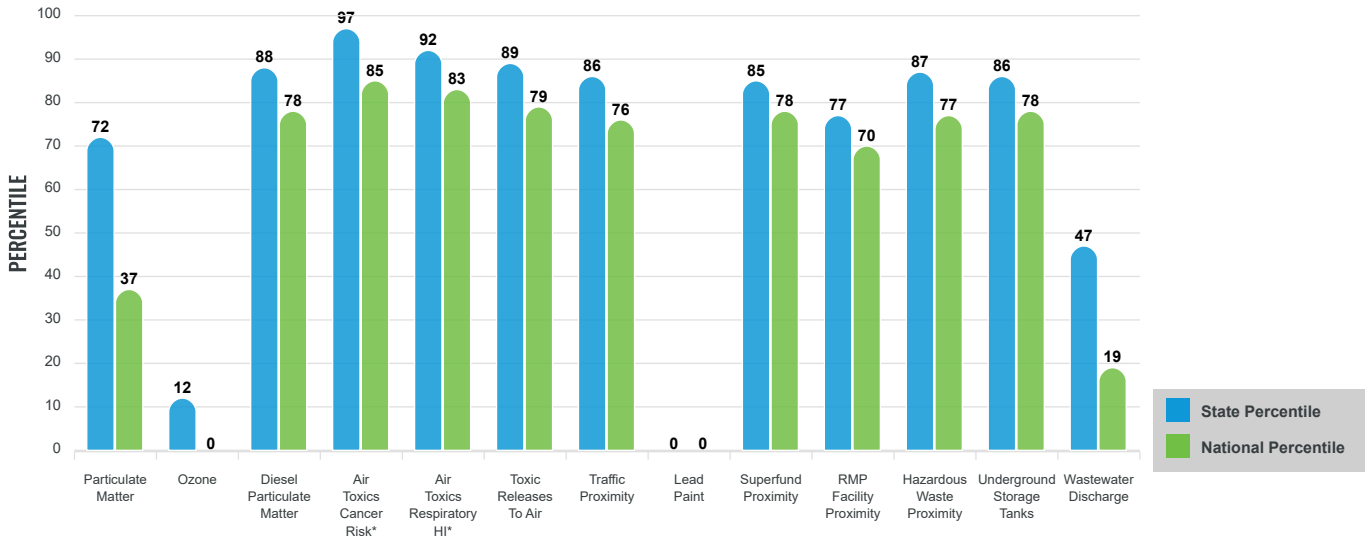
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

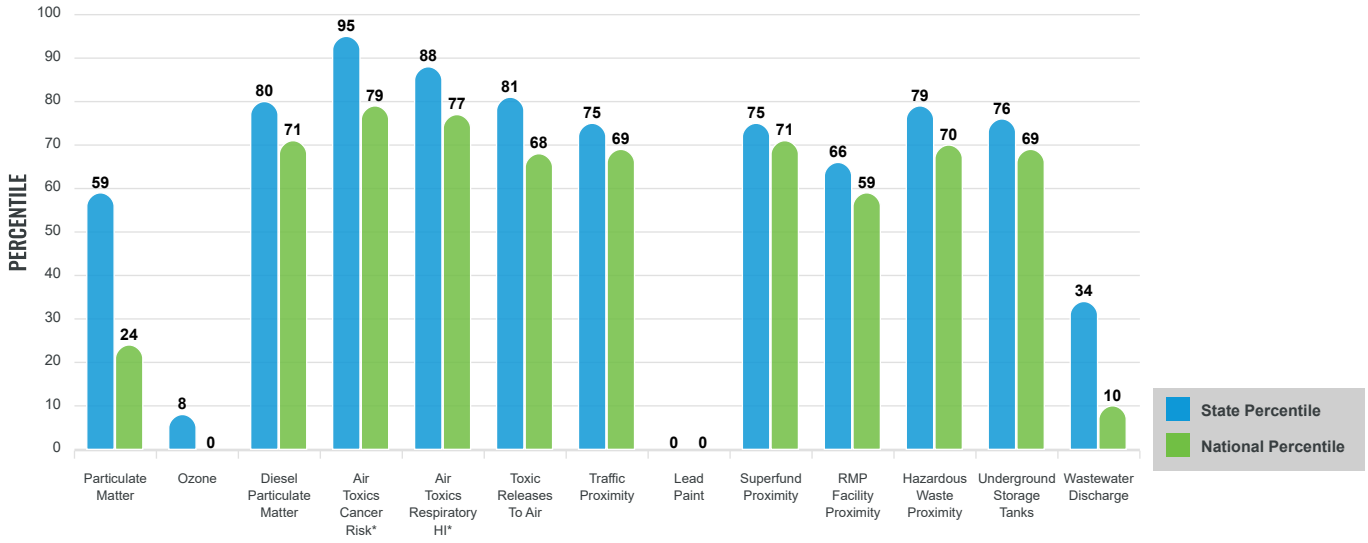
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Tract: 53033007303

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	7.2	7.02	61	8.08	25
Ozone (ppb)	45.4	49.8	7	61.6	0
Diesel Particulate Matter (µg/m^3)	1.74	0.355	99	0.261	99
Air Toxics Cancer Risk* (lifetime risk per million)	50	27	97	25	94
Air Toxics Respiratory HI*	0.9	0.39	98	0.31	92
Toxic Releases to Air	8,100	1,800	96	4,600	91
Traffic Proximity (daily traffic count/distance to road)	1,900	190	98	210	98
Lead Paint (% Pre-1960 Housing)	0	0.23	0	0.3	0
Superfund Proximity (site count/km distance)	0.53	0.18	92	0.13	95
RMP Facility Proximity (facility count/km distance)	0.48	0.4	77	0.43	75
Hazardous Waste Proximity (facility count/km distance)	20	1.6	99	1.9	99
Underground Storage Tanks (count/km^2)	120	6.3	99	3.9	99
Wastewater Discharge (toxicity-weighted concentration/m distance)	2.4E-06	0.024	30	22	11
SOCIOECONOMIC INDICATORS					
Demographic Index	32%	28%	66	35%	54
Supplemental Demographic Index	9%	12%	40	14%	30
People of Color	49%	32%	79	39%	65
Low Income	15%	24%	36	31%	27
Unemployment Rate	5%	5%	61	6%	60
Limited English Speaking Households	8%	4%	84	5%	82
Less Than High School Education	0%	8%	0	12%	0
Under Age 5	1%	6%	12	6%	16
Over Age 64	19%	16%	65	17%	62
Low Life Expectancy	17%	18%	30	20%	22

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	1
Water Dischargers	1
Air Pollution	2
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	0
Hospitals	0
Places of Worship	0

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	Yes

Report for Tract: 53033007303

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	18%	30	20%	22
Heart Disease	3.5	5.3	11	6.1	7
Asthma	8.9	10.5	8	10	22
Cancer	4.8	6.3	15	6.1	22
Persons with Disabilities	16.5%	13.1%	74	13.4%	73

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	13%	11%	75	12%	74
Wildfire Risk	0%	12%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	2%	9%	23	14%	16
Lack of Health Insurance	0%	6%	0	9%	0
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Tract: 53033007303

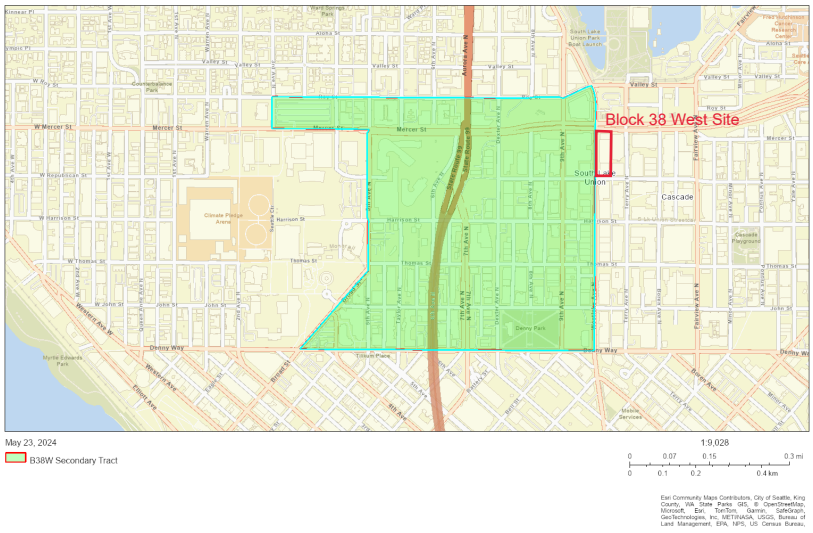
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Seattle, WA

Tract: 53033007203
Population: 2,920
Area in square miles: 0.22

A3 Landscape



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	64%
Spanish	1%
Russian, Polish, or Other Slavic	10%
Other Indo-European	7%
Chinese (including Mandarin, Cantonese)	8%
Vietnamese	1%
Other Asian and Pacific Island	9%
Total Non-English	36%

COMMUNITY INFORMATION

- Low income: 16 percent
- People of color: 48 percent
- Less than high school education: 5 percent
- Limited English households: 10 percent
- Unemployment: 0 percent
- Persons with disabilities: 8 percent
- Male: 60 percent
- Female: 40 percent
- 77 years — Average life expectancy
- $95,768 — Per capita income
- Number of households: 1,982
- Owner occupied: 10 percent

BREAKDOWN BY RACE

- White: 52%
- Black: 3%
- American Indian: 3%
- Asian: 36%
- Hawaiian/Pacific Islander: 0%
- Other race: 0%
- Two or more races: 2%
- Hispanic: 4%

BREAKDOWN BY AGE

From Ages 1 to 4	1%
From Ages 1 to 18	2%
From Ages 18 and up	98%
From Ages 65 and up	5%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	0%
Speak Other Indo-European Languages	13%
Speak Asian-Pacific Island Languages	87%
Speak Other Languages	0%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

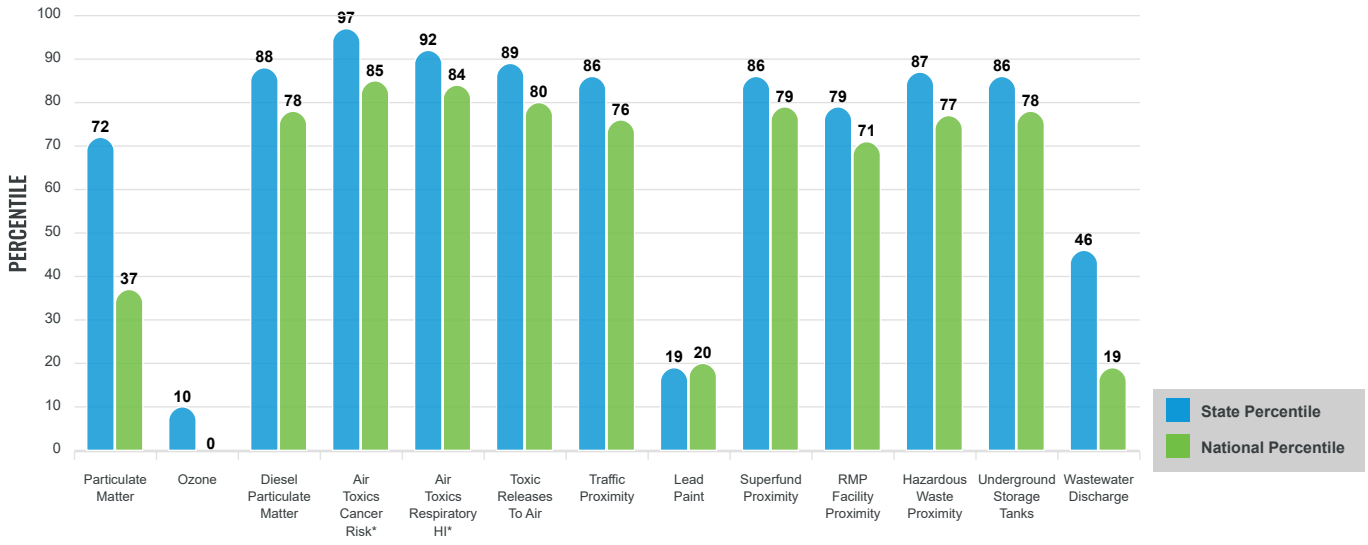
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

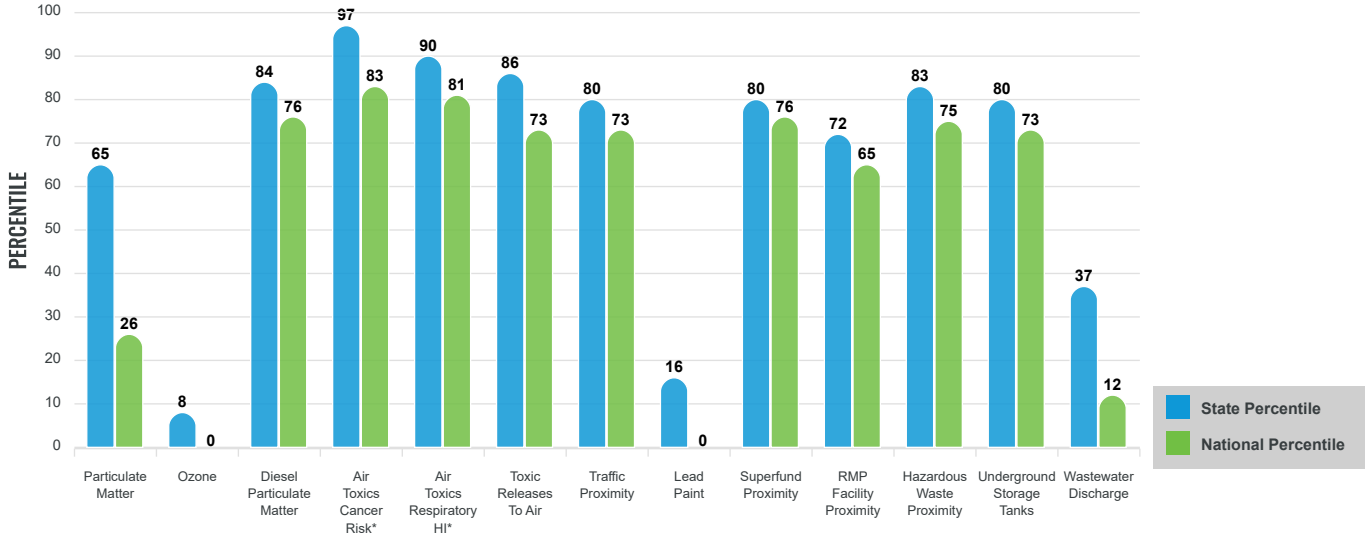
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Tract: 53033007203

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	7.2	7.02	61	8.08	25
Ozone (ppb)	45.3	49.8	6	61.6	0
Diesel Particulate Matter (µg/m^3)	1.83	0.355	99	0.261	99
Air Toxics Cancer Risk* (lifetime risk per million)	50	27	97	25	94
Air Toxics Respiratory HI*	0.9	0.39	98	0.31	92
Toxic Releases to Air	9,100	1,800	96	4,600	92
Traffic Proximity (daily traffic count/distance to road)	1,700	190	98	210	98
Lead Paint (% Pre-1960 Housing)	0.012	0.23	16	0.3	16
Superfund Proximity (site count/km distance)	0.64	0.18	94	0.13	96
RMP Facility Proximity (facility count/km distance)	0.57	0.4	80	0.43	79
Hazardous Waste Proximity (facility count/km distance)	24	1.6	99	1.9	99
Underground Storage Tanks (count/km^2)	93	6.3	99	3.9	99
Wastewater Discharge (toxicity-weighted concentration/m distance)	2.3E-06	0.024	30	22	11
SOCIOECONOMIC INDICATORS					
Demographic Index	32%	28%	66	35%	54
Supplemental Demographic Index	10%	12%	50	14%	37
People of Color	48%	32%	78	39%	65
Low Income	16%	24%	39	31%	29
Unemployment Rate	0%	5%	0	6%	0
Limited English Speaking Households	10%	4%	87	5%	85
Less Than High School Education	5%	8%	49	12%	38
Under Age 5	1%	6%	13	6%	16
Over Age 64	5%	16%	9	17%	8
Low Life Expectancy	21%	18%	80	20%	64

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	2
Water Dischargers	1
Air Pollution	0
Brownfields	0
Toxic Release Inventory	1

Other community features within defined area:

Schools	0
Hospitals	0
Places of Worship	4

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	No
Selected location contains an EPA IRA disadvantaged community	Yes

Report for Tract: 53033007203

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	18%	80	20%	64
Heart Disease	2.1	5.3	1	6.1	0
Asthma	8.9	10.5	8	10	22
Cancer	3.3	6.3	2	6.1	4
Persons with Disabilities	8%	13.1%	18	13.4%	18

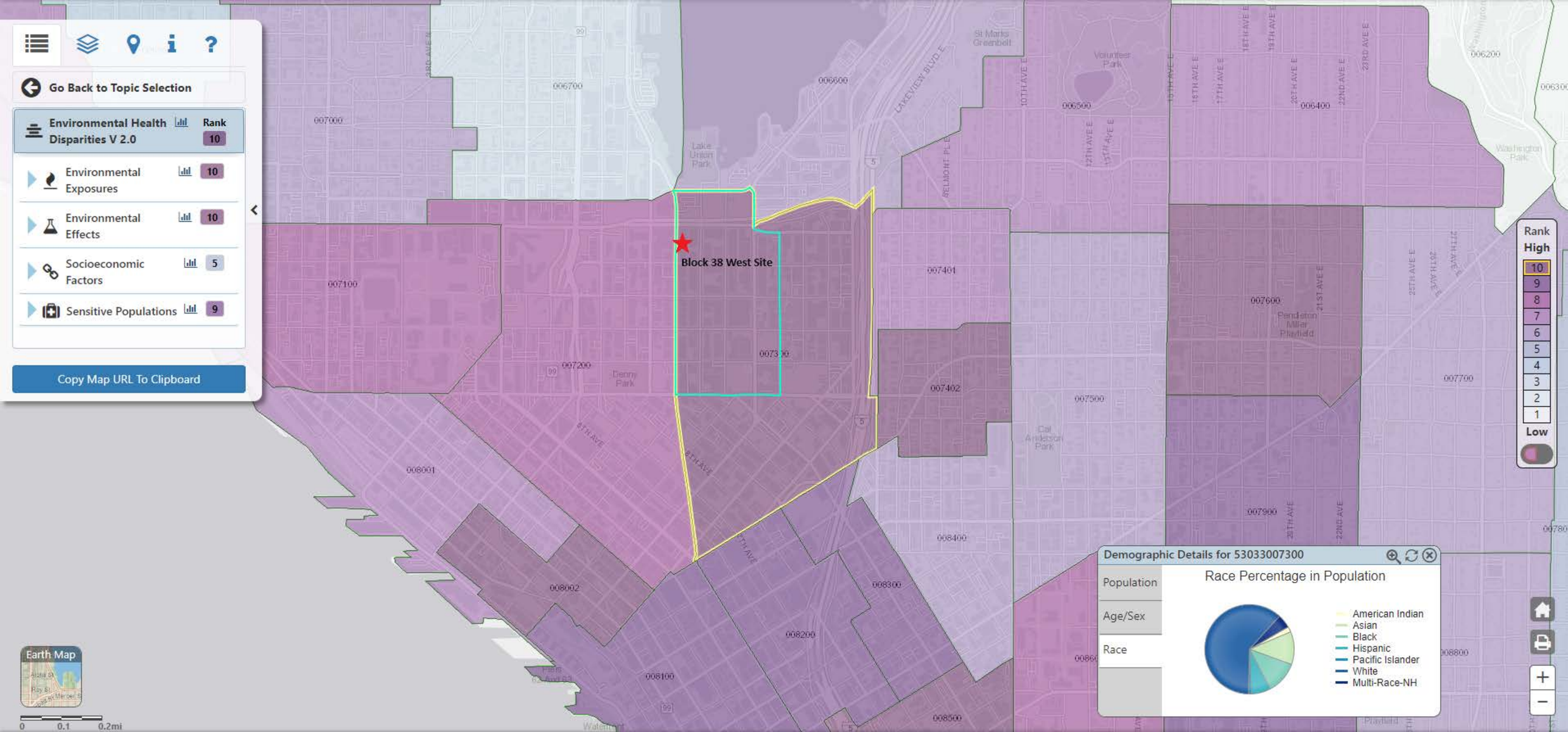
CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	3%	11%	33	12%	26
Wildfire Risk	0%	12%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	2%	9%	21	14%	14
Lack of Health Insurance	6%	6%	58	9%	45
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Tract: 53033007203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Environmental Health Disparities V 2.0
Rank
10
Environmental Exposures
10
Environmental Effects
10
Socioeconomic Factors
5
Sensitive Populations
9
Copy Map URL To Clipboard
Block 38 West Site
Rank
High
10
9
8
7
6
5
4
3
2
1
Low
Demographic Details for 53033007300
Population
Age/Sex
Race
Race Percentage in Population
American Indian
Asian
Black
Hispanic
Pacific Islander
White
Multi-Race-NH
Earth Map
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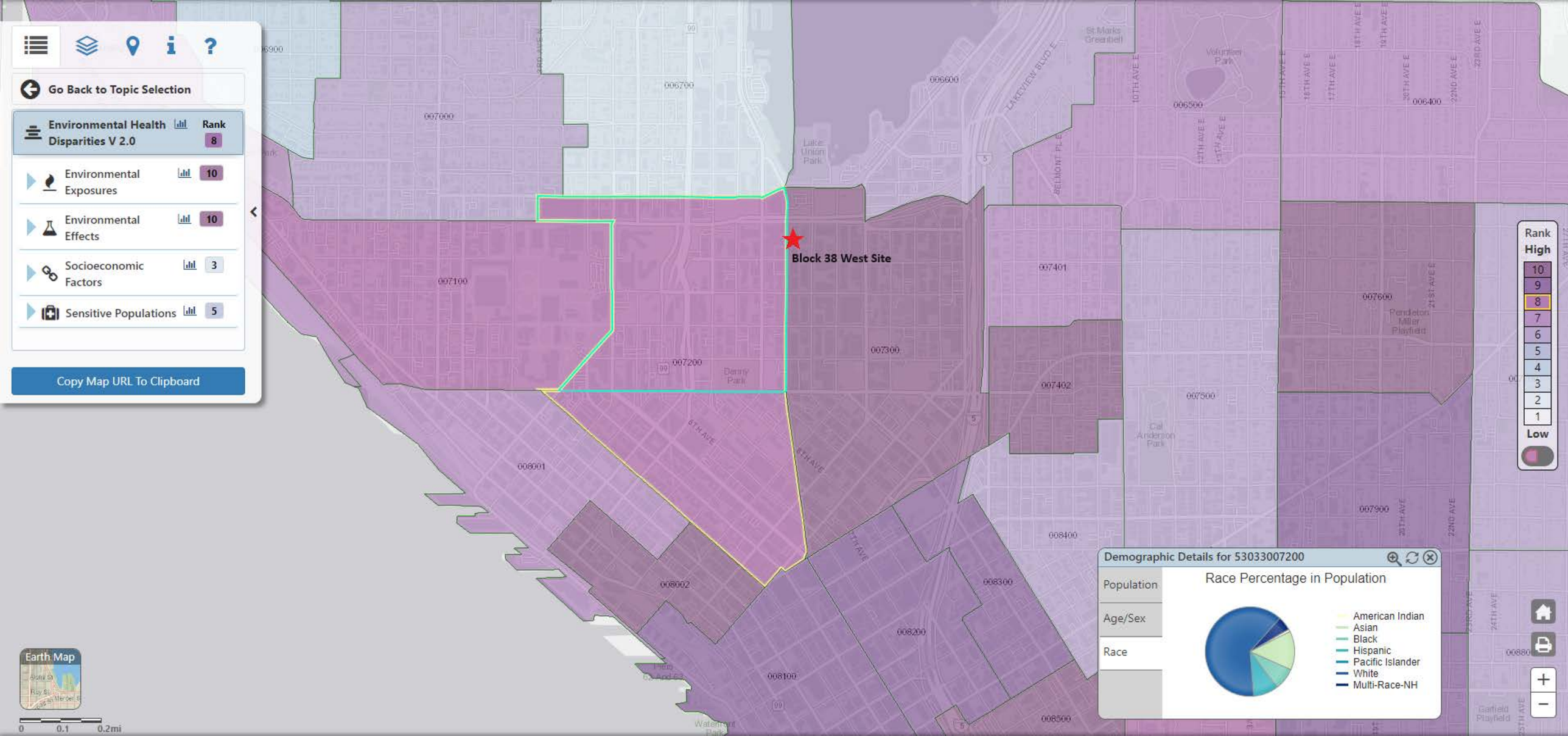
0.2mi


Go Back to Topic Selection
Environmental Health Disparities V 2.0
Rank
8
Environmental Exposures
10
Environmental Effects
10
Socioeconomic Factors
3
Sensitive Populations
5
Copy Map URL To Clipboard
Block 38 West Site
Rank
High
10
9
8
7
6
5
4
3
2
1
Low
Demographic Details for 53033007200
Population
Age/Sex
Race
Race Percentage in Population
American Indian
Asian
Black
Hispanic
Pacific Islander
White
Multi-Race-NH
Earth Map
0
0.1
0.2mi

APPENDIX C
ANALYTICAL LABORATORY RESULTS

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

2020 LABORATORY REPORTS

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 16, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2009-116

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on September 14, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

Case Narrative

Samples were collected on September 12 and 13, 2020 and received by the laboratory on September 14, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH-Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene and the MTCA Method A cleanup level of 30.0 ppm for fresh gasoline are not achievable for samples FB-13-20.0, FB-13-17.5, FB-12-20.0 and FB-12-17.5 due to the low dry weight of the samples in addition to the low sample weight in the provided VOA vials

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-20.0**					
Laboratory ID:	09-116-07					
Benzene	**ND**	0.070	EPA 8021B	9-15-20	9-15-20	
Toluene	**ND**	0.35	EPA 8021B	9-15-20	9-15-20	
Ethyl Benzene	**ND**	0.35	EPA 8021B	9-15-20	9-15-20	
m,p-Xylene	**ND**	0.35	EPA 8021B	9-15-20	9-15-20	
o-Xylene	**ND**	0.35	EPA 8021B	9-15-20	9-15-20	
Gasoline	**ND**	35	NWTPH-Gx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*58-129*				
Client ID:	**FB-13-17.5**					
Laboratory ID:	09-116-08					
Benzene	**ND**	0.10	EPA 8021B	9-15-20	9-15-20	
Toluene	**ND**	0.51	EPA 8021B	9-15-20	9-15-20	
Ethyl Benzene	**ND**	0.51	EPA 8021B	9-15-20	9-15-20	
m,p-Xylene	**ND**	0.51	EPA 8021B	9-15-20	9-15-20	
o-Xylene	**ND**	0.51	EPA 8021B	9-15-20	9-15-20	
Gasoline	**ND**	51	NWTPH-Gx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*58-129*				
Client ID:	**FB-12-20.0**					
Laboratory ID:	09-116-19					
Benzene	**ND**	0.083	EPA 8021B	9-15-20	9-15-20	
Toluene	**ND**	0.41	EPA 8021B	9-15-20	9-15-20	
Ethyl Benzene	**ND**	0.41	EPA 8021B	9-15-20	9-15-20	
m,p-Xylene	**ND**	0.41	EPA 8021B	9-15-20	9-15-20	
o-Xylene	**ND**	0.41	EPA 8021B	9-15-20	9-15-20	
Gasoline	**ND**	41	NWTPH-Gx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*99*	*58-129*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-17.5**					
Laboratory ID:	09-116-20					
Benzene	**ND**	0.075	EPA 8021B	9-15-20	9-15-20	
Toluene	**ND**	0.38	EPA 8021B	9-15-20	9-15-20	
Ethyl Benzene	**ND**	0.38	EPA 8021B	9-15-20	9-15-20	
m,p-Xylene	**ND**	0.38	EPA 8021B	9-15-20	9-15-20	
o-Xylene	**ND**	0.38	EPA 8021B	9-15-20	9-15-20	
Gasoline	**ND**	38	NWTPH-Gx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*106*	*58-129*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0915S1					
Benzene	**ND**	0.020	EPA 8021B	9-15-20	9-15-20	
Toluene	**ND**	0.050	EPA 8021B	9-15-20	9-15-20	
Ethyl Benzene	**ND**	0.050	EPA 8021B	9-15-20	9-15-20	
m,p-Xylene	**ND**	0.050	EPA 8021B	9-15-20	9-15-20	
o-Xylene	**ND**	0.050	EPA 8021B	9-15-20	9-15-20	
Gasoline	**ND**	5.0	NWTPH-Gx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*99*	*58-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-116-07										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*97*	*95*	*58-129*			
SPIKE BLANKS											
Laboratory ID:	SB0915S1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**0.823**	**0.830**	1.00	1.00		**82**	**83**	68-112	1	10	
Toluene	**0.863**	**0.873**	1.00	1.00		**86**	**87**	70-114	1	10	
Ethyl Benzene	**0.866**	**0.881**	1.00	1.00		**87**	**88**	70-115	2	10	
m,p-Xylene	**0.866**	**0.877**	1.00	1.00		**87**	**88**	69-117	1	11	
o-Xylene	**0.884**	**0.893**	1.00	1.00		**88**	**89**	71-115	1	11	
Surrogate:											
Fluorobenzene						*100*	*100*	*58-129*			

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-20.0**					
Laboratory ID:	09-116-07					
Diesel Range Organics	**86**	70	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**1400**	140	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*55*	*50-150*				
Client ID:	**FB-13-17.5**					
Laboratory ID:	09-116-08					
Diesel Range Organics	**160**	100	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**2700**	200	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*52*	*50-150*				
Client ID:	**FB-11-20.0**					
Laboratory ID:	09-116-10					
Diesel Range Organics	**72**	45	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**470**	91	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*75*	*50-150*				
Client ID:	**FB-11-17.5**					
Laboratory ID:	09-116-11					
Diesel Range Organics	**ND**	59	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**ND**	120	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*72*	*50-150*				
Client ID:	**FB-14-20.0**					
Laboratory ID:	09-116-17					
Diesel Range Organics	**32**	29	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**150**	58	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*75*	*50-150*				
Client ID:	**FB-12-20.0**					
Laboratory ID:	09-116-19					
Diesel Range Organics	**170**	93	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**1600**	190	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*60*	*50-150*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-17.5**					
Laboratory ID:	09-116-20					
Diesel Range Organics	**ND**	94	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**1300**	190	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*68*	*50-150*				
Client ID:	**FB-14-17.5**					
Laboratory ID:	09-116-23					
Diesel Range Organics	**ND**	65	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**510**	130	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*70*	*50-150*				
Client ID:	**FB-15-22.5**					
Laboratory ID:	09-116-25					
Diesel Range Organics	**ND**	140	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**1500**	270	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*78*	*50-150*				
Client ID:	**FB-15-20.0**					
Laboratory ID:	09-116-26					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**160**	59	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*77*	*50-150*				
Client ID:	**FB-15-17.5**					
Laboratory ID:	09-116-27					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*74*	*50-150*				
Client ID:	**FB-16-22.5**					
Laboratory ID:	09-116-30					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**110**	57	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*74*	*50-150*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-16-20.0**					
Laboratory ID:	09-116-31					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*74*	*50-150*				
Client ID:	**FB-16-17.5**					
Laboratory ID:	09-116-32					
Diesel Range Organics	**130**	110	NWTPH-Dx	9-15-20	9-15-20	N
Lube Oil Range Organics	**1000**	210	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*52*	*50-150*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0915S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-15-20	9-15-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-116-31										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*74*	*73*	*50-150*			
Laboratory ID:	SB0915S1										
	ORIG	DUP									
Diesel Fuel #2	**94.2**	**92.6**	NA	NA		NA		NA	2	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*88*	*87*	*50-150*			

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-10-22.5**					
Laboratory ID:	09-116-01					
Benzo[a]anthracene	**0.58**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**0.68**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**0.71**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.17**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**0.61**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**0.37**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.065**	0.045	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*78*	*46 - 113*				
Pyrene-d10	*83*	*45 - 114*				
Terphenyl-d14	*86*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-10-20.0**					
Laboratory ID:	09-116-02					
Benzo[a]anthracene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.0097	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*71*	*46 - 113*				
Pyrene-d10	*67*	*45 - 114*				
Terphenyl-d14	*67*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-10-17.5**					
Laboratory ID:	09-116-03					
Benzo[a]anthracene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.016	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*47*	*46 - 113*				
Pyrene-d10	*46*	*45 - 114*				
Terphenyl-d14	*49*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-22.5**					
Laboratory ID:	09-116-06					
Naphthalene	**4.1**	0.077	EPA 8270E/SIM	9-15-20	9-16-20	
2-Methylnaphthalene	**4.1**	0.077	EPA 8270E/SIM	9-15-20	9-16-20	
1-Methylnaphthalene	**3.4**	0.077	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*63*	*46 - 113*				
Pyrene-d10	*72*	*45 - 114*				
Terphenyl-d14	*76*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-20.0**					
Laboratory ID:	09-116-07					
Naphthalene	**0.40**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
2-Methylnaphthalene	**0.11**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
1-Methylnaphthalene	**0.084**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]anthracene	**0.55**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.50**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.53**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**0.16**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.55**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.30**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**0.046**	0.019	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*64*	*46 - 113*				
Pyrene-d10	*59*	*45 - 114*				
Terphenyl-d14	*55*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-17.5**					
Laboratory ID:	09-116-08					
Benzo[a]anthracene	**1.9**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**1.6**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**1.8**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.46**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**1.8**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**1.0**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.15**	0.027	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*70*	*46 - 113*				
Pyrene-d10	*65*	*45 - 114*				
Terphenyl-d14	*62*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-11-20.0**					
Laboratory ID:	09-116-10					
Benzo[a]anthracene	**0.50**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.52**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.62**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**0.17**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.54**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.37**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**0.058**	0.012	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*57*	*46 - 113*				
Pyrene-d10	*58*	*45 - 114*				
Terphenyl-d14	*53*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-11-17.5**					
Laboratory ID:	09-116-11					
Benzo[a]anthracene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Chrysene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[b]fluoranthene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo(j,k)fluoranthene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[a]pyrene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Dibenz[a,h]anthracene	**ND**	0.016	EPA 8270E/SIM	9-16-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*69*	*46 - 113*				
Pyrene-d10	*67*	*45 - 114*				
Terphenyl-d14	*72*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-14-22.5**					
Laboratory ID:	09-116-16					
Naphthalene	**0.18**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
2-Methylnaphthalene	**0.21**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
1-Methylnaphthalene	**0.15**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]anthracene	**2.8**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**2.6**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**2.4**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.78**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**2.4**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**1.4**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.24**	0.073	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*76*	*46 - 113*				
Pyrene-d10	*93*	*45 - 114*				
Terphenyl-d14	*100*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-14-20.0**					
Laboratory ID:	09-116-17					
Naphthalene	**0.14**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
2-Methylnaphthalene	**0.14**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
1-Methylnaphthalene	**0.13**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]anthracene	**1.7**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**1.6**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**1.6**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.47**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**1.8**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**0.97**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.16**	0.039	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*66*	*46 - 113*				
Pyrene-d10	*72*	*45 - 114*				
Terphenyl-d14	*80*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-21.5**					
Laboratory ID:	09-116-18					
Naphthalene	**ND**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
2-Methylnaphthalene	**ND**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
1-Methylnaphthalene	**ND**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*62*	*46 - 113*				
Pyrene-d10	*80*	*45 - 114*				
Terphenyl-d14	*76*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-20.0**					
Laboratory ID:	09-116-19					
Benzo[a]anthracene	**0.084**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.085**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.089**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.081**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.058**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*71*	*46 - 113*				
Pyrene-d10	*70*	*45 - 114*				
Terphenyl-d14	*60*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-17.5**					
Laboratory ID:	09-116-20					
Benzo[a]anthracene	**0.21**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.19**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.22**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**0.083**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.25**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.16**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.025	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*76*	*46 - 113*				
Pyrene-d10	*80*	*45 - 114*				
Terphenyl-d14	*75*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-14-17.5**					
Laboratory ID:	09-116-23					
Benzo[a]anthracene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.017	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*54*	*46 - 113*				
Pyrene-d10	*56*	*45 - 114*				
Terphenyl-d14	*50*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-15-22.5**					
Laboratory ID:	09-116-25					
Naphthalene	**0.40**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
2-Methylnaphthalene	**0.32**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
1-Methylnaphthalene	**0.26**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]anthracene	**2.4**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**2.0**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**2.2**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.78**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**2.3**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**1.3**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.24**	0.15	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*60*	*46 - 113*				
Pyrene-d10	*73*	*45 - 114*				
Terphenyl-d14	*72*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
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PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-15-20.0**					
Laboratory ID:	09-116-26					
Naphthalene	**0.25**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
2-Methylnaphthalene	**0.34**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
1-Methylnaphthalene	**0.29**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]anthracene	**0.21**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.20**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.20**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**0.064**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.20**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.11**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**0.020**	0.0079	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*67*	*46 - 113*				
Pyrene-d10	*64*	*45 - 114*				
Terphenyl-d14	*65*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-15-17.5**					
Laboratory ID:	09-116-27					
Naphthalene	**0.10**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
2-Methylnaphthalene	**0.040**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
1-Methylnaphthalene	**0.033**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]anthracene	**0.26**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**0.25**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**0.27**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**0.098**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**0.31**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**0.18**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**0.025**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*79*	*46 - 113*				
Pyrene-d10	*86*	*45 - 114*				
Terphenyl-d14	*83*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-16-22.5**					
Laboratory ID:	09-116-30					
Benzo[a]anthracene	**0.45**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Chrysene	**0.45**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[b]fluoranthene	**0.47**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo(j,k)fluoranthene	**0.13**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Benzo[a]pyrene	**0.49**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**0.29**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Dibenz[a,h]anthracene	**0.051**	0.0075	EPA 8270E/SIM	9-15-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*72*	*46 - 113*				
Pyrene-d10	*84*	*45 - 114*				
Terphenyl-d14	*81*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-16-20.0**					
Laboratory ID:	09-116-31					
Benzo[a]anthracene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.0074	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*74*	*46 - 113*				
Pyrene-d10	*78*	*45 - 114*				
Terphenyl-d14	*80*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-16-17.5**					
Laboratory ID:	09-116-32					
Benzo[a]anthracene	**0.032**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Chrysene	**0.055**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[b]fluoranthene	**0.029**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo(j,k)fluoranthene	**ND**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[a]pyrene	**ND**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Dibenz[a,h]anthracene	**ND**	0.029	EPA 8270E/SIM	9-16-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*77*	*46 - 113*				
Pyrene-d10	*81*	*45 - 114*				
Terphenyl-d14	*75*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0915S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*78*	*46 - 113*				
Pyrene-d10	*88*	*45 - 114*				
Terphenyl-d14	*92*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0916S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-16-20	9-16-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*86*	*46 - 113*				
Pyrene-d10	*87*	*45 - 114*				
Terphenyl-d14	*91*	*49 - 121*				

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0915S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0675**	**0.0646**	0.0833	0.0833	81	78	60 - 116	4	16	
Acenaphthylene	**0.0674**	**0.0694**	0.0833	0.0833	81	83	60 - 125	3	15	
Acenaphthene	**0.0703**	**0.0724**	0.0833	0.0833	84	87	60 - 121	3	15	
Fluorene	**0.0684**	**0.0724**	0.0833	0.0833	82	87	65 - 126	6	15	
Phenanthrene	**0.0700**	**0.0736**	0.0833	0.0833	84	88	65 - 120	5	15	
Anthracene	**0.0711**	**0.0748**	0.0833	0.0833	85	90	67 - 125	5	15	
Fluoranthene	**0.0714**	**0.0784**	0.0833	0.0833	86	94	66 - 125	9	15	
Pyrene	**0.0755**	**0.0799**	0.0833	0.0833	91	96	62 - 125	6	15	
Benzo[a]anthracene	**0.0790**	**0.0847**	0.0833	0.0833	95	102	72 - 129	7	15	
Chrysene	**0.0764**	**0.0786**	0.0833	0.0833	92	94	66 - 123	3	15	
Benzo[b]fluoranthene	**0.0744**	**0.0816**	0.0833	0.0833	89	98	68 - 128	9	15	
Benzo(j,k)fluoranthene	**0.0718**	**0.0763**	0.0833	0.0833	86	92	63 - 128	6	16	
Benzo[a]pyrene	**0.0772**	**0.0809**	0.0833	0.0833	93	97	66 - 130	5	15	
Indeno(1,2,3-c,d)pyrene	**0.0685**	**0.0751**	0.0833	0.0833	82	90	63 - 135	9	15	
Dibenz[a,h]anthracene	**0.0710**	**0.0803**	0.0833	0.0833	85	96	65 - 130	12	15	
Benzo[g,h,i]perylene	**0.0708**	**0.0798**	0.0833	0.0833	85	96	66 - 127	12	15	
Surrogate:										
2-Fluorobiphenyl					*78*	*82*	*46 - 113*			
Pyrene-d10					*85*	*89*	*45 - 114*			
Terphenyl-d14					*86*	*90*	*49 - 121*			

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0916S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0720**	**0.0689**	0.0833	0.0833	86	83	60 - 116	4	16	
Acenaphthylene	**0.0751**	**0.0731**	0.0833	0.0833	90	88	60 - 125	3	15	
Acenaphthene	**0.0771**	**0.0752**	0.0833	0.0833	93	90	60 - 121	2	15	
Fluorene	**0.0725**	**0.0706**	0.0833	0.0833	87	85	65 - 126	3	15	
Phenanthrene	**0.0735**	**0.0691**	0.0833	0.0833	88	83	65 - 120	6	15	
Anthracene	**0.0741**	**0.0718**	0.0833	0.0833	89	86	67 - 125	3	15	
Fluoranthene	**0.0704**	**0.0767**	0.0833	0.0833	85	92	66 - 125	9	15	
Pyrene	**0.0751**	**0.0781**	0.0833	0.0833	90	94	62 - 125	4	15	
Benzo[a]anthracene	**0.0789**	**0.0738**	0.0833	0.0833	95	89	72 - 129	7	15	
Chrysene	**0.0740**	**0.0717**	0.0833	0.0833	89	86	66 - 123	3	15	
Benzo[b]fluoranthene	**0.0767**	**0.0690**	0.0833	0.0833	92	83	68 - 128	11	15	
Benzo(j,k)fluoranthene	**0.0722**	**0.0702**	0.0833	0.0833	87	84	63 - 128	3	16	
Benzo[a]pyrene	**0.0768**	**0.0731**	0.0833	0.0833	92	88	66 - 130	5	15	
Indeno(1,2,3-c,d)pyrene	**0.0749**	**0.0716**	0.0833	0.0833	90	86	63 - 135	5	15	
Dibenz[a,h]anthracene	**0.0765**	**0.0726**	0.0833	0.0833	92	87	65 - 130	5	15	
Benzo[g,h,i]perylene	**0.0759**	**0.0723**	0.0833	0.0833	91	87	66 - 127	5	15	
Surrogate:										
2-Fluorobiphenyl					*85*	*84*	*46 - 113*			
Pyrene-d10					*85*	*84*	*45 - 114*			
Terphenyl-d14					*88*	*83*	*49 - 121*			

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

TOTAL METALS
EPA 6010D/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-22.5**					
Laboratory ID:	09-116-06					
Arsenic	**ND**	11	EPA 6010D	9-16-20	9-16-20	
Barium	**490**	2.9	EPA 6010D	9-16-20	9-16-20	
Cadmium	**0.73**	0.57	EPA 6010D	9-16-20	9-16-20	
Chromium	**23**	0.57	EPA 6010D	9-16-20	9-16-20	
Lead	**130**	5.7	EPA 6010D	9-16-20	9-16-20	
Mercury	**ND**	0.29	EPA 7471B	9-16-20	9-16-20	
Selenium	**ND**	11	EPA 6010D	9-16-20	9-16-20	
Silver	**ND**	1.1	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-13-20.0**					
Laboratory ID:	09-116-07					
Cadmium	**ND**	1.4	EPA 6010D	9-16-20	9-16-20	
Lead	**96**	14	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-14-22.5**					
Laboratory ID:	09-116-16					
Arsenic	**13**	11	EPA 6010D	9-16-20	9-16-20	
Barium	**68**	2.7	EPA 6010D	9-16-20	9-16-20	
Cadmium	**ND**	0.55	EPA 6010D	9-16-20	9-16-20	
Chromium	**17**	0.55	EPA 6010D	9-16-20	9-16-20	
Lead	**31**	5.5	EPA 6010D	9-16-20	9-16-20	
Mercury	**ND**	0.27	EPA 7471B	9-16-20	9-16-20	
Selenium	**ND**	11	EPA 6010D	9-16-20	9-16-20	
Silver	**ND**	1.1	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-14-20.0**					
Laboratory ID:	09-116-17					
Cadmium	**ND**	0.58	EPA 6010D	9-16-20	9-16-20	
Lead	**50**	5.8	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-12-21.5**					
Laboratory ID:	09-116-18					
Lead	**25**	5.6	EPA 6010D	9-16-20	9-16-20	

Date of Report: September 16, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

TOTAL METALS
EPA 6010D/7471B

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-15-22.5**					
Laboratory ID:	09-116-25					
Arsenic	**ND**	11	EPA 6010D	9-16-20	9-16-20	
Barium	**81**	2.7	EPA 6010D	9-16-20	9-16-20	
Cadmium	**ND**	0.54	EPA 6010D	9-16-20	9-16-20	
Chromium	**15**	0.54	EPA 6010D	9-16-20	9-16-20	
Lead	**120**	5.4	EPA 6010D	9-16-20	9-16-20	
Mercury	**ND**	0.27	EPA 7471B	9-16-20	9-16-20	
Selenium	**ND**	11	EPA 6010D	9-16-20	9-16-20	
Silver	**ND**	1.1	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-15-20.0**					
Laboratory ID:	09-116-26					
Cadmium	**ND**	0.59	EPA 6010D	9-16-20	9-16-20	
Lead	**56**	5.9	EPA 6010D	9-16-20	9-16-20	
Client ID:	**FB-15-17.5**					
Laboratory ID:	09-116-27					
Cadmium	**ND**	0.56	EPA 6010D	9-16-20	9-16-20	
Lead	**ND**	5.6	EPA 6010D	9-16-20	9-16-20	

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TOTAL METALS
EPA 6010D/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0916SM1					
Arsenic	**ND**	10	EPA 6010D	9-16-20	9-16-20	
Cadmium	**ND**	0.50	EPA 6010D	9-16-20	9-16-20	
Lead	**ND**	5.0	EPA 6010D	9-16-20	9-16-20	
Selenium	**ND**	10	EPA 6010D	9-16-20	9-16-20	
Silver	**ND**	1.0	EPA 6010D	9-16-20	9-16-20	
Laboratory ID:	MB0916S1					
Mercury	**ND**	0.25	EPA 7471B	9-16-20	9-16-20	
Laboratory ID:	MB0916SM2					
Barium	**ND**	2.5	EPA 6010D	9-16-20	9-16-20	
Chromium	**ND**	0.50	EPA 6010D	9-16-20	9-16-20	

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Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116
Project: 397-019

TOTAL METALS
EPA 6010D/7471B
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-116-18										
	ORIG	DUP									
Arsenic	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**21.9**	**22.5**	NA	NA		NA		NA	3	20	
Selenium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Silver	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	09-116-16										
Mercury	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	09-116-18										
	ORIG	DUP									
Barium	**69.2**	**62.4**	NA	NA		NA		NA	10	20	
Chromium	**20.5**	**24.2**	NA	NA		NA		NA	17	20	
MATRIX SPIKES											
Laboratory ID:	09-116-18										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**94.7**	**94.6**	100	100	ND	**95**	**95**	75-125	0	20	
Cadmium	**40.0**	**40.7**	50.0	50.0	ND	**80**	**81**	75-125	2	20	
Lead	**234**	**233**	250	250	21.9	**85**	**84**	75-125	1	20	
Selenium	**85.9**	**85.7**	100	100	ND	**86**	**86**	75-125	0	20	
Silver	**20.0**	**20.2**	25.0	25.0	ND	**80**	**81**	75-125	1	20	
Laboratory ID:	09-116-16										
Mercury	**0.596**	**0.612**	0.500	0.500	0.0673	**106**	**109**	80-120	3	20	
Laboratory ID:	09-116-18										
	MS	MSD	MS	MSD		MS	MSD				
Barium	**146**	**144**	100	100	69.2	**77**	**75**	75-125	1	20	
Chromium	**104**	**103**	100	100	20.5	**84**	**83**	75-125	1	20	

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Samples Submitted: September 14, 2020
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Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-10-22.5	09-116-01	**25**	9-15-20
FB-10-20.0	09-116-02	**31**	9-15-20
FB-10-17.5	09-116-03	**58**	9-15-20
FB-13-22.5	09-116-06	**13**	9-15-20
FB-13-20.0	09-116-07	**64**	9-15-20
FB-13-17.5	09-116-08	**75**	9-15-20
FB-11-20.0	09-116-10	**45**	9-15-20
FB-11-17.5	09-116-11	**58**	9-15-20
FB-14-22.5	09-116-16	**9**	9-15-20
FB-14-20.0	09-116-17	**14**	9-15-20
FB-12-21.5	09-116-18	**11**	9-15-20
FB-12-20.0	09-116-19	**73**	9-15-20
FB-12-17.5	09-116-20	**73**	9-15-20
FB-14-17.5	09-116-23	**61**	9-15-20
FB-15-22.5	09-116-25	**8**	9-15-20
FB-15-20.0	09-116-26	**16**	9-15-20
FB-15-17.5	09-116-27	**10**	9-15-20
FB-16-22.5	09-116-30	**12**	9-15-20
FB-16-20.0	09-116-31	**10**	9-15-20
FB-16-17.5	09-116-32	**77**	9-15-20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Stacy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/~~BTEX~~ BTEX by 8260	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~NTCA~~ Metals lead + cadmium	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
1	FB-10-22.5	9/12/20	1020	Soil	5									X													X
2	FB-10-20.0		1127											X													X
3	FB-10-17.5		1154											X													X
4	FB-10-15.0		1210																								
5	FB-10-10.0		1215																								
6	FB-13-22.5		1230										X						X								X
7	FB-13-20.0		1240				X		X				X	X						X							X
8	FB-13-17.5		1250				X		X					X													X
9	FB-11-22.5		1350																								
10	FB-11-20.0		1405						X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1108
Received			9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Project Manager will confirm sample analyses and turnaround time.
X-added 9-15-20 KL (1 day TAT)

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

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Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX ~~by 8260~~	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total ~~RCRA~~ Metals lead + cadmium RCRA	Total ~~HCRA~~ Metals lead + cadmium	TCLP Metals	HEM (oil and grease) 1664A	lead only				% Moisture
11	FB-11-17.5	9/12/20	1415	Soil	5				X					X													X
12	FB-11-15.0		1420																								
13	FB-11-10.0		1430																								
14	FB-13-15.0		1555																								
15	FB-13-10.0		1600																								
16	FB-14-22.5		1555										X	X					X								X
17	FB-14-20.0		1600						X				X	X						X							X
18	FB-12-21.5	9/13/20	0930										X										X				X
19	FB-12-20.0		0937				X		X					X													X
20	FB-12-17.5		1011				X		X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1108
Received			9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See pg. 1

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX ~~or 8260~~	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~TTO~~ Metals lead + cadmium	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
21	FB-12-15.0	9/13/20	1020	S	S																						
22	FB-12-10.0		1030																								
23	FB-14-17.5		1038						X					X													X
24	FB-14-10.0		1045																								
25	FB-~~15~~ 14-22.5		1050						X				X	X					X								X
26	FB-15-20.0		1100						X				X	X						X							X
27	FB-15-17.5		1103						X				X	X						X							X
28	FB-15-15.0		1105																								
29	FB-15-10.0		1106																								
30	FB-~~16~~ 14-22.5		1125						X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		speedy	9-14-20	1108
Received		OSE	9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See pg. 1

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX 8260	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~RCRA~~ Metals lead + Cadmium	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
31	FB-16-20.0	9/13/20	1130	Soil	5				X					X													X
32	FB-16-17.5		1135						X					X													X
33	FB-16-15.0		1140																								
34	FB-16-10.0		1150																								

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1110
Received		OSC	9/14/20	1110
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

See PG. 1

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 29, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2009-116B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on September 14, 2020.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

Case Narrative

Samples were collected on September 12 and 13, 2020 and received by the laboratory on September 14, 2020. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-15.0**					
Laboratory ID:	09-116-14					
Diesel Range Organics	**ND**	130	NWTPH-Dx	9-21-20	9-21-20	
Lube Oil Range Organics	**1200**	260	NWTPH-Dx	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0921S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-21-20	9-21-20	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0921S1										
	ORIG	DUP									
Diesel Fuel #2	**90.3**	**88.6**	NA	NA		NA		NA	2	NA	
Surrogate:											
o-Terphenyl						*86*	*85*	*50-150*			

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-15.0**					
Laboratory ID:	09-116-14					
Benzo[a]anthracene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Chrysene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[b]fluoranthene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo(j,k)fluoranthene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[a]pyrene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Dibenz[a,h]anthracene	**ND**	0.035	EPA 8270E/SIM	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*59*	*46 - 113*				
Pyrene-d10	*63*	*45 - 114*				
Terphenyl-d14	*71*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-12-15.0**					
Laboratory ID:	09-116-21					
Benzo[a]anthracene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Chrysene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[b]fluoranthene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo(j,k)fluoranthene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[a]pyrene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Dibenz[a,h]anthracene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*62*	*46 - 113*				
Pyrene-d10	*67*	*45 - 114*				
Terphenyl-d14	*65*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-15-15.0**					
Laboratory ID:	09-116-28					
Benzo[a]anthracene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Chrysene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[b]fluoranthene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo(j,k)fluoranthene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[a]pyrene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Dibenz[a,h]anthracene	**ND**	0.022	EPA 8270E/SIM	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*70*	*46 - 113*				
Pyrene-d10	*69*	*45 - 114*				
Terphenyl-d14	*65*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0921S1					
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-21-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*77*	*46 - 113*				
Pyrene-d10	*83*	*45 - 114*				
Terphenyl-d14	*91*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0921S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	**0.0670**	**0.0707**	0.0833	0.0833	80	85	72 - 129	5	15	
Chrysene	**0.0663**	**0.0714**	0.0833	0.0833	80	86	66 - 123	7	15	
Benzo[b]fluoranthene	**0.0674**	**0.0692**	0.0833	0.0833	81	83	68 - 128	3	15	
Benzo(j,k)fluoranthene	**0.0662**	**0.0701**	0.0833	0.0833	79	84	63 - 128	6	16	
Benzo[a]pyrene	**0.0644**	**0.0691**	0.0833	0.0833	77	83	66 - 130	7	15	
Indeno(1,2,3-c,d)pyrene	**0.0620**	**0.0661**	0.0833	0.0833	74	79	63 - 135	6	15	
Dibenz[a,h]anthracene	**0.0589**	**0.0622**	0.0833	0.0833	71	75	65 - 130	5	15	
Surrogate:										
2-Fluorobiphenyl					*73*	*71*	*46 - 113*			
Pyrene-d10					*82*	*85*	*45 - 114*			
Terphenyl-d14					*81*	*85*	*49 - 121*			

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-22.5**					
Laboratory ID:	09-116-06					
Benzo[a]anthracene	**24**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Chrysene	**24**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Benzo[b]fluoranthene	**24**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Benzo(j,k)fluoranthene	**7.7**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Benzo[a]pyrene	**25**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Indeno(1,2,3-c,d)pyrene	**12**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Dibenz[a,h]anthracene	**2.1**	0.77	EPA 8270E/SIM	9-15-20	9-21-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*63*	*46 - 113*				
Pyrene-d10	*72*	*45 - 114*				
Terphenyl-d14	*76*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0915S1					
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	9-15-20	9-15-20	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*78*	*46 - 113*				
Pyrene-d10	*88*	*45 - 114*				
Terphenyl-d14	*92*	*49 - 121*				

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0915S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0675**	**0.0646**	0.0833	0.0833	81	78	60 - 116	4	16	
Acenaphthylene	**0.0674**	**0.0694**	0.0833	0.0833	81	83	60 - 125	3	15	
Acenaphthene	**0.0703**	**0.0724**	0.0833	0.0833	84	87	60 - 121	3	15	
Fluorene	**0.0684**	**0.0724**	0.0833	0.0833	82	87	65 - 126	6	15	
Phenanthrene	**0.0700**	**0.0736**	0.0833	0.0833	84	88	65 - 120	5	15	
Anthracene	**0.0711**	**0.0748**	0.0833	0.0833	85	90	67 - 125	5	15	
Fluoranthene	**0.0714**	**0.0784**	0.0833	0.0833	86	94	66 - 125	9	15	
Pyrene	**0.0755**	**0.0799**	0.0833	0.0833	91	96	62 - 125	6	15	
Benzo[a]anthracene	**0.0790**	**0.0847**	0.0833	0.0833	95	102	72 - 129	7	15	
Chrysene	**0.0764**	**0.0786**	0.0833	0.0833	92	94	66 - 123	3	15	
Benzo[b]fluoranthene	**0.0744**	**0.0816**	0.0833	0.0833	89	98	68 - 128	9	15	
Benzo(j,k)fluoranthene	**0.0718**	**0.0763**	0.0833	0.0833	86	92	63 - 128	6	16	
Benzo[a]pyrene	**0.0772**	**0.0809**	0.0833	0.0833	93	97	66 - 130	5	15	
Indeno(1,2,3-c,d)pyrene	**0.0685**	**0.0751**	0.0833	0.0833	82	90	63 - 135	9	15	
Dibenz[a,h]anthracene	**0.0710**	**0.0803**	0.0833	0.0833	85	96	65 - 130	12	15	
Benzo[g,h,i]perylene	**0.0708**	**0.0798**	0.0833	0.0833	85	96	66 - 127	12	15	
Surrogate:										
2-Fluorobiphenyl					*78*	*82*	*46 - 113*			
Pyrene-d10					*85*	*89*	*45 - 114*			
Terphenyl-d14					*86*	*90*	*49 - 121*			

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-13-22.5**					
Laboratory ID:	09-116-06					
Lead	**ND**	0.20	EPA 6010D	9-24-20	9-24-20	
Client ID:	**FB-15-22.5**					
Laboratory ID:	09-116-25					
Lead	**0.41**	0.20	EPA 6010D	9-24-20	9-24-20	

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0924TM1					
Lead	**ND**	0.20	EPA 6010D	9-24-20	9-24-20	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-116-25										
	ORIG	DUP									
Lead	**0.414**	**0.402**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	09-116-25										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**9.44**	**9.38**	10.0	10.0	0.414	**90**	**90**	75-125	1	20	

Date of Report: September 29, 2020
Samples Submitted: September 14, 2020
Laboratory Reference: 2009-116B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-13-15.0	09-116-14	**81**	9-18-20
FB-12-15.0	09-116-21	**70**	9-18-20
FB-15-15.0	09-116-28	**70**	9-18-20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Retka

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/~~BTEX~~ BTEX by 8260	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals lead + cadmium	TCLP ~~Metals~~ Lead	HEM (oil and grease) 1664A					% Moisture
1	FB-10-22.5	9/12/20	1020	Soil	5									X													X
2	FB-10-20.0		1127											X													X
3	FB-10-17.5		1154											X													X
4	FB-10-15.0		1210																								
5	FB-10-10.0		1215																								
6	FB-13-22.5		1230										X						X		O						X
7	FB-13-20.0		1240				X		X				X	X						X							X
8	FB-13-17.5		1250				X		X					X													X
9	FB-11-22.5		1350																								
10	FB-11-20.0	↓	1405	↓	↓				X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1108
Received			9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Project Manager will confirm sample analyses and turnaround time.
X-added 9-15-20 KL (1 day TAT)
⊗ Added 9/15/20 BK 1 day TAT

Data Package: Standard ☐ Level III ☒ Level IV ☐ STA
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX ~~by 8260~~	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total ~~RCRA~~ Metals lead + cadmium	Total ~~RCRA~~ Metals lead + cadmium	TCLP Metals	HEM (oil and grease) 1664A	lead only				% Moisture
11	FB-11-17.5	9/12/20	1415	Soil	5				X					X													X
12	FB-11-15.0		1420																								
13	FB-11-10.0		1430																								
14	FB-13-15.0		0955						(X)					(X)													(X)
15	FB-13-10.0		1600																								
16	FB-14-22.5		1555										X	X					X								X
17	FB-14-20.0		1600						X				X	X						X							X
18	FB-12-21.5	9/13/20	0930										X										X				X
19	FB-12-20.0		~~0937~~				X		X					X													X
20	FB-12-17.5	↓	1011		↓		X		X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1108
Received			9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

See pg. 1

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX ~~by 8260~~	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) c PAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals lead + cadmium	TCLP ~~Metals~~ Lead	HEM (oil and grease) 1664A					% Moisture
21	FB-12-15.0	9/13/20	1020	S	5									X													X
22	FB-12-10.0		1030																								
23	FB-14-17.5		1038						X					X													X
24	FB-14-10.0		1045																								
25	FB-~~15~~ 14-22.5		1050						X				X	X					X		0						X
26	FB-15-20.0		1100						X				X	X						X							X
27	FB-15-17.5		1103						X				X	X						X							X
28	FB-15-15.0		1105											X													X
29	FB-15-10.0		1106																								
30	FB-~~16~~ 14-22.5		1125						X					X													X

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		speedy	9-14-20	1108
Received			9/14/20	1108
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See pg 1

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Pokes

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 09-116

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
31	FB-16-20.0	9/13/20	1130	Soil	5
32	FB-16-17.5		1135		
33	FB-16-15.0		1140		
34	FB-16-10.0		1150		

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX by 8260C	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs) Naphthalenes	PAHs 8270D/SIM (low-level) cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals lead + Cadmium	TCLP Metals	HEM (oil and grease) 1664A					% Moisture
31				X					X													X
32				X					X													X
33																						
34																						

	Signature	Company	Date	Time
Relinquished		Farallon	9/13/20	1430
Received		Speedy	9-14-20	1030
Relinquished		Speedy	9-14-20	1110
Received		OSE	9/14/20	1110
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

See Pg. 1

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

2022 LABORATORY REPORTS

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 18, 2022

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2202-076B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2022.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

Case Narrative

Samples were collected on February 5, 2022 and received by the laboratory on February 7, 2022. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-21-5.0**					
Laboratory ID:	02-076-07					
Benzo[a]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Chrysene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo[b]fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo(j,k)fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo[a]pyrene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Dibenz[a,h]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*79*	*41 - 114*				
Pyrene-d10	*94*	*39 - 115*				
Terphenyl-d14	*94*	*44 - 125*				

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0217S1					
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*41 - 114*				
Pyrene-d10	*97*	*39 - 115*				
Terphenyl-d14	*95*	*44 - 125*				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0217S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	**0.0986**	**0.0954**	0.0833	0.0833	118	115	64 - 138	3	15	
Chrysene	**0.0962**	**0.0962**	0.0833	0.0833	115	115	63 - 128	0	15	
Benzo[b]fluoranthene	**0.0918**	**0.0881**	0.0833	0.0833	110	106	62 - 129	4	15	
Benzo(j,k)fluoranthene	**0.0882**	**0.0882**	0.0833	0.0833	106	106	59 - 134	0	16	
Benzo[a]pyrene	**0.0918**	**0.0890**	0.0833	0.0833	110	107	63 - 132	3	15	
Indeno(1,2,3-c,d)pyrene	**0.0832**	**0.0802**	0.0833	0.0833	100	96	58 - 132	4	15	
Dibenz[a,h]anthracene	**0.0888**	**0.0864**	0.0833	0.0833	107	104	60 - 130	3	15	
Surrogate:										
2-Fluorobiphenyl					*83*	*80*	*41 - 114*			
Pyrene-d10					*99*	*96*	*39 - 115*			
Terphenyl-d14					*100*	*98*	*44 - 125*			

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-21-5.0	02-076-07	**13**	2-17-22

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Sady Stumpf
Sampled by: G. Rikes

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 02-076

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Hold	cPAHs	Naphthalenes		% Moisture
1	FB-20-12.0	2/5/22	910	Soil	5				X															X	X		X
2	FB-20-15.0		920		5				X															X	X		X
3	FB-20-17.0		925		5				X															X	X		X
4	FB-20-22.0		930		5																	X					
5	FB-20-25.0		940		5																	X					
6	FB-21-3.0		1045		1																			X			X
7	FB-21-5.0		1100		1																	X		(X)			(X)
8	FB-21-10.0		1105		1																	X					
9	FMW-154-5.0		1220		5																	X					
10	FMW-154-10.0		1230		5																	X					

	Signature	Company	Date	Time
Relinquished		Farallon	2/6/22	1330
Received	Van	Sady	2/7/22	0837
Relinquished	Van	Sady	2/7/22	1015
Received	Nichelle Robinson	OSE	2/7/22	1015
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(X) Added 2/17/22. DB (STA)

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Terralon
Project Number: 327-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: G. Peters

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 02-076

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Hold				% Moisture
11	~~FB~~ MW-154-15.0	2/5/22	1240	Soil	5																		X				
12	FMW-155-5.0		1300																								
13	FMW-155-10.0		1310																								
14	FMW-155-15.0		1315																								
15	FMW-156-10.0		1400																								
16	FMW-156-15.0		1405																								
17	FMW-156-20.0		1410																								
18	FMW-157-30.0		1440																								
19	FMW-157-35.0		1450																								
20	FMW-157-40.0		1500																								

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Terralon	2/6/22	1330	
Received	Van	Spdy	2/7/22	0837	
Relinquished	Van	Spdy	2/7/22	1015	
Received		OS	2/7/22	1015	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 18, 2022

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2202-076B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2022.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

Case Narrative

Samples were collected on February 5, 2022 and received by the laboratory on February 7, 2022. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-21-5.0**					
Laboratory ID:	02-076-07					
Naphthalene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
2-Methylnaphthalene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
1-Methylnaphthalene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo[a]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Chrysene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo[b]fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo(j,k)fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Benzo[a]pyrene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Dibenz[a,h]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-17-22	2-18-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*79*	*42 - 116*				
Pyrene-d10	*94*	*41 - 116*				
Terphenyl-d14	*94*	*49 - 130*				

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0217S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-17-22	2-17-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*42 - 116*				
Pyrene-d10	*97*	*41 - 116*				
Terphenyl-d14	*95*	*49 - 130*				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0217S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0917**	**0.0849**	0.0833	0.0833	110	102	60 - 117	8	19	
Acenaphthylene	**0.0938**	**0.0893**	0.0833	0.0833	113	107	68 - 129	5	15	
Acenaphthene	**0.0965**	**0.0900**	0.0833	0.0833	116	108	67 - 127	7	15	
Fluorene	**0.0876**	**0.0846**	0.0833	0.0833	105	102	69 - 128	3	15	
Phenanthrene	**0.0805**	**0.0748**	0.0833	0.0833	97	90	70 - 126	7	15	
Anthracene	**0.0877**	**0.0855**	0.0833	0.0833	105	103	72 - 130	3	15	
Fluoranthene	**0.0920**	**0.0885**	0.0833	0.0833	110	106	70 - 135	4	15	
Pyrene	**0.0931**	**0.0915**	0.0833	0.0833	112	110	62 - 134	2	15	
Benzo[a]anthracene	**0.0986**	**0.0954**	0.0833	0.0833	118	115	73 - 128	3	15	
Chrysene	**0.0962**	**0.0962**	0.0833	0.0833	115	115	73 - 131	0	15	
Benzo[b]fluoranthene	**0.0918**	**0.0881**	0.0833	0.0833	110	106	72 - 134	4	15	
Benzo(j,k)fluoranthene	**0.0882**	**0.0882**	0.0833	0.0833	106	106	59 - 140	0	16	
Benzo[a]pyrene	**0.0918**	**0.0890**	0.0833	0.0833	110	107	70 - 135	3	15	
Indeno(1,2,3-c,d)pyrene	**0.0832**	**0.0802**	0.0833	0.0833	100	96	70 - 132	4	15	
Dibenz[a,h]anthracene	**0.0888**	**0.0864**	0.0833	0.0833	107	104	70 - 132	3	15	
Benzo[g,h,i]perylene	**0.0880**	**0.0885**	0.0833	0.0833	106	106	70 - 131	1	15	
Surrogate:										
2-Fluorobiphenyl					*83*	*80*	*42 - 116*			
Pyrene-d10					*99*	*96*	*41 - 116*			
Terphenyl-d14					*100*	*98*	*49 - 130*			

Date of Report: February 18, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-21-5.0	02-076-07	**13**	2-17-22

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 17, 2022

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2202-076

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2022.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

Case Narrative

Samples were collected on February 5, 2022 and received by the laboratory on February 7, 2022. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-20-12-0**					
Laboratory ID:	02-076-01					
Diesel Range Organics	**ND**	28	NWTPH-Dx	2-9-22	2-14-22	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	2-9-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Client ID:	**FB-20-15.0**					
Laboratory ID:	02-076-02					
Diesel Range Organics	**ND**	29	NWTPH-Dx	2-9-22	2-14-22	
Lube Oil Range Organics	**83**	58	NWTPH-Dx	2-9-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**FB-20-17.0**					
Laboratory ID:	02-076-03					
Diesel Range Organics	**59**	33	NWTPH-Dx	2-9-22	2-14-22	N
Lube Oil Range Organics	**210**	66	NWTPH-Dx	2-9-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0209S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	2-9-22	2-9-22	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	2-9-22	2-9-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	SB0209S1										
	ORIG	DUP									
Diesel Fuel #2	**80.1**	**78.1**	NA	NA		NA		NA	3	NA	
Surrogate:											
o-Terphenyl						*96*	*93*	*50-150*			

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-20-12-0**					
Laboratory ID:	02-076-01					
Naphthalene	**0.019**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
2-Methylnaphthalene	**0.0081**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
1-Methylnaphthalene	**ND**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]anthracene	**0.046**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Chrysene	**0.039**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[b]fluoranthene	**0.038**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo(j,k)fluoranthene	**0.015**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]pyrene	**0.048**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Indeno(1,2,3-c,d)pyrene	**0.025**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Dibenz[a,h]anthracene	**ND**	0.0075	EPA 8270E/SIM	2-14-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*41 - 114*				
Pyrene-d10	*87*	*39 - 115*				
Terphenyl-d14	*81*	*44 - 125*				
Client ID:	**FB-20-15.0**					
Laboratory ID:	02-076-02					
Naphthalene	**0.014**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
2-Methylnaphthalene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
1-Methylnaphthalene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Chrysene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[b]fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo(j,k)fluoranthene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]pyrene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Dibenz[a,h]anthracene	**ND**	0.0077	EPA 8270E/SIM	2-14-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*85*	*41 - 114*				
Pyrene-d10	*86*	*39 - 115*				
Terphenyl-d14	*88*	*44 - 125*				

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**FB-20-17.0**					
Laboratory ID:	02-076-03					
Naphthalene	**0.16**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
2-Methylnaphthalene	**0.036**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
1-Methylnaphthalene	**0.060**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]anthracene	**0.017**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Chrysene	**0.026**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[b]fluoranthene	**0.019**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo(j,k)fluoranthene	**ND**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]pyrene	**0.022**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Indeno(1,2,3-c,d)pyrene	**0.012**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Dibenz[a,h]anthracene	**ND**	0.0088	EPA 8270E/SIM	2-14-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*77*	*41 - 114*				
Pyrene-d10	*71*	*39 - 115*				
Terphenyl-d14	*79*	*44 - 125*				
Client ID:	**FB-21-3.0**					
Laboratory ID:	02-076-06					
Benzo[a]anthracene	**0.23**	0.0082	EPA 8270E/SIM	2-14-22	2-14-22	
Chrysene	**0.23**	0.0082	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[b]fluoranthene	**0.26**	0.041	EPA 8270E/SIM	2-14-22	2-15-22	
Benzo(j,k)fluoranthene	**0.057**	0.041	EPA 8270E/SIM	2-14-22	2-15-22	
Benzo[a]pyrene	**0.17**	0.041	EPA 8270E/SIM	2-14-22	2-15-22	
Indeno(1,2,3-c,d)pyrene	**0.095**	0.041	EPA 8270E/SIM	2-14-22	2-15-22	
Dibenz[a,h]anthracene	**ND**	0.041	EPA 8270E/SIM	2-14-22	2-15-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*89*	*41 - 114*				
Pyrene-d10	*71*	*39 - 115*				
Terphenyl-d14	*79*	*44 - 125*				

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0214S1					
Naphthalene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Chrysene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270E/SIM	2-14-22	2-14-22	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*92*	*41 - 114*				
Pyrene-d10	*99*	*39 - 115*				
Terphenyl-d14	*94*	*44 - 125*				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0214S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0899**	**0.0867**	0.0833	0.0833	108	104	57 - 117	4	16	
Acenaphthylene	**0.0958**	**0.0943**	0.0833	0.0833	115	113	58 - 126	2	15	
Acenaphthene	**0.0976**	**0.0959**	0.0833	0.0833	117	115	61 - 122	2	15	
Fluorene	**0.0996**	**0.0954**	0.0833	0.0833	120	115	59 - 127	4	15	
Phenanthrene	**0.0968**	**0.0921**	0.0833	0.0833	116	111	58 - 124	5	15	
Anthracene	**0.0973**	**0.0910**	0.0833	0.0833	117	109	64 - 128	7	15	
Fluoranthene	**0.104**	**0.0907**	0.0833	0.0833	125	109	63 - 128	14	15	
Pyrene	**0.101**	**0.0961**	0.0833	0.0833	121	115	62 - 129	5	15	
Benzo[a]anthracene	**0.100**	**0.0977**	0.0833	0.0833	120	117	64 - 138	2	15	
Chrysene	**0.0976**	**0.0920**	0.0833	0.0833	117	110	63 - 128	6	15	
Benzo[b]fluoranthene	**0.0957**	**0.0958**	0.0833	0.0833	115	115	62 - 129	0	15	
Benzo(j,k)fluoranthene	**0.0970**	**0.0859**	0.0833	0.0833	116	103	59 - 134	12	16	
Benzo[a]pyrene	**0.0991**	**0.0944**	0.0833	0.0833	119	113	63 - 132	5	15	
Indeno(1,2,3-c,d)pyrene	**0.101**	**0.0923**	0.0833	0.0833	121	111	58 - 132	9	15	
Dibenz[a,h]anthracene	**0.0975**	**0.0925**	0.0833	0.0833	117	111	60 - 130	5	15	
Benzo[g,h,i]perylene	**0.0958**	**0.0919**	0.0833	0.0833	115	110	61 - 129	4	15	
Surrogate:										
2-Fluorobiphenyl					*91*	*92*	*41 - 114*			
Pyrene-d10					*105*	*93*	*39 - 115*			
Terphenyl-d14					*95*	*91*	*44 - 125*			

Date of Report: February 17, 2022
Samples Submitted: February 7, 2022
Laboratory Reference: 2202-076
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-20-12-0	02-076-01	**11**	2-9-22
FB-20-15.0	02-076-02	**14**	2-9-22
FB-20-17.0	02-076-03	**25**	2-9-22
FB-21-3.0	02-076-06	**18**	2-9-22

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Farallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Sady Stumpf
Sampled by: G. Ekes

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 02-076

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Hold	cPAHs	Naphthalenes		% Moisture
1	FB-20-12.0	2/5/22	910	Soil	5				X															X	X		X
2	FB-20-15.0		920		5				X															X	X		X
3	FB-20-17.0		925		5				X															X	X		X
4	FB-20-22.0		930		5																		X				
5	FB-20-25.0		940		5																		X				
6	FB-21-3.0		1045		1																			X			X
7	FB-21-5.0		1100		1																		X				
8	FB-21-10.0		1105		1																		X				
9	FMW-154-5.0		1220		5																		X				
10	FMW-154-10.0		1230		5																		X				

	Signature	Company	Date	Time
Relinquished		Farallon	2/6/22	1330
Received	Van	Sady	2/7/22	0837
Relinquished	Van	Sady	2/7/22	1015
Received	Nicole Richter	OSE	2/7/22	1015
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Terralon
Project Number: 327-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: G. Peters

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 02-076

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Hold				% Moisture
11	~~FB~~ MW-154-15.0	2/5/22	1240	Soil	5																		X				
12	FMW-155-5.0		1300																								
13	FMW-155-10.0		1310																								
14	FMW-155-15.0		1315																								
15	FMW-156-10.0		1400																								
16	FMW-156-15.0		1405																								
17	FMW-156-20.0		1410																								
18	FMW-157-30.0		1440																								
19	FMW-157-35.0		1450																								
20	FMW-157-40.0		1500																								

	Signature	Company	Date	Time
Relinquished		Terralon	2/6/22	1330
Received	Van	Spdy	2/7/22	0837
Relinquished	Van	Spdy	2/7/22	1015
Received		OS	2/7/22	1015
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

2023 LABORATORY REPORTS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Thursday, May 25, 2023

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3E1048 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3E1048, which was received by the laboratory on 5/4/2023 at 10:58:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler	3.2	degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-163-20.0	A3E1048-01	Soil	05/01/23 12:40	05/04/23 10:58
FMW-163-15.0	A3E1048-02	Soil	05/01/23 12:50	05/04/23 10:58
FMW-161-20.0	A3E1048-05	Soil	05/03/23 10:40	05/04/23 10:58
FMW-161-15.0	A3E1048-06	Soil	05/03/23 10:47	05/04/23 10:58

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-163-20.0 (A3E1048-01)				**Matrix: Soil**		**Batch: 23E0443**		
Diesel	ND	11.6	23.1	mg/kg dry	1	05/10/23 21:15	NWTPH-Dx	
Oil	ND	23.1	46.2	mg/kg dry	1	05/10/23 21:15	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*		*Limits: 50-150 %*	*1*	*05/10/23 21:15*	*NWTPH-Dx*	
FMW-163-15.0 (A3E1048-02)				**Matrix: Soil**		**Batch: 23E0443**		
Diesel	ND	12.1	24.1	mg/kg dry	1	05/10/23 21:55	NWTPH-Dx	
Oil	ND	24.1	48.3	mg/kg dry	1	05/10/23 21:55	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*05/10/23 21:55*	*NWTPH-Dx*	
FMW-161-20.0 (A3E1048-05)				**Matrix: Soil**		**Batch: 23E0443**		
Diesel	ND	13.3	26.6	mg/kg dry	1	05/10/23 22:15	NWTPH-Dx	
Oil	**71.6**	26.6	53.3	mg/kg dry	1	05/10/23 22:15	NWTPH-Dx	**F-13**
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*		*Limits: 50-150 %*	*1*	*05/10/23 22:15*	*NWTPH-Dx*	
FMW-161-15.0 (A3E1048-06)				**Matrix: Soil**		**Batch: 23E0443**		
Diesel	ND	12.0	24.0	mg/kg dry	1	05/10/23 22:56	NWTPH-Dx	
Oil	ND	24.0	48.1	mg/kg dry	1	05/10/23 22:56	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*		*Limits: 50-150 %*	*1*	*05/10/23 22:56*	*NWTPH-Dx*	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-163-20.0 (A3E1048-01RE2)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	ND	0.00154	0.00309	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Benzo(a)pyrene	ND	0.00231	0.00462	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.00693	0.0139	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Chrysene	ND	0.00154	0.00309	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00154	0.00309	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00154	0.00309	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
1-Methylnaphthalene	ND	0.00309	0.00616	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
2-Methylnaphthalene	ND	0.00309	0.00616	mg/kg dry	1	05/15/23 15:00	EPA 8270E	
Naphthalene	**0.00552**	0.00309	0.00616	mg/kg dry	1	05/15/23 15:00	EPA 8270E	**J, Q-37**
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*96 %*	*Limits: 37-122 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*87 %*	*44-120 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
Phenol-d6 (Surr)			*113 %*	*33-122 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*99 %*	*54-127 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
2-Fluorophenol (Surr)			*99 %*	*35-120 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*98 %*	*39-132 %*	*1*	*05/15/23 15:00*	*EPA 8270E*	
FMW-163-15.0 (A3E1048-02RE1)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	ND	0.00158	0.00318	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Benzo(a)pyrene	ND	0.00238	0.00477	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.00715	0.0143	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Chrysene	ND	0.00158	0.00318	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00158	0.00318	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00158	0.00318	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
1-Methylnaphthalene	**0.00789**	0.00318	0.00635	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
2-Methylnaphthalene	**0.00857**	0.00318	0.00635	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Naphthalene	**0.340**	0.00318	0.00635	mg/kg dry	1	05/15/23 16:11	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*76 %*	*Limits: 37-122 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*65 %*	*44-120 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
Phenol-d6 (Surr)			*94 %*	*33-122 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*71 %*	*54-127 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
2-Fluorophenol (Surr)			*88 %*	*35-120 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*71 %*	*39-132 %*	*1*	*05/15/23 16:11*	*EPA 8270E*	
FMW-161-20.0 (A3E1048-05RE2)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	**0.00917**	0.00173	0.00348	mg/kg dry	1	05/15/23 18:35	EPA 8270E	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-161-20.0 (A3E1048-05RE2)				**Matrix: Soil**		**Batch: 23E0546**		
Benzo(a)pyrene	**0.00987**	0.00261	0.00521	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
Benzofluoranthenes (Total)	**0.0165**	0.00782	0.0156	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
Chrysene	**0.0125**	0.00173	0.00348	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
Dibenz(a,h)anthracene	**0.00199**	0.00173	0.00348	mg/kg dry	1	05/15/23 18:35	EPA 8270E	**J**
Indeno(1,2,3-cd)pyrene	**0.00884**	0.00173	0.00348	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
1-Methylnaphthalene	ND	0.00348	0.00695	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
2-Methylnaphthalene	ND	0.00348	0.00695	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
Naphthalene	**0.0113**	0.00348	0.00695	mg/kg dry	1	05/15/23 18:35	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*86 %*	*Limits: 37-122 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*81 %*	*44-120 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
Phenol-d6 (Surr)			*102 %*	*33-122 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*91 %*	*54-127 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
2-Fluorophenol (Surr)			*93 %*	*35-120 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*81 %*	*39-132 %*	*1*	*05/15/23 18:35*	*EPA 8270E*	
FMW-161-15.0 (A3E1048-06RE2)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	ND	0.00155	0.00311	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Benzo(a)pyrene	ND	0.00233	0.00466	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.00700	0.0140	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Chrysene	ND	0.00155	0.00311	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00155	0.00311	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00155	0.00311	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
1-Methylnaphthalene	ND	0.00311	0.00621	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
2-Methylnaphthalene	ND	0.00311	0.00621	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Naphthalene	**0.0336**	0.00311	0.00621	mg/kg dry	1	05/15/23 17:23	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*88 %*	*Limits: 37-122 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*83 %*	*44-120 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	
Phenol-d6 (Surr)			*96 %*	*33-122 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*88 %*	*54-127 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	
2-Fluorophenol (Surr)			*90 %*	*35-120 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*96 %*	*39-132 %*	*1*	*05/15/23 17:23*	*EPA 8270E*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-163-20.0 (A3E1048-01)				**Matrix: Soil**		**Batch: 23E0260**		
% Solids	**85.5**	1.00	1.00	%	1	05/06/23 14:50	EPA 8000D	
FMW-163-15.0 (A3E1048-02)				**Matrix: Soil**		**Batch: 23E0260**		
% Solids	**82.5**	1.00	1.00	%	1	05/06/23 14:50	EPA 8000D	
FMW-161-20.0 (A3E1048-05)				**Matrix: Soil**		**Batch: 23E0260**		
% Solids	**74.7**	1.00	1.00	%	1	05/06/23 14:50	EPA 8000D	
FMW-161-15.0 (A3E1048-06)				**Matrix: Soil**		**Batch: 23E0260**		
% Solids	**82.8**	1.00	1.00	%	1	05/06/23 14:50	EPA 8000D	

Apex Laboratories

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0443 - EPA 3546 (Fuels)							Soil					
Blank (23E0443-BLK1)			Prepared: 05/10/23 08:45		Analyzed: 05/10/23 20:34							
NWTPH-Dx												
Diesel	ND	10.0	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	20.0	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 100 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (23E0443-BS1)			Prepared: 05/10/23 08:45		Analyzed: 05/10/23 20:54							
NWTPH-Dx												
Diesel	104	10.0	20.0	mg/kg wet	1	125	---	83	38-132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 97 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (23E0443-DUP1)			Prepared: 05/10/23 08:45		Analyzed: 05/10/23 21:35							
QC Source Sample: FMW-163-20.0 (A3E1048-01)												
NWTPH-Dx												
Diesel	ND	11.6	23.3	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	23.3	46.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 88 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (23E0443-DUP2)			Prepared: 05/10/23 18:01		Analyzed: 05/10/23 23:57							
QC Source Sample: Non-SDG (A3E1252-02)												
Diesel	ND	10.8	21.6	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	21.6	43.3	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 64 %*		*Limits: 50-150 %*		*Dilution: 1x*					

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546							**Soil**					
Blank (23E0546-BLK1)			Prepared: 05/12/23 08:03 Analyzed: 05/12/23 18:23									
EPA 8270E												
Benz(a)anthracene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00200	0.00400	mg/kg wet	1	---	---	---	---	---	---	
Benzofluoranthenes (Total)	ND	0.00600	0.0120	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 82 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*90 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*83 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*110 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*89 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*99 %*		*39-132 %*			*"*				
LCS (23E0546-BS1)			Prepared: 05/12/23 08:03 Analyzed: 05/12/23 18:57									
EPA 8270E												
Benz(a)anthracene	0.546	0.00532	0.0107	mg/kg wet	4	0.533	---	102	49-126%	---	---	
Benzo(a)pyrene	0.521	0.00800	0.0160	mg/kg wet	4	0.533	---	98	45-129%	---	---	
Benzo(b)fluoranthene	0.540	0.00800	0.0160	mg/kg wet	4	0.533	---	101	45-132%	---	---	
Benzo(k)fluoranthene	0.534	0.00800	0.0160	mg/kg wet	4	0.533	---	100	47-132%	---	---	
Chrysene	0.545	0.00532	0.0107	mg/kg wet	4	0.533	---	102	50-124%	---	---	
Dibenz(a,h)anthracene	0.539	0.00532	0.0107	mg/kg wet	4	0.533	---	101	45-134%	---	---	
Indeno(1,2,3-cd)pyrene	0.517	0.00532	0.0107	mg/kg wet	4	0.533	---	97	45-133%	---	---	
1-Methylnaphthalene	0.551	0.0107	0.0213	mg/kg wet	4	0.533	---	103	40-120%	---	---	
2-Methylnaphthalene	0.575	0.0107	0.0213	mg/kg wet	4	0.533	---	108	38-122%	---	---	
Naphthalene	0.528	0.0107	0.0213	mg/kg wet	4	0.533	---	99	35-123%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 84 %*		*Limits: 37-122 %*			*Dilution: 4x*				
2-Fluorobiphenyl (Surr)			*97 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*90 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*116 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*99 %*		*35-120 %*			*"*				

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546							**Soil**					
LCS (23E0546-BS1)			Prepared: 05/12/23 08:03 Analyzed: 05/12/23 18:57									
Surr: 2,4,6-Tribromophenol (Surr)			*Recovery: 120 %*	*Limits: 39-132 %*			*Dilution: 4x*					
Duplicate (23E0546-DUP3)			Prepared: 05/12/23 08:03 Analyzed: 05/15/23 15:35									
QC Source Sample: FMW-163-20.0 (A3E1048-01RE2)												
EPA 8270E												
Benz(a)anthracene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.00230	0.00460	mg/kg dry	1	---	ND	---	---	---	30%	
Benzofluoranthenes (Total)	ND	0.00689	0.0138	mg/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	0.00307	0.00612	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.00307	0.00612	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	**0.0167**	0.00307	0.00612	mg/kg dry	1	---	0.00552	---	---	**100**	**30%**	Q-05
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 107 %*	*Limits: 37-122 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*84 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*130 %*	*33-122 %*			*"*					S-03
p-Terphenyl-d14 (Surr)			*94 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*107 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*94 %*	*39-132 %*			*"*					
Matrix Spike (23E0546-MS1)			Prepared: 05/12/23 08:03 Analyzed: 05/15/23 12:36									
QC Source Sample: FMW-161-15.0 (A3E1048-06RE2)												
EPA 8270E												
Benz(a)anthracene	0.602	0.00633	0.0127	mg/kg dry	4	0.634	ND	95	49-126%	---	---	
Benzo(a)pyrene	0.575	0.00951	0.0190	mg/kg dry	4	0.634	ND	91	45-129%	---	---	
Benzo(b)fluoranthene	0.565	0.00951	0.0190	mg/kg dry	4	0.634	ND	89	45-132%	---	---	
Benzo(k)fluoranthene	0.598	0.00951	0.0190	mg/kg dry	4	0.634	ND	94	47-132%	---	---	
Chrysene	0.607	0.00633	0.0127	mg/kg dry	4	0.634	ND	96	50-124%	---	---	
Dibenz(a,h)anthracene	0.611	0.00633	0.0127	mg/kg dry	4	0.634	ND	96	45-134%	---	---	
Indeno(1,2,3-cd)pyrene	0.575	0.00633	0.0127	mg/kg dry	4	0.634	ND	91	45-133%	---	---	
1-Methylnaphthalene	0.595	0.0127	0.0253	mg/kg dry	4	0.634	ND	94	40-120%	---	---	
2-Methylnaphthalene	0.629	0.0127	0.0253	mg/kg dry	4	0.634	ND	99	38-122%	---	---	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546							**Soil**					
Matrix Spike (23E0546-MS1)				Prepared: 05/12/23 08:03		Analyzed: 05/15/23 12:36						
QC Source Sample: FMW-161-15.0 (A3E1048-06RE2)												
Naphthalene	0.637	0.0127	0.0253	mg/kg dry	4	0.634	0.0336	95	35-123%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 92 %*		*Limits: 37-122 %*		*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*96 %*		*44-120 %*		*"*					
Phenol-d6 (Surr)			*102 %*		*33-122 %*		*"*					
p-Terphenyl-d14 (Surr)			*102 %*		*54-127 %*		*"*					
2-Fluorophenol (Surr)			*93 %*		*35-120 %*		*"*					
2,4,6-Tribromophenol (Surr)			*106 %*		*39-132 %*		*"*					

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0260 - Total Solids (Dry Weight) - 2022							**Soil**					
Duplicate (23E0260-DUP1)			Prepared: 05/05/23 09:23		Analyzed: 05/06/23 14:50							**COMP, PRO**
QC Source Sample: Non-SDG (A3D1502-17)												
% Solids	**96.6**	1.00	1.00	%	1	---	96.6	---	---	0.01	10%	
Duplicate (23E0260-DUP2)			Prepared: 05/05/23 09:23		Analyzed: 05/06/23 14:50							**COMP, PRO**
QC Source Sample: Non-SDG (A3D1502-18)												
% Solids	**97.1**	1.00	1.00	%	1	---	97.1	---	---	0.04	10%	
Duplicate (23E0260-DUP3)			Prepared: 05/05/23 09:23		Analyzed: 05/06/23 14:50							**COMP, PRO**
QC Source Sample: Non-SDG (A3D1502-19)												
% Solids	**96.9**	1.00	1.00	%	1	---	97.0	---	---	0.09	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0443							
A3E1048-01	Soil	NWTPH-Dx	05/01/23 12:40	05/10/23 08:45	10.12g/5mL	10g/5mL	0.99
A3E1048-02	Soil	NWTPH-Dx	05/01/23 12:50	05/10/23 08:45	10.05g/5mL	10g/5mL	1.00
A3E1048-05	Soil	NWTPH-Dx	05/03/23 10:40	05/10/23 08:45	10.05g/5mL	10g/5mL	1.00
A3E1048-06	Soil	NWTPH-Dx	05/03/23 10:47	05/10/23 08:45	10.04g/5mL	10g/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0546							
A3E1048-01RE2	Soil	EPA 8270E	05/01/23 12:40	05/12/23 08:03	15.18g/2mL	15g/2mL	0.99
A3E1048-02RE1	Soil	EPA 8270E	05/01/23 12:50	05/12/23 08:03	15.26g/2mL	15g/2mL	0.98
A3E1048-05RE2	Soil	EPA 8270E	05/03/23 10:40	05/12/23 08:03	15.41g/2mL	15g/2mL	0.97
A3E1048-06RE2	Soil	EPA 8270E	05/03/23 10:47	05/12/23 08:03	15.53g/2mL	15g/2mL	0.97

Percent Dry Weight

Prep: Total Solids (Dry Weight) - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0260							
A3E1048-01	Soil	EPA 8000D	05/01/23 12:40	05/05/23 09:23			NA
A3E1048-02	Soil	EPA 8000D	05/01/23 12:50	05/05/23 09:23			NA
A3E1048-05	Soil	EPA 8000D	05/03/23 10:40	05/05/23 09:23			NA
A3E1048-06	Soil	EPA 8000D	05/03/23 10:47	05/05/23 09:23			NA

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Tigard, OR 97223
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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

COMP	Analyzed sample is a composite of discrete samples that was performed in the laboratory.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-37	Sample is non-homogenous. Sample results are less than the Reporting Level (MDL and/or MRL) and Duplicate results exceed this level. See QC Section of the report for Duplicate results.
S-03	Sample re-extract, or the analysis of an associated Batch QC sample, confirms surrogate failure due to sample matrix effect.

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Tigard, OR 97223
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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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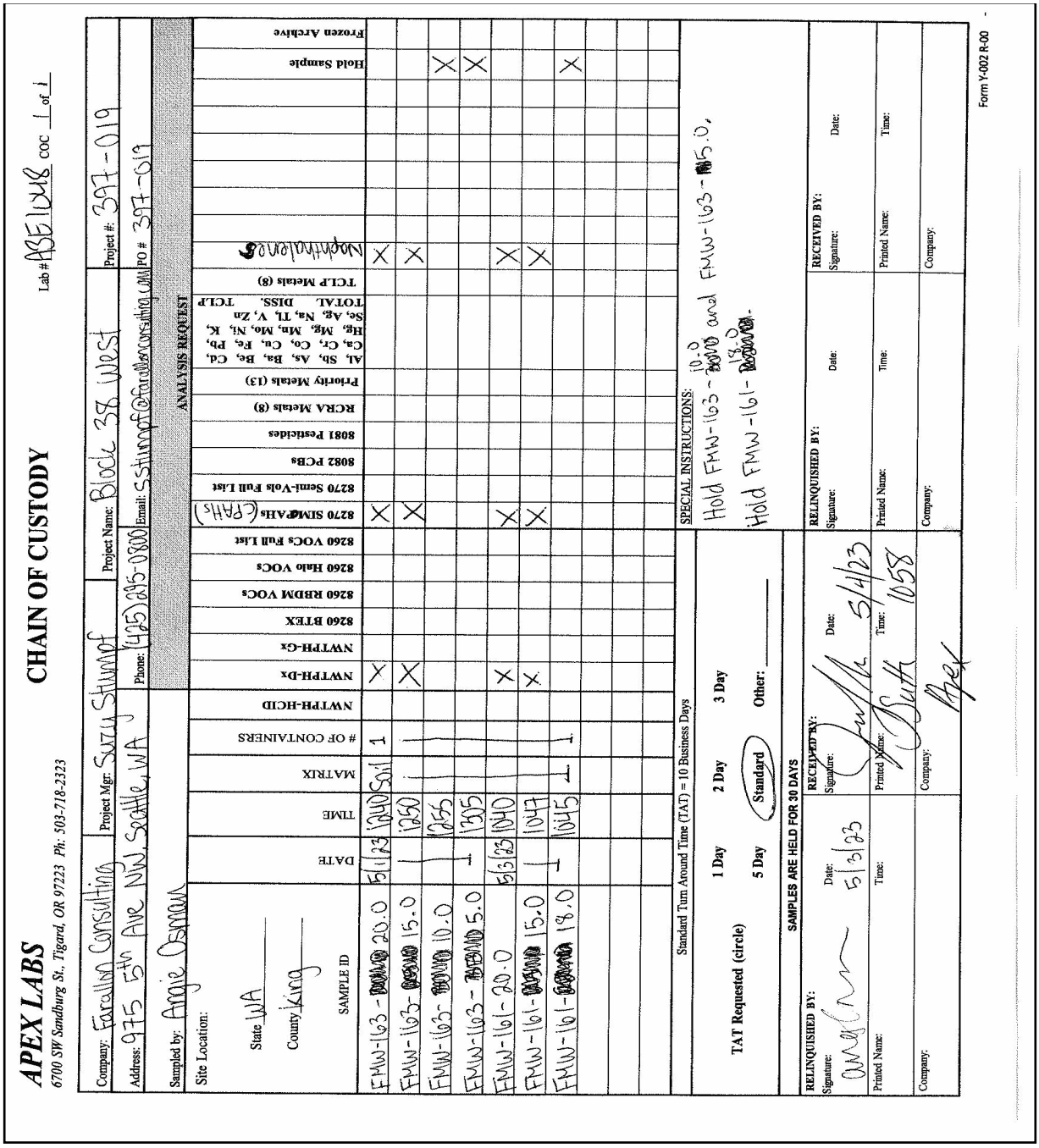
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3E1048 COC 1 of 1

Company: Farallon Consulting | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Seattle, WA | Phone: (425) 295-0800 | Email: sstumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osmun

Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RRDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIMGAHs (PAHs)	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalene	Hold Sample	Frozen Archive
FMW-163-[illegible] 20.0	5/1/23	1040	Soil	1		X						X							X		
FMW-163-[illegible] 15.0		1050		1		X						X							X		
FMW-163-[illegible] 10.0		1055		1																X	
FMW-163-[illegible] 5.0		1305		1																X	
FMW-161-20.0	5/1/23	1040		1		X						X							X		
FMW-161-[illegible] 15.0		1047		1		X						X							X		
FMW-161-[illegible] 18.0		1045		1																X	

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS: Hold FMW-163-10.0 and FMW-163-[illegible] 15.0, Hold FMW-161-[illegible] 18.0

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time:
Company:		Company:	
RELINQUISHED BY: Signature: [illegible]	Date: 5/3/23	RECEIVED BY: Signature: [illegible]	Date: 5/4/23
Printed Name:	Time:	Printed Name: [illegible]	Time: 1058
Company:		Company: Apex	

Form Y-002 R-00

Apex Laboratories

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1048 - 05 25 23 1102**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3E1048

Project/Project #: Block 38 West 397-019

Delivery Info:

Date/time received: 5/4/23 @ 1058 By: JS

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

Cooler Inspection Date/time inspected: 5/4/23 @ 1059 By: JS

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.2						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y)(N) Possible reason why: ____

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 5/4/23 @ 19:11 By: AMW

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ____

Additional information: 3978 4732 8860

Labeled by: AMW Witness: KM Cooler Inspected by: JS

Form Y-003 R-00 -

Apex Laboratories

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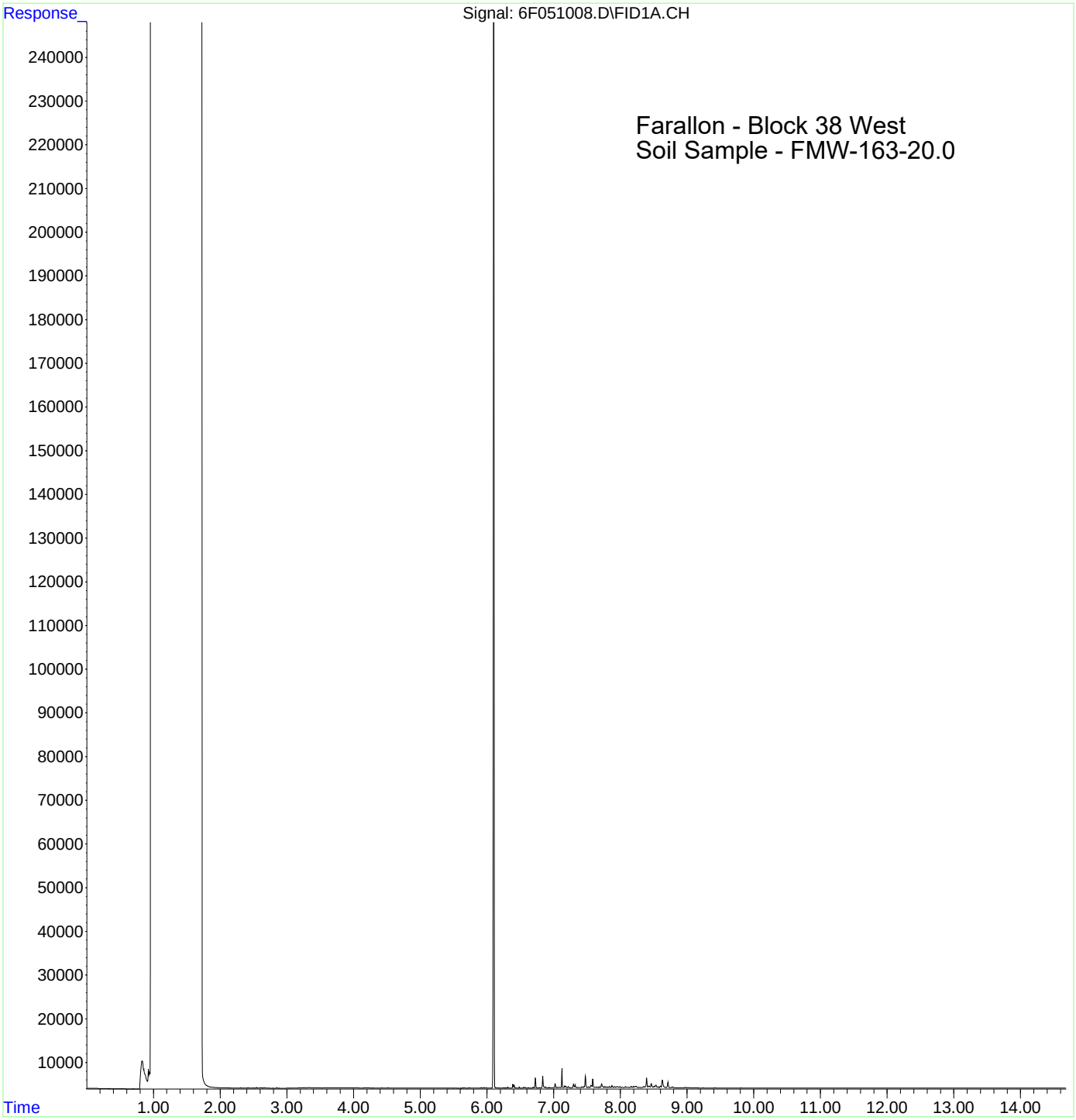
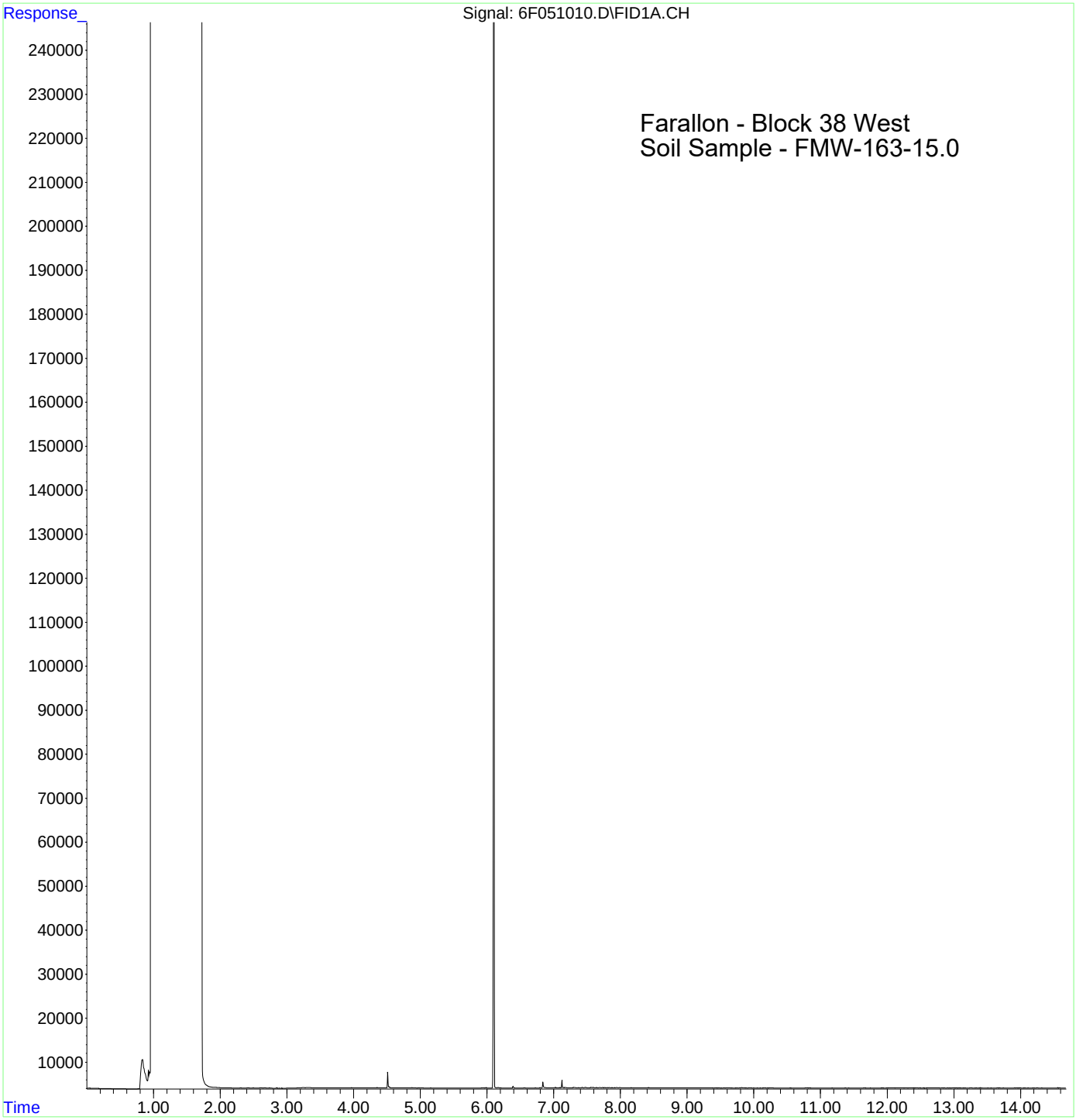
Michele Poquiz For Kurt Johnson, Senior Chemist

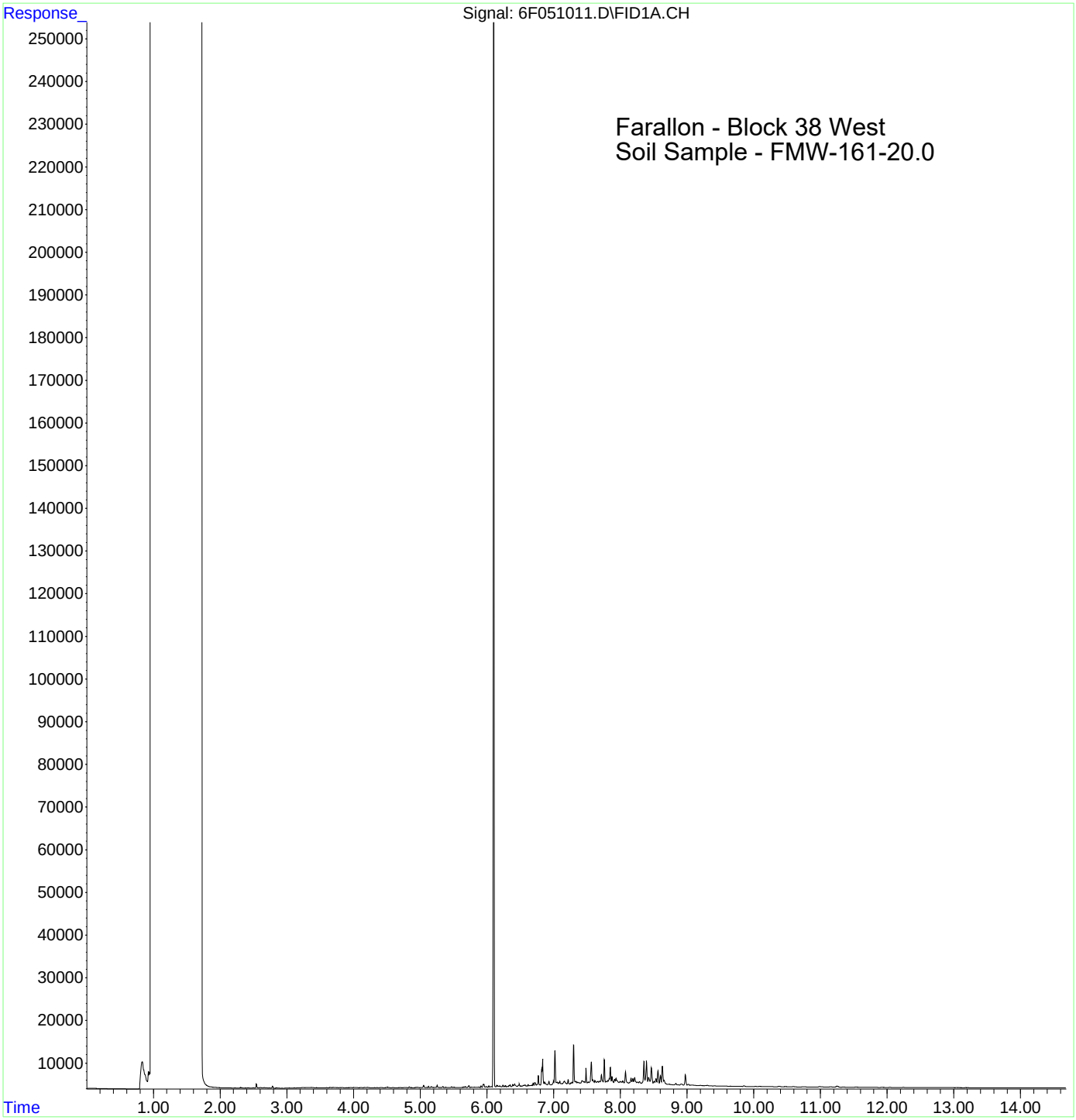
File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051008.D
Operator   : BLL
Acquired   : 10 May 2023   9:15 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1048-01
Misc Info :
Vial Number: 5



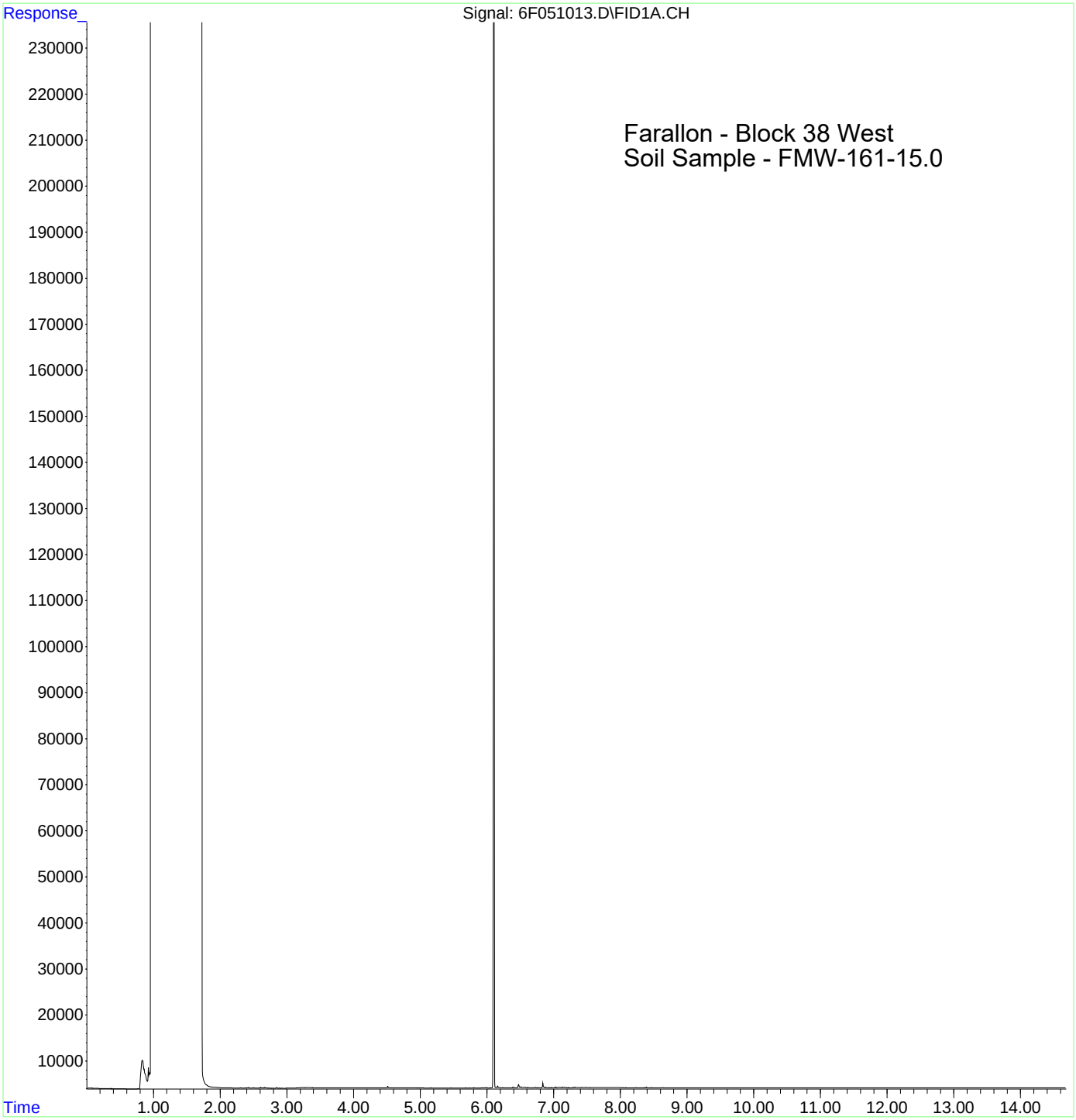
File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051010.D
Operator   : BLL
Acquired   : 10 May 2023   9:55 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1048-02
Misc Info :
Vial Number: 7



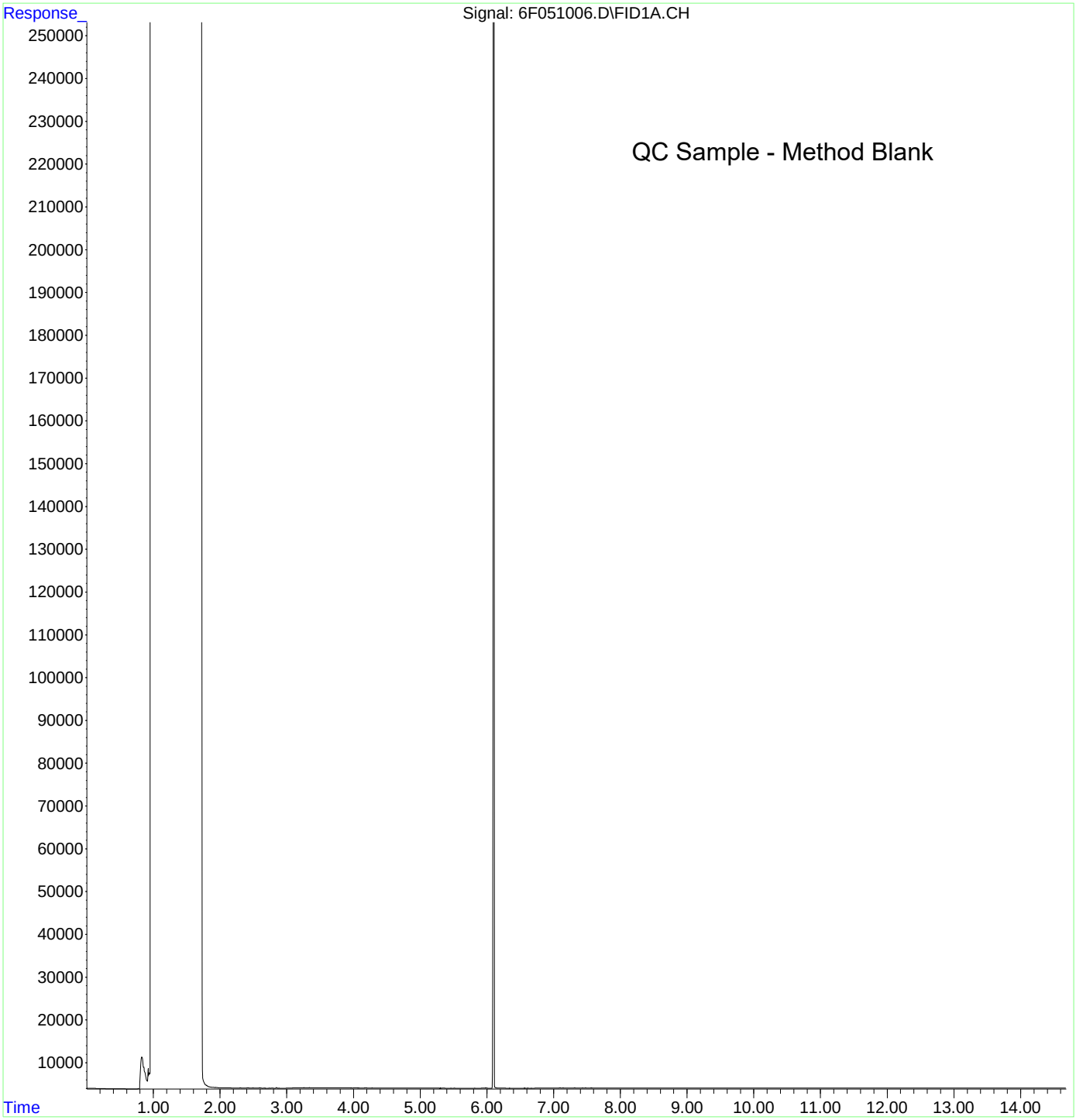
File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051011.D
Operator   : BLL
Acquired   : 10 May 2023 10:15 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1048-05
Misc Info :
Vial Number: 8



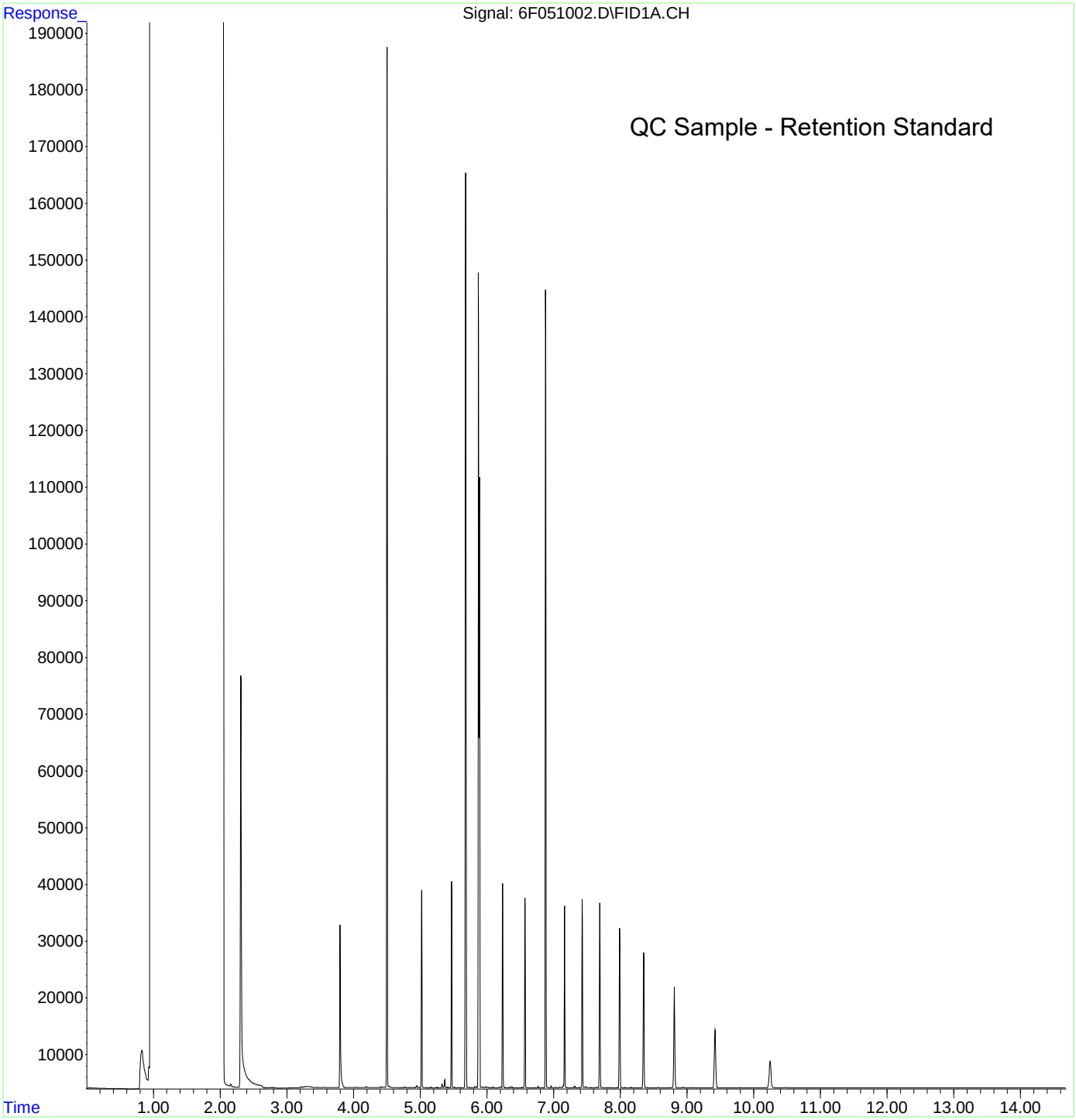
File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051013.D
Operator   : BLL
Acquired   : 10 May 2023 10:56 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1048-06
Misc Info :
Vial Number: 9



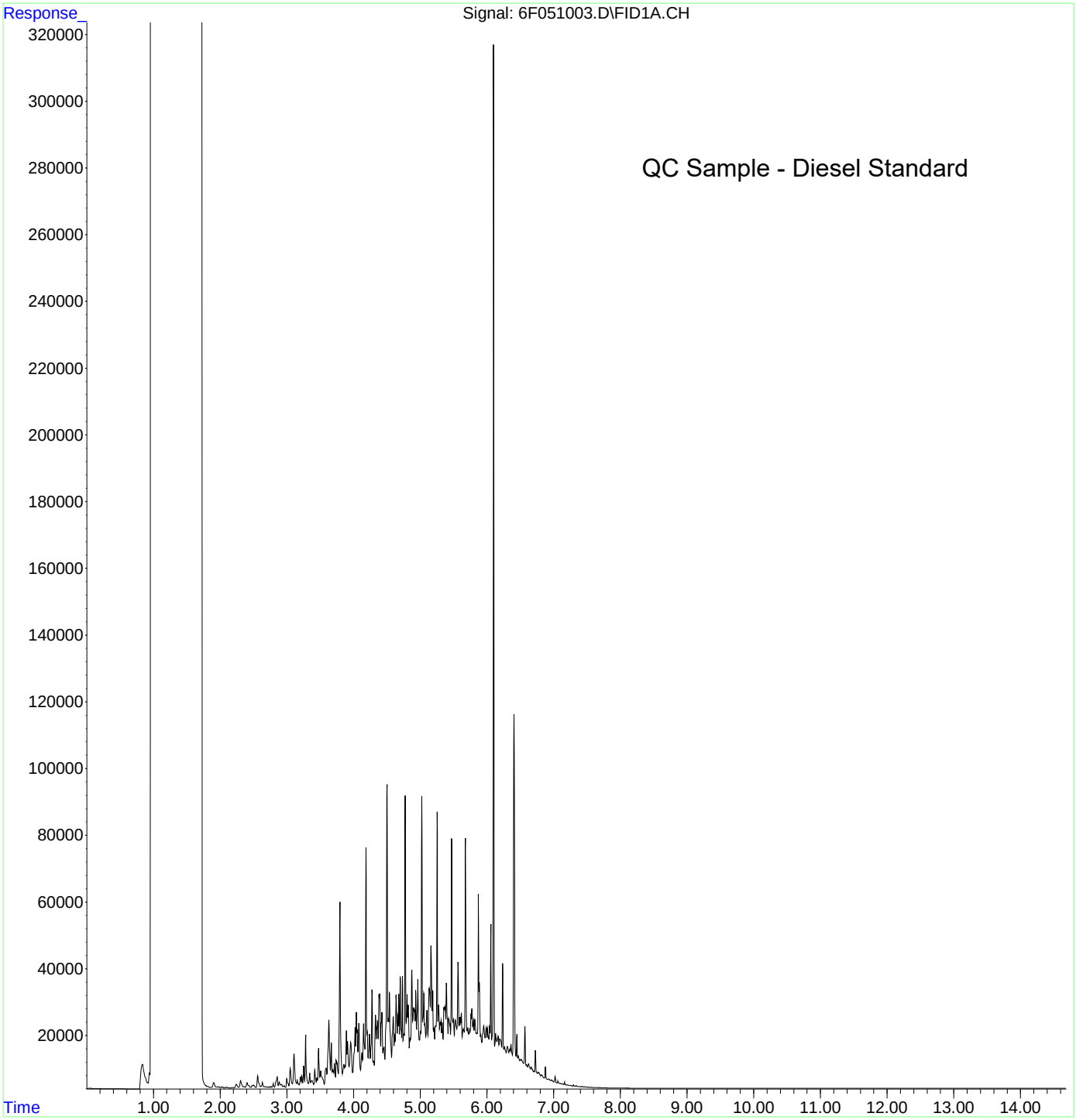
File :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051006.D
Operator : BLL
Acquired : 10 May 2023 8:34 pm using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 23E0443-BLK1
Misc Info :
Vial Number: 3



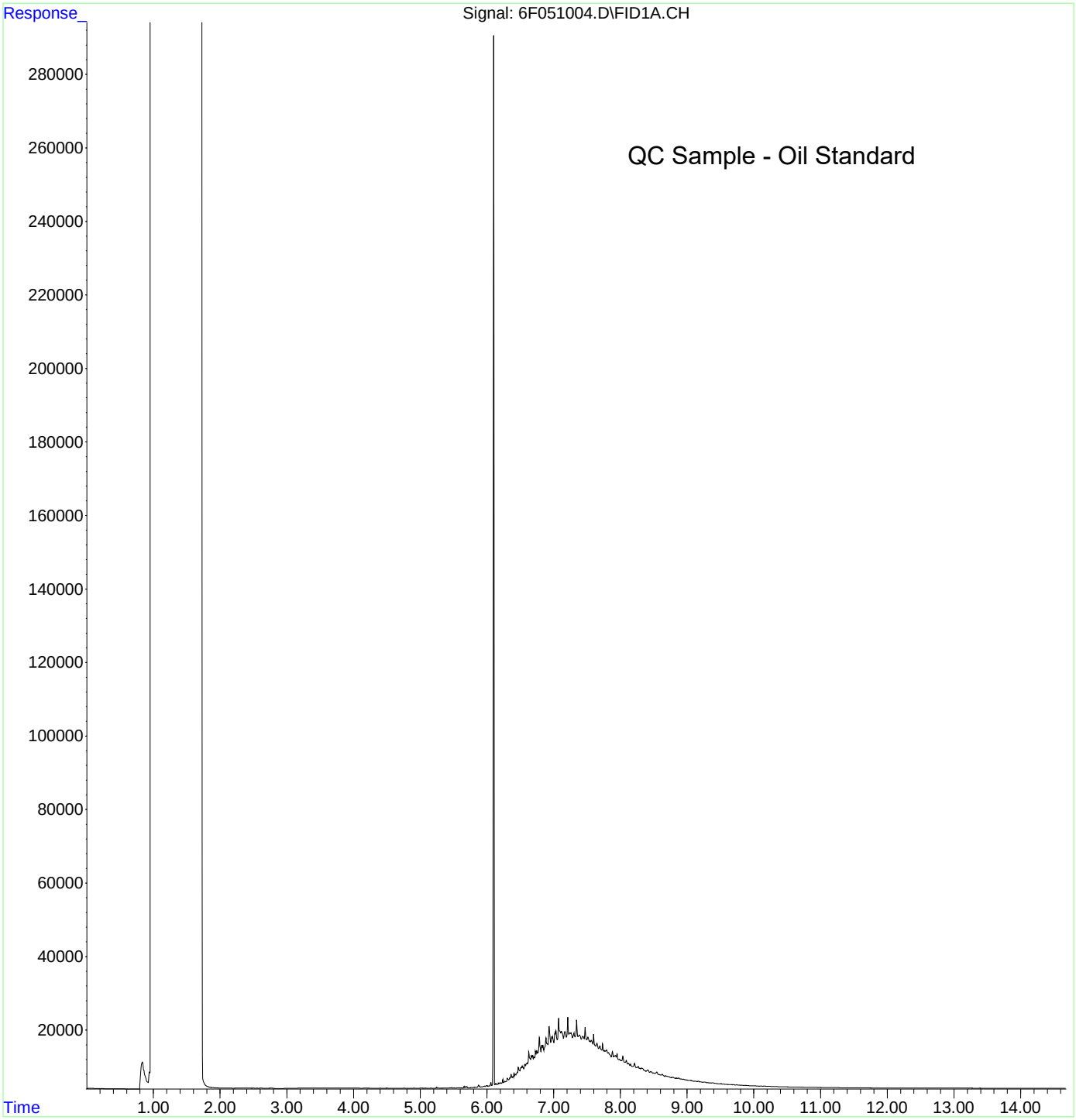
File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051002.D
Operator   : BLL
Acquired   : 10 May 2023   1:39 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3E10058-RES1
Misc Info :
Vial Number: 94



File   :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051003.D
Operator   : BLL
Acquired   : 10 May 2023   1:59 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3E10058-CCV1
Misc Info :
Vial Number: 1



File :M:\DUALFID6\1\DATA\2023-05\3E10058\6F051004.D
Operator : BLL
Acquired : 10 May 2023 2:20 pm using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 3E10058-CCV2
Misc Info :
Vial Number: 2



Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Friday, May 26, 2023

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3E1263 - 397-019 Block 38 West - 397-019 Block 38 West

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3E1263, which was received by the laboratory on 5/10/2023 at 10:36:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler	2.4	degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-160-20.0	A3E1263-01	Soil	05/05/23 10:30	05/10/23 10:36
FMW-160-15.0	A3E1263-03	Soil	05/05/23 10:40	05/10/23 10:36
FMW-159-20.0	A3E1263-04	Soil	05/08/23 11:20	05/10/23 10:36
FMW-159-15.0	A3E1263-05	Soil	05/08/23 11:30	05/10/23 10:36
FB-17-17.0	A3E1263-06	Soil	05/09/23 12:35	05/10/23 10:36
FB-17-15.0	A3E1263-07	Soil	05/09/23 12:42	05/10/23 10:36
FB-17-10.0	A3E1263-08	Soil	05/09/23 12:48	05/10/23 10:36

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-20.0 (A3E1263-01)				**Matrix: Soil**		**Batch: 23E0662**		
Diesel	ND	12.1	24.3	mg/kg dry	1	05/17/23 01:40	NWTPH-Dx	
Oil	**48.7**	24.3	48.5	mg/kg dry	1	05/17/23 01:40	NWTPH-Dx	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 90 %*		*Limits: 50-150 %*	*1*	*05/17/23 01:40*	*NWTPH-Dx*	
FMW-160-15.0 (A3E1263-03)				**Matrix: Soil**		**Batch: 23E0662**		
Diesel	ND	12.9	25.7	mg/kg dry	1	05/17/23 02:01	NWTPH-Dx	
Oil	ND	25.7	51.4	mg/kg dry	1	05/17/23 02:01	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*	*1*	*05/17/23 02:01*	*NWTPH-Dx*	
FB-17-17.0 (A3E1263-06RE1)				**Matrix: Soil**		**Batch: 23E0662**		
Diesel	ND	11.2	22.5	mg/kg dry	1	05/17/23 11:55	NWTPH-Dx	
Oil	**128**	22.5	45.0	mg/kg dry	1	05/17/23 11:55	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*05/17/23 11:55*	*NWTPH-Dx*	
FB-17-15.0 (A3E1263-07)				**Matrix: Soil**		**Batch: 23E0662**		
Diesel	**131**	59.7	119	mg/kg dry	1	05/17/23 03:03	NWTPH-Dx	**F-17**
Oil	**1550**	119	239	mg/kg dry	1	05/17/23 03:03	NWTPH-Dx	**F-17**
Surrogate: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*05/17/23 03:03*	*NWTPH-Dx*	
FB-17-10.0 (A3E1263-08)				**Matrix: Soil**		**Batch: 23E0662**		
Diesel	ND	12.1	24.2	mg/kg dry	1	05/17/23 03:23	NWTPH-Dx	
Oil	ND	24.2	48.3	mg/kg dry	1	05/17/23 03:23	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*05/17/23 03:23*	*NWTPH-Dx*	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-20.0 (A3E1263-01RE1)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	**0.100**	0.00655	0.0132	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Benzo(a)pyrene	**0.144**	0.00985	0.0197	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Benzofluoranthenes (Total)	**0.181**	0.0296	0.0591	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Chrysene	**0.125**	0.00655	0.0132	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Dibenz(a,h)anthracene	**0.0220**	0.00655	0.0132	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**0.0972**	0.00655	0.0132	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
1-Methylnaphthalene	ND	0.0132	0.0263	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
2-Methylnaphthalene	ND	0.0132	0.0263	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Naphthalene	**0.0276**	0.0132	0.0263	mg/kg dry	4	05/15/23 14:24	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*86 %*	*Limits: 37-122 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*87 %*	*44-120 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
Phenol-d6 (Surr)			*102 %*	*33-122 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*104 %*	*54-127 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
2-Fluorophenol (Surr)			*86 %*	*35-120 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*113 %*	*39-132 %*	*4*	*05/15/23 14:24*	*EPA 8270E*	
FMW-160-15.0 (A3E1263-03RE1)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	ND	0.00169	0.00339	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Benzo(a)pyrene	ND	0.00254	0.00508	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.00762	0.0152	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Chrysene	ND	0.00169	0.00339	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00169	0.00339	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.00169	0.00339	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
1-Methylnaphthalene	ND	0.00339	0.00677	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
2-Methylnaphthalene	ND	0.00339	0.00677	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Naphthalene	ND	0.00339	0.00677	mg/kg dry	1	05/15/23 16:47	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*83 %*	*Limits: 37-122 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*77 %*	*44-120 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
Phenol-d6 (Surr)			*91 %*	*33-122 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*86 %*	*54-127 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
2-Fluorophenol (Surr)			*85 %*	*35-120 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*87 %*	*39-132 %*	*1*	*05/15/23 16:47*	*EPA 8270E*	
FB-17-17.0 (A3E1263-06)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	**0.146**	0.0601	0.121	mg/kg dry	40	05/13/23 01:06	EPA 8270E	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FB-17-17.0 (A3E1263-06)				**Matrix: Soil**		**Batch: 23E0546**		
Benzo(a)pyrene	**0.215**	0.0904	0.181	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
Benzofluoranthenes (Total)	**0.319**	0.271	0.543	mg/kg dry	40	05/13/23 01:06	EPA 8270E	**J**
Chrysene	**0.192**	0.0601	0.121	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.0601	0.121	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**0.126**	0.0601	0.121	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
1-Methylnaphthalene	ND	0.121	0.241	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
2-Methylnaphthalene	ND	0.121	0.241	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
Naphthalene	ND	0.121	0.241	mg/kg dry	40	05/13/23 01:06	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*42 %*	*Limits: 37-122 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
2-Fluorobiphenyl (Surr)			*59 %*	*44-120 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
Phenol-d6 (Surr)			*42 %*	*33-122 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
p-Terphenyl-d14 (Surr)			*86 %*	*54-127 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
2-Fluorophenol (Surr)			*43 %*	*35-120 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
2,4,6-Tribromophenol (Surr)			*66 %*	*39-132 %*	*40*	*05/13/23 01:06*	*EPA 8270E*	*S-05*
FB-17-15.0 (A3E1263-07RE1)				**Matrix: Soil**		**Batch: 23E0546**		**R-04**
Benz(a)anthracene	ND	0.0434	0.0872	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Benzo(a)pyrene	ND	0.0653	0.131	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.196	0.392	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Chrysene	ND	0.0434	0.0872	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.0434	0.0872	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	0.0434	0.0872	mg/kg dry	10	05/15/23 13:48	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*91 %*	*Limits: 37-122 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*86 %*	*44-120 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
Phenol-d6 (Surr)			*84 %*	*33-122 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*90 %*	*54-127 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
2-Fluorophenol (Surr)			*75 %*	*35-120 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*108 %*	*39-132 %*	*10*	*05/15/23 13:48*	*EPA 8270E*	
FB-17-10.0 (A3E1263-08RE1)				**Matrix: Soil**		**Batch: 23E0546**		
Benz(a)anthracene	ND	0.00168	0.00337	mg/kg dry	1	05/15/23 17:59	EPA 8270E	
Benzo(a)pyrene	ND	0.00253	0.00505	mg/kg dry	1	05/15/23 17:59	EPA 8270E	
Benzofluoranthenes (Total)	ND	0.00758	0.0152	mg/kg dry	1	05/15/23 17:59	EPA 8270E	
Chrysene	ND	0.00168	0.00337	mg/kg dry	1	05/15/23 17:59	EPA 8270E	
Dibenz(a,h)anthracene	ND	0.00168	0.00337	mg/kg dry	1	05/15/23 17:59	EPA 8270E	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FB-17-10.0 (A3E1263-08RE1)				**Matrix: Soil**		**Batch: 23E0546**		
Indeno(1,2,3-cd)pyrene	ND	0.00168	0.00337	mg/kg dry	1	05/15/23 17:59	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*96 %*	*Limits: 37-122 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*83 %*	*44-120 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	
Phenol-d6 (Surr)			*108 %*	*33-122 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*93 %*	*54-127 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	
2-Fluorophenol (Surr)			*100 %*	*35-120 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*104 %*	*39-132 %*	*1*	*05/15/23 17:59*	*EPA 8270E*	

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-20.0 (A3E1263-01)				**Matrix: Soil**		**Batch: 23E0502**		
% Solids	**79.1**	1.00	1.00	%	1	05/12/23 05:47	EPA 8000D	
FMW-160-15.0 (A3E1263-03)				**Matrix: Soil**		**Batch: 23E0502**		
% Solids	**77.7**	1.00	1.00	%	1	05/12/23 05:47	EPA 8000D	
FMW-159-20.0 (A3E1263-04)				**Matrix: Soil**		**Batch: 23E0980**		**H-01**
% Solids	**42.2**	1.00	1.00	%	1	05/24/23 07:19	EPA 8000D	
FMW-159-15.0 (A3E1263-05)				**Matrix: Soil**		**Batch: 23E0980**		**H-01**
% Solids	**68.4**	1.00	1.00	%	1	05/24/23 07:19	EPA 8000D	
FB-17-17.0 (A3E1263-06)				**Matrix: Soil**		**Batch: 23E0502**		
% Solids	**87.5**	1.00	1.00	%	1	05/12/23 05:47	EPA 8000D	
FB-17-15.0 (A3E1263-07)				**Matrix: Soil**		**Batch: 23E0502**		
% Solids	**30.4**	1.00	1.00	%	1	05/12/23 05:47	EPA 8000D	
FB-17-10.0 (A3E1263-08)				**Matrix: Soil**		**Batch: 23E0502**		
% Solids	**78.4**	1.00	1.00	%	1	05/12/23 05:47	EPA 8000D	

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1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0662 - EPA 3546 (Fuels)							**Soil**					
Blank (23E0662-BLK1)			Prepared: 05/16/23 07:26		Analyzed: 05/16/23 17:23							
NWTPH-Dx												
Diesel	ND	10.0	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	20.0	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 108 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23E0662-BS1)			Prepared: 05/16/23 07:26		Analyzed: 05/16/23 17:43							
NWTPH-Dx												
Diesel	131	10.0	20.0	mg/kg wet	1	125	---	105	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 111 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (23E0662-DUP1)			Prepared: 05/16/23 07:26		Analyzed: 05/16/23 18:25							
QC Source Sample: Non-SDG (A3E1233-03)												
Diesel	**1490**	13.9	27.7	mg/kg dry	1	---	1280	---	---	15	30%	F-11, F-15
Oil	**1160**	27.7	55.4	mg/kg dry	1	---	1250	---	---	8	30%	F-03, F-16
Surr: o-Terphenyl (Surr)		*Recovery: 98 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Duplicate (23E0662-DUP2)			Prepared: 05/16/23 07:26		Analyzed: 05/17/23 03:44							
QC Source Sample: FB-17-10.0 (A3E1263-08)												
NWTPH-Dx												
Diesel	ND	12.5	25.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	25.0	50.1	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 85 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546							**Soil**					
Blank (23E0546-BLK1)			Prepared: 05/12/23 08:03		Analyzed: 05/12/23 18:23							
EPA 8270E												
Benz(a)anthracene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.00200	0.00400	mg/kg wet	1	---	---	---	---	---	---	
Benzofluoranthenes (Total)	ND	0.00600	0.0120	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00133	0.00267	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	0.00267	0.00533	mg/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 82 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*90 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*83 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*110 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*89 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*99 %*		*39-132 %*			*"*				
LCS (23E0546-BS1)			Prepared: 05/12/23 08:03		Analyzed: 05/12/23 18:57							
EPA 8270E												
Benz(a)anthracene	0.546	0.00532	0.0107	mg/kg wet	4	0.533	---	102	49-126%	---	---	
Benzo(a)pyrene	0.521	0.00800	0.0160	mg/kg wet	4	0.533	---	98	45-129%	---	---	
Benzo(b)fluoranthene	0.540	0.00800	0.0160	mg/kg wet	4	0.533	---	101	45-132%	---	---	
Benzo(k)fluoranthene	0.534	0.00800	0.0160	mg/kg wet	4	0.533	---	100	47-132%	---	---	
Chrysene	0.545	0.00532	0.0107	mg/kg wet	4	0.533	---	102	50-124%	---	---	
Dibenz(a,h)anthracene	0.539	0.00532	0.0107	mg/kg wet	4	0.533	---	101	45-134%	---	---	
Indeno(1,2,3-cd)pyrene	0.517	0.00532	0.0107	mg/kg wet	4	0.533	---	97	45-133%	---	---	
1-Methylnaphthalene	0.551	0.0107	0.0213	mg/kg wet	4	0.533	---	103	40-120%	---	---	
2-Methylnaphthalene	0.575	0.0107	0.0213	mg/kg wet	4	0.533	---	108	38-122%	---	---	
Naphthalene	0.528	0.0107	0.0213	mg/kg wet	4	0.533	---	99	35-123%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 84 %*		*Limits: 37-122 %*			*Dilution: 4x*				
2-Fluorobiphenyl (Surr)			*97 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*90 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*116 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*99 %*		*35-120 %*			*"*				

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546							**Soil**					
LCS (23E0546-BS1)			Prepared: 05/12/23 08:03 Analyzed: 05/12/23 18:57									
Surr: 2,4,6-Tribromophenol (Surr)			*Recovery: 120 %*	*Limits: 39-132 %*			*Dilution: 4x*					
Duplicate (23E0546-DUP3)			Prepared: 05/12/23 08:03 Analyzed: 05/15/23 15:35									
QC Source Sample: Non-SDG (A3E1048-01RE2)												
Benz(a)anthracene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	0.00230	0.00460	mg/kg dry	1	---	ND	---	---	---	30%	
Benzofluoranthenes (Total)	ND	0.00689	0.0138	mg/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	0.00153	0.00307	mg/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	0.00307	0.00612	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	0.00307	0.00612	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	**0.0167**	0.00307	0.00612	mg/kg dry	1	---	0.00552	---	---	**100**	**30%**	Q-05
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 107 %*	*Limits: 37-122 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*84 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*130 %*	*33-122 %*			*"*					S-03
p-Terphenyl-d14 (Surr)			*94 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*107 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*94 %*	*39-132 %*			*"*					
Matrix Spike (23E0546-MS1)			Prepared: 05/12/23 08:03 Analyzed: 05/15/23 12:36									
QC Source Sample: Non-SDG (A3E1048-06RE2)												
EPA 8270E												
Benz(a)anthracene	0.499	0.00524	0.0105	mg/kg wet	4	0.525	ND	95	49-126%	---	---	
Benzo(a)pyrene	0.476	0.00788	0.0158	mg/kg wet	4	0.525	ND	91	45-129%	---	---	
Benzo(b)fluoranthene	0.468	0.00788	0.0158	mg/kg wet	4	0.525	ND	89	45-132%	---	---	
Benzo(k)fluoranthene	0.496	0.00788	0.0158	mg/kg wet	4	0.525	ND	94	47-132%	---	---	
Chrysene	0.503	0.00524	0.0105	mg/kg wet	4	0.525	ND	96	50-124%	---	---	
Dibenz(a,h)anthracene	0.506	0.00524	0.0105	mg/kg wet	4	0.525	ND	96	45-134%	---	---	
Indeno(1,2,3-cd)pyrene	0.477	0.00524	0.0105	mg/kg wet	4	0.525	ND	91	45-133%	---	---	
1-Methylnaphthalene	0.493	0.0105	0.0210	mg/kg wet	4	0.525	ND	94	40-120%	---	---	
2-Methylnaphthalene	0.521	0.0105	0.0210	mg/kg wet	4	0.525	ND	99	38-122%	---	---	
Naphthalene	0.527	0.0105	0.0210	mg/kg wet	4	0.525	0.0279	95	35-123%	---	---	

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1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0546 - EPA 3546												**Soil**
Matrix Spike (23E0546-MS1)					Prepared: 05/12/23 08:03		Analyzed: 05/15/23 12:36					
QC Source Sample: Non-SDG (A3E1048-06RE2)												
Surr: Nitrobenzene-d5 (Surr)				*Recovery: 92 %*	*Limits: 37-122 %*		*Dilution: 4x*					
2-Fluorobiphenyl (Surr)				*96 %*	*44-120 %*		*"*					
Phenol-d6 (Surr)				*102 %*	*33-122 %*		*"*					
p-Terphenyl-d14 (Surr)				*102 %*	*54-127 %*		*"*					
2-Fluorophenol (Surr)				*93 %*	*35-120 %*		*"*					
2,4,6-Tribromophenol (Surr)				*106 %*	*39-132 %*		*"*					

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0502 - Total Solids (Dry Weight) - 2022							**Soil**					
Duplicate (23E0502-DUP1)			Prepared: 05/11/23 10:11		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1211-01)												
% Solids	**78.4**	1.00	1.00	%	1	---	77.3	---	---	1	10%	
Duplicate (23E0502-DUP2)			Prepared: 05/11/23 10:11		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1231-01)												
% Solids	**81.0**	1.00	1.00	%	1	---	82.3	---	---	2	10%	
Duplicate (23E0502-DUP3)			Prepared: 05/11/23 10:11		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1233-03)												
% Solids	**80.0**	1.00	1.00	%	1	---	71.0	---	---	**12**	**10%**	Q-04
Duplicate (23E0502-DUP4)			Prepared: 05/11/23 18:03		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1267-01)												
% Solids	**79.1**	1.00	1.00	%	1	---	78.9	---	---	0.3	10%	
Duplicate (23E0502-DUP5)			Prepared: 05/11/23 19:00		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1302-01)												
% Solids	**92.1**	1.00	1.00	%	1	---	94.0	---	---	2	10%	
Duplicate (23E0502-DUP6)			Prepared: 05/11/23 19:00		Analyzed: 05/12/23 05:47							
QC Source Sample: Non-SDG (A3E1307-09)												
% Solids	**82.5**	1.00	1.00	%	1	---	81.3	---	---	1	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0980 - Total Solids (Dry Weight) - 2022							**Soil**					
Duplicate (23E0980-DUP1)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: FMW-159-20.0 (A3E1263-04)												
EPA 8000D												
% Solids	**42.5**	1.00	1.00	%	1	---	42.2	---	---	0.6	10%	
Duplicate (23E0980-DUP2)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: FMW-159-15.0 (A3E1263-05)												
EPA 8000D												
% Solids	**73.8**	1.00	1.00	%	1	---	68.4	---	---	8	10%	
Duplicate (23E0980-DUP3)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1383-03)												
% Solids	**75.6**	1.00	1.00	%	1	---	78.1	---	---	3	10%	
Duplicate (23E0980-DUP4)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1383-06)												
% Solids	**77.0**	1.00	1.00	%	1	---	77.0	---	---	0.05	10%	
Duplicate (23E0980-DUP5)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1383-13)												
% Solids	**78.4**	1.00	1.00	%	1	---	78.7	---	---	0.4	10%	
Duplicate (23E0980-DUP6)			Prepared: 05/23/23 11:13		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1555-01)												
% Solids	**90.5**	1.00	1.00	%	1	---	78.6	---	---	**14**	**10%**	Q-04
Duplicate (23E0980-DUP7)			Prepared: 05/23/23 18:40		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1653-02)												
% Solids	**69.5**	1.00	1.00	%	1	---	70.0	---	---	0.7	10%	
Duplicate (23E0980-DUP8)			Prepared: 05/23/23 19:31		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1654-02)												

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019 Block 38 West	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A3E1263 - 05 26 23 1018

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0980 - Total Solids (Dry Weight) - 2022							Soil					
Duplicate (23E0980-DUP8)			Prepared: 05/23/23 19:31		Analyzed: 05/24/23 07:19							
QC Source Sample: Non-SDG (A3E1654-02)												
% Solids	**74.5**	1.00	1.00	%	1	---	73.8	---	---	1	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0662							
A3E1263-01	Soil	NWTPH-Dx	05/05/23 10:30	05/16/23 07:26	10.42g/5mL	10g/5mL	0.96
A3E1263-03	Soil	NWTPH-Dx	05/05/23 10:40	05/16/23 07:26	10.01g/5mL	10g/5mL	1.00
A3E1263-06RE1	Soil	NWTPH-Dx	05/09/23 12:35	05/16/23 07:26	10.17g/5mL	10g/5mL	0.98
A3E1263-07	Soil	NWTPH-Dx	05/09/23 12:42	05/16/23 07:26	5.51g/5mL	10g/5mL	1.81
A3E1263-08	Soil	NWTPH-Dx	05/09/23 12:48	05/16/23 07:26	10.56g/5mL	10g/5mL	0.95

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0546							
A3E1263-01RE1	Soil	EPA 8270E	05/05/23 10:30	05/12/23 13:23	15.4g/2mL	15g/2mL	0.97
A3E1263-03RE1	Soil	EPA 8270E	05/05/23 10:40	05/12/23 13:23	15.2g/2mL	15g/2mL	0.99
A3E1263-06	Soil	EPA 8270E	05/09/23 12:35	05/12/23 13:23	15.17g/2mL	15g/2mL	0.99
A3E1263-07RE1	Soil	EPA 8270E	05/09/23 12:42	05/12/23 13:23	15.12g/2mL	15g/2mL	0.99
A3E1263-08RE1	Soil	EPA 8270E	05/09/23 12:48	05/12/23 13:23	15.15g/2mL	15g/2mL	0.99

Percent Dry Weight

Prep: Total Solids (Dry Weight) - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0502							
A3E1263-01	Soil	EPA 8000D	05/05/23 10:30	05/11/23 10:11			NA
A3E1263-03	Soil	EPA 8000D	05/05/23 10:40	05/11/23 10:11			NA
A3E1263-06	Soil	EPA 8000D	05/09/23 12:35	05/11/23 10:11			NA
A3E1263-07	Soil	EPA 8000D	05/09/23 12:42	05/11/23 10:11			NA
A3E1263-08	Soil	EPA 8000D	05/09/23 12:48	05/11/23 10:11			NA
Batch: 23E0980							
A3E1263-04	Soil	EPA 8000D	05/08/23 11:20	05/23/23 11:13			NA
A3E1263-05	Soil	EPA 8000D	05/08/23 11:30	05/23/23 11:13			NA

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-15	Results for diesel are estimated due to overlap from the reported oil result.
F-16	Results for oil are estimated due to overlap from the reported diesel result.
F-17	No fuel pattern detected. The Diesel result represents carbon range C10 to C25, and the Oil result represents >C25 to C40.
H-01	Analyzed outside the recommended holding time.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
S-03	Sample re-extract, or the analysis of an associated Batch QC sample, confirms surrogate failure due to sample matrix effect.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
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503-718-2323
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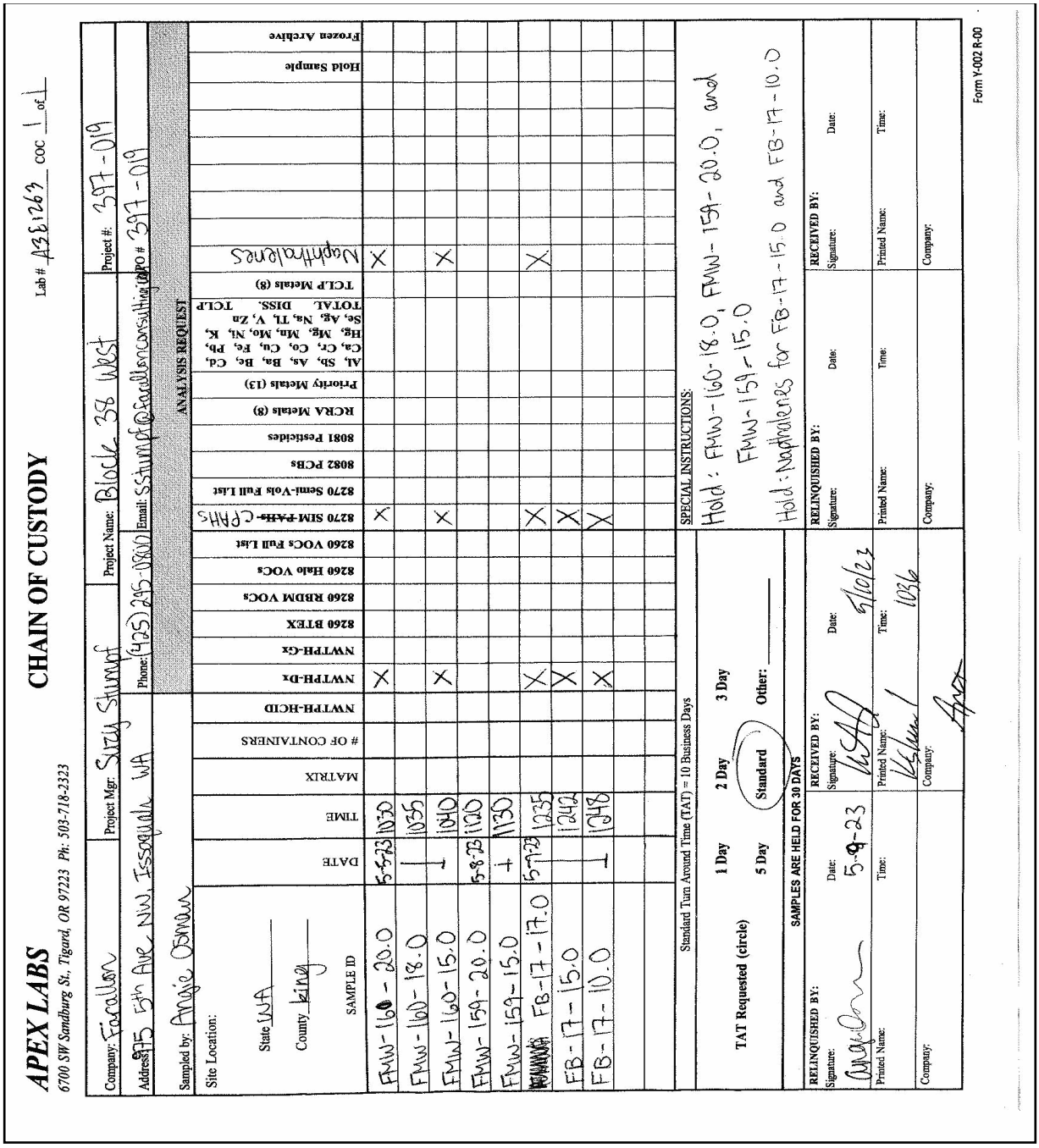
ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph.: 503-718-2323

CHAIN OF CUSTODY

Lab # A3E1263 COC 1 of 1

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Issaquah WA | Phone: (425) 295-0800 | Email: sstumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osman
Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs ~~CPAHs~~	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes	Hold Sample	Frozen Archive
FMW-160-20.0	5-5-23	1030				X						X								X	
FMW-160-18.0		1035																			
FMW-160-15.0		1040				X						X								X	
FMW-159-20.0	5-8-23	1120																			
FMW-159-15.0		1130																			
~~FMW-159-17.0~~ FB-17-15.0	5-7-23	1235				X						X								X	
FB-17-15.0		1242				X						X								X	
FB-17-10.0		1248				X						X								X	

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SPECIAL INSTRUCTIONS:
Hold: FMW-160-18.0, FMW-159-20.0, and FMW-159-15.0
Hold: Naphthalenes for FB-17-15.0 and FB-17-10.0

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	5-9-23		Signature:	5/10/23	
Printed Name:			Printed Name:		1036
Company:			Company:		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

Form Y-002 R-00

Apex Laboratories

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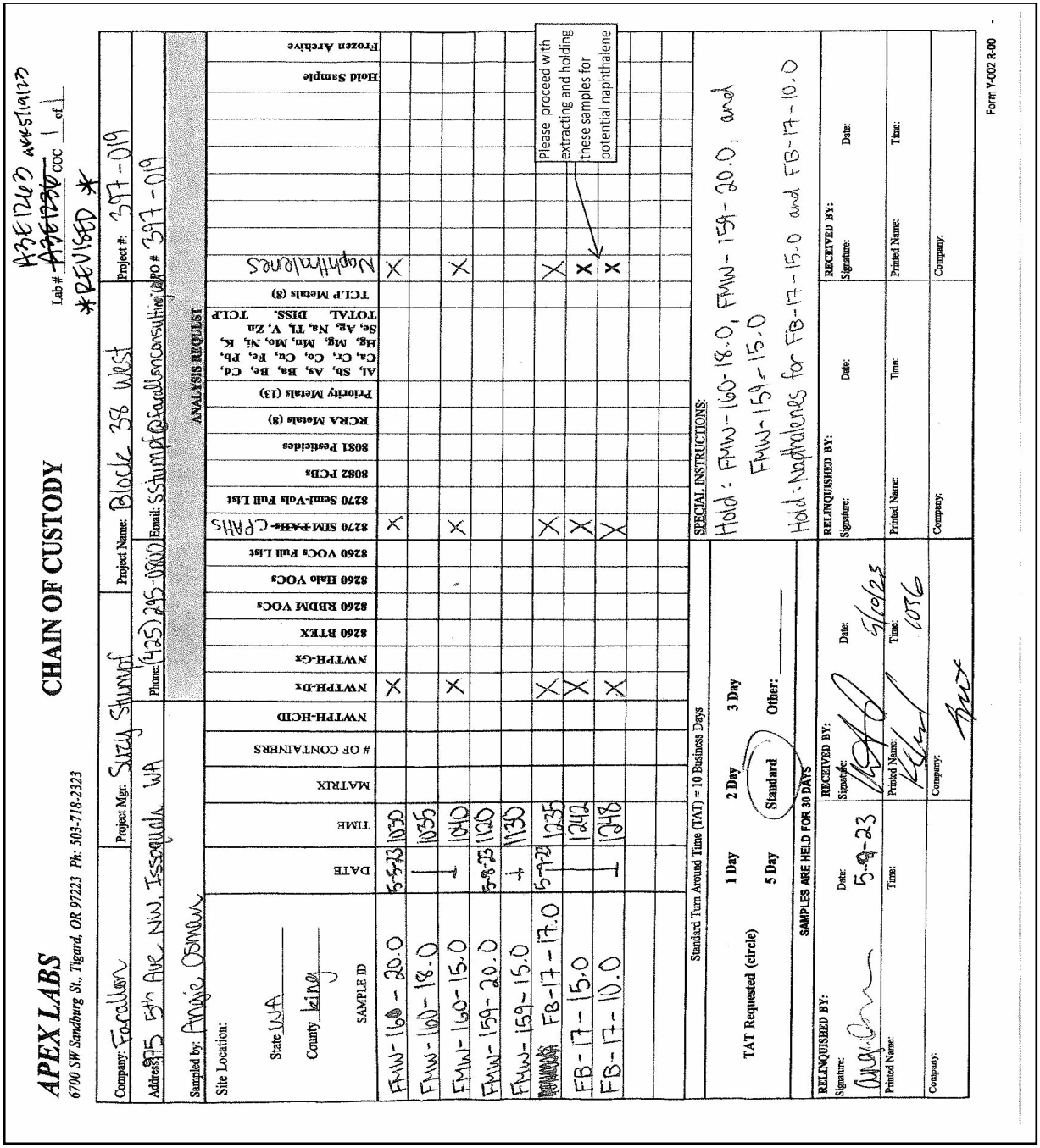
Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

A3E1263 revised
Lab # Apex COC 1 of 1
REVISED

Company: Farallon — Project Mgr. Suzy Stumpf — Project Name: Block 38 West — Project #: 397-019
Address: 975 5th Ave NW, Issaquah WA — Phone: (425) 295-0800 — Email: sstumpf@farallonconsulting.com — PO # 397-019
Sampled by: Angie Osman
Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs- CPAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes	Hold Sample	Frozen Archive
FMW-160-20.0	5-5-23	1030				X						X									
FMW-160-18.0		1035																			
FMW-160-15.0		1040				X						X									
FMW-159-20.0	5-8-23	1120																			
FMW-159-15.0		1130																			
FB-17-17.0	5-9-23	1235				X						X							X		
FB-17-15.0		1242				X						X							X		
FB-17-10.0		1248				X						X							X		

Please proceed with extracting and holding these samples for potential naphthalene

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: _____
SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:
Hold: FMW-160-18.0, FMW-159-20.0, and FMW-159-15.0
Hold: Naphthalenes for FB-17-15.0 and FB-17-10.0

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	5-9-23		Signature:	5/10/23	
Printed Name:			Printed Name:		1036
Company:			Company:		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

Form Y-002 R-00

Apex Laboratories

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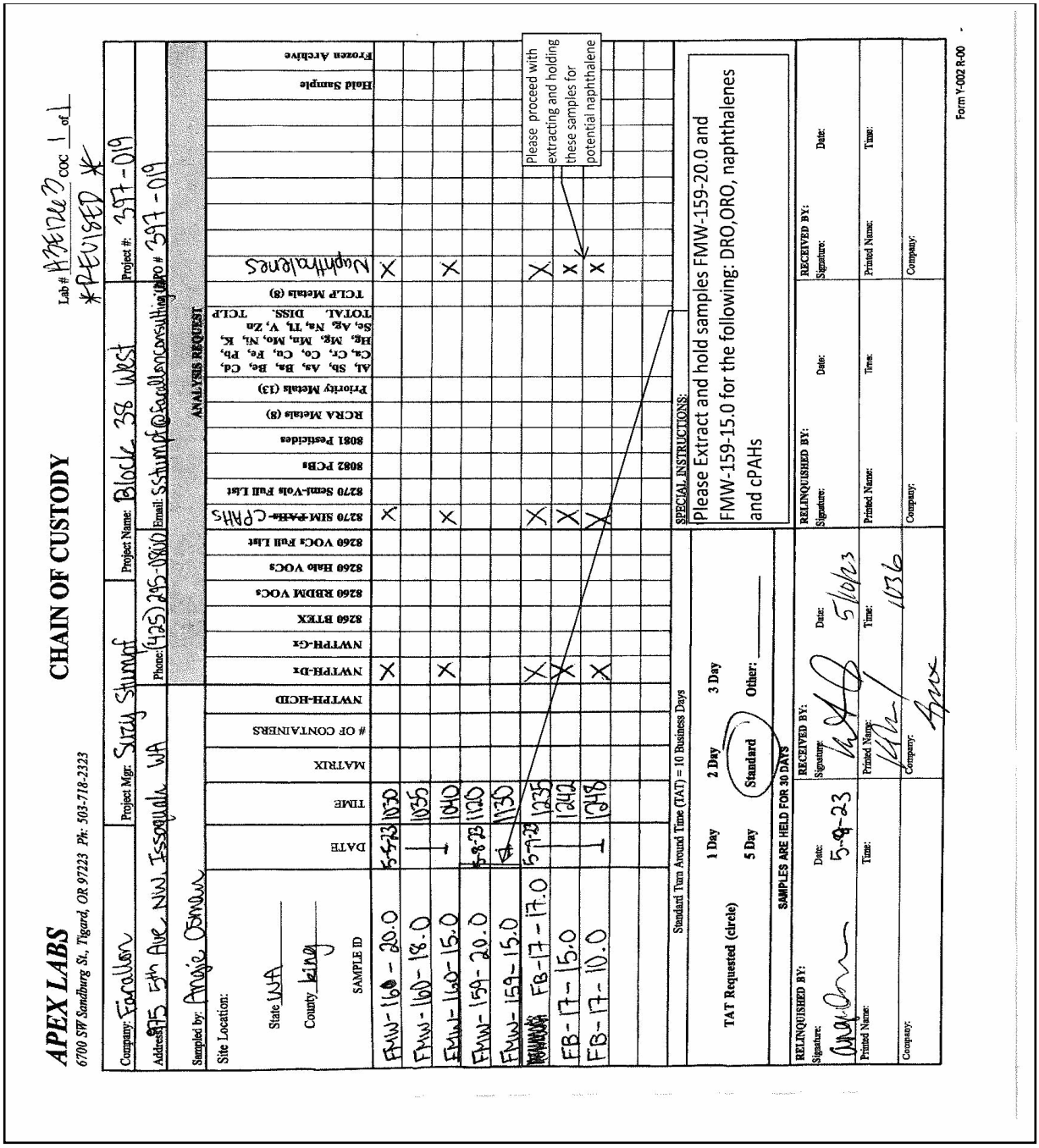
Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3E1263 COC 1 of 1
*REVISED *

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA | Phone: (425) 295-0800 | Email: sstumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osmer

Site Location: State: WA County: King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM-PAHs-cPAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes	Hold Sample	Frozen Archive
FMW-160-20.0	5-5-23	1030				X						X									
FMW-160-18.0	1	1055																			
FMW-160-15.0	1	1040				X						X									
FMW-159-20.0	5-8-23	1120																			
FMW-159-15.0	1	1130																			
FB-17-17.0	5-9-23	1235				X						X							X		
FB-17-15.0	1	1242				X						X							X		
FB-17-10.0	1	1248				X						X							X		

Please proceed with extracting and holding these samples for potential naphthalene

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: ____

SPECIAL INSTRUCTIONS:
Please Extract and hold samples FMW-159-20.0 and FMW-159-15.0 for the following: DRO,ORO, naphthalenes and cPAHs

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:	5-9-23	Signature:	5/10/23
Printed Name:	Time:	Printed Name:	Time: 1136
Company:		Company: Apex	

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time:
Company:		Company:	

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time:
Company:		Company:	

Form 1-002 R-00

Apex Laboratories

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ANALYTICAL REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1263 - 05 26 23 1018**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Element WO#: A3 E1263

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 5/10/23 @ 1036 By: VHO

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

Cooler Inspection Date/time inspected: 5/10/23 @ 1036 By: VHO

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.4						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why: ____

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 5.10.23 @ 1114 By: DSS

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ____

Additional information: 9980 9834 9841

Labeled by: DSS Witness: JS Cooler Inspected by: DSS

Form Y-003 R-00

Apex Laboratories

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Friday, December 22, 2023

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3E1405 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3E1405, which was received by the laboratory on 5/16/2023 at 10:42:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information			
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.			
(See Cooler Receipt Form for details)			
Cooler #1	2.1 degC	Cooler #2	4.8 degC
Cooler #3	4.7 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-160-051523	A3E1405-01	Water	05/15/23 13:33	05/16/23 10:42
FMW-158-051523	A3E1405-02	Water	05/15/23 14:00	05/16/23 10:42
FMW-161-051523	A3E1405-03	Water	05/15/23 15:40	05/16/23 10:42
FMW-163-051523	A3E1405-04	Water	05/15/23 15:45	05/16/23 10:42

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL CASE NARRATIVE

A3E1405	Apex Laboratories

Amended Report Revision 1:

Reporting to Reporting Limits (RLs)-

This report supersedes all previous reports.

Per client request, this report has been amended to report all NWTPH-Dx data to the RLs.

Michele Poquiz
Forensics Project Manager
12/22/2023

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A3E1405 - 12 22 23 1809

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-051523 (A3E1405-01)				**Matrix: Water**		**Batch: 23E1023**		
Diesel	**114**	---	75.5	ug/L	1	05/24/23 22:33	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/24/23 22:33	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*	*Limits: 50-150 %*		*1*	*05/24/23 22:33*	*NWTPH-Dx LL*	
FMW-158-051523 (A3E1405-02)				**Matrix: Water**		**Batch: 23E1023**		
Diesel	**149**	---	75.5	ug/L	1	05/24/23 22:53	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/24/23 22:53	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*	*Limits: 50-150 %*		*1*	*05/24/23 22:53*	*NWTPH-Dx LL*	
FMW-161-051523 (A3E1405-03)				**Matrix: Water**		**Batch: 23E1023**		
Diesel	**211**	---	75.5	ug/L	1	05/24/23 23:14	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/24/23 23:14	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*	*Limits: 50-150 %*		*1*	*05/24/23 23:14*	*NWTPH-Dx LL*	
FMW-163-051523 (A3E1405-04)				**Matrix: Water**		**Batch: 23E1023**		
Diesel	**181**	---	76.9	ug/L	1	05/24/23 23:34	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/24/23 23:34	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*	*Limits: 50-150 %*		*1*	*05/24/23 23:34*	*NWTPH-Dx LL*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-051523 (A3E1405-01RE1)				**Matrix: Water**		**Batch: 23E0762**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/17/23 15:03	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*93 %*	*Limits: 50-150 %*	*1*	*05/17/23 15:03*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*05/17/23 15:03*	*NWTPH-Gx (MS)*	
FMW-158-051523 (A3E1405-02RE1)				**Matrix: Water**		**Batch: 23E0762**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/17/23 15:25	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*95 %*	*Limits: 50-150 %*	*1*	*05/17/23 15:25*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*05/17/23 15:25*	*NWTPH-Gx (MS)*	
FMW-161-051523 (A3E1405-03RE1)				**Matrix: Water**		**Batch: 23E0762**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/17/23 15:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*92 %*	*Limits: 50-150 %*	*1*	*05/17/23 15:48*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*05/17/23 15:48*	*NWTPH-Gx (MS)*	
FMW-163-051523 (A3E1405-04RE1)				**Matrix: Water**		**Batch: 23E0762**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/17/23 16:10	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*91 %*	*Limits: 50-150 %*	*1*	*05/17/23 16:10*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*05/17/23 16:10*	*NWTPH-Gx (MS)*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1405 - 12 22 23 1809

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-051523 (A3E1405-01RE1)				**Matrix: Water**		**Batch: 23E0762**		
Benzene	ND	0.100	0.200	ug/L	1	05/17/23 15:03	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/17/23 15:03	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/17/23 15:03	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/17/23 15:03	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*98 %*	*Limits: 80-120 %*	*1*	*05/17/23 15:03*	*EPA 8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*05/17/23 15:03*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*107 %*	*80-120 %*	*1*	*05/17/23 15:03*	*EPA 8260D*	
FMW-158-051523 (A3E1405-02RE1)				**Matrix: Water**		**Batch: 23E0762**		
Benzene	ND	0.100	0.200	ug/L	1	05/17/23 15:25	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/17/23 15:25	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/17/23 15:25	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/17/23 15:25	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*94 %*	*Limits: 80-120 %*	*1*	*05/17/23 15:25*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*05/17/23 15:25*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*105 %*	*80-120 %*	*1*	*05/17/23 15:25*	*EPA 8260D*	
FMW-161-051523 (A3E1405-03RE1)				**Matrix: Water**		**Batch: 23E0762**		
Benzene	**0.120**	0.100	0.200	ug/L	1	05/17/23 15:48	EPA 8260D	**J**
Toluene	ND	0.500	1.00	ug/L	1	05/17/23 15:48	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/17/23 15:48	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/17/23 15:48	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*95 %*	*Limits: 80-120 %*	*1*	*05/17/23 15:48*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*05/17/23 15:48*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*108 %*	*80-120 %*	*1*	*05/17/23 15:48*	*EPA 8260D*	
FMW-163-051523 (A3E1405-04RE1)				**Matrix: Water**		**Batch: 23E0762**		
Benzene	**1.16**	0.100	0.200	ug/L	1	05/17/23 16:10	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/17/23 16:10	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/17/23 16:10	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/17/23 16:10	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*94 %*	*Limits: 80-120 %*	*1*	*05/17/23 16:10*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*05/17/23 16:10*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*105 %*	*80-120 %*	*1*	*05/17/23 16:10*	*EPA 8260D*	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-051523 (A3E1405-01)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/19/23 21:01	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/19/23 21:01	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/19/23 21:01	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*56 %*	*Limits: 44-120 %*	*1*	*05/19/23 21:01*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*68 %*	*50-134 %*	*1*	*05/19/23 21:01*	*EPA 8270E SIM*	
FMW-158-051523 (A3E1405-02)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	**0.180**	0.0381	0.0762	ug/L	1	05/22/23 17:25	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0381	0.0762	ug/L	1	05/22/23 17:25	EPA 8270E SIM	
Naphthalene	**0.316**	0.0381	0.0762	ug/L	1	05/22/23 17:25	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*55 %*	*Limits: 44-120 %*	*1*	*05/22/23 17:25*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*73 %*	*50-134 %*	*1*	*05/22/23 17:25*	*EPA 8270E SIM*	
FMW-161-051523 (A3E1405-03)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0381	0.0762	ug/L	1	05/22/23 17:50	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0381	0.0762	ug/L	1	05/22/23 17:50	EPA 8270E SIM	
Naphthalene	**0.206**	0.0381	0.0762	ug/L	1	05/22/23 17:50	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*53 %*	*Limits: 44-120 %*	*1*	*05/22/23 17:50*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*68 %*	*50-134 %*	*1*	*05/22/23 17:50*	*EPA 8270E SIM*	
FMW-163-051523 (A3E1405-04)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0381	0.0762	ug/L	1	05/22/23 18:16	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0381	0.0762	ug/L	1	05/22/23 18:16	EPA 8270E SIM	
Naphthalene	**0.122**	0.0381	0.0762	ug/L	1	05/22/23 18:16	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*36 %*	*Limits: 44-120 %*	*1*	*05/22/23 18:16*	*EPA 8270E SIM*	*S-06*
p-Terphenyl-d14 (Surr)			*70 %*	*50-134 %*	*1*	*05/22/23 18:16*	*EPA 8270E SIM*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-051523 (A3E1405-02RE1)				**Matrix: Water**				
Batch: 23E0748								
Barium	**84.7**	1.00	2.00	ug/L	1	05/17/23 16:43	EPA 6020B	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-051523 (A3E1405-02)				**Matrix: Water**				
Batch: 23E1016								
Barium	**82.0**	0.500	1.00	ug/L	1	05/25/23 12:15	EPA 6020B (Diss)	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E1023 - EPA 3510C (Fuels/Acid Ext.)									Water			
Blank (23E1023-BLK1)			Prepared: 05/24/23 11:28		Analyzed: 05/24/23 21:32							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 90 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23E1023-BS1)			Prepared: 05/24/23 11:28		Analyzed: 05/24/23 21:52							
NWTPH-Dx LL												
Diesel	266	---	80.0	ug/L	1	500	---	53	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23E1023-BSD1)			Prepared: 05/24/23 11:28		Analyzed: 05/24/23 22:13							**Q-19**
NWTPH-Dx LL												
Diesel	269	---	80.0	ug/L	1	500	---	54	36-132%	1	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 84 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0669 - EPA 5030C									Water			
Blank (23E0669-BLK1)			Prepared: 05/16/23 10:00		Analyzed: 05/16/23 11:21							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 104 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*114 %*		*50-150 %*			*"*				
LCS (23E0669-BS2)			Prepared: 05/16/23 10:00		Analyzed: 05/16/23 10:54							
NWTPH-Gx (MS)												
Gasoline Range Organics	504	50.0	100	ug/L	1	500	---	101	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 105 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*109 %*		*50-150 %*			*"*				
Duplicate (23E0669-DUP1)			Prepared: 05/16/23 10:00		Analyzed: 05/16/23 17:41							
QC Source Sample: Non-SDG (A3E1253-01)												
Gasoline Range Organics	ND	500	1000	ug/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 108 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*117 %*		*50-150 %*			*"*				

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0762 - EPA 5030C									Water			
Blank (23E0762-BLK1)				Prepared: 05/17/23 12:02		Analyzed: 05/17/23 14:12						
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 92 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
LCS (23E0762-BS2)				Prepared: 05/17/23 12:02		Analyzed: 05/17/23 13:50						
NWTPH-Gx (MS)												
Gasoline Range Organics	417	50.0	100	ug/L	1	500	---	83	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
Duplicate (23E0762-DUP1)				Prepared: 05/17/23 12:02		Analyzed: 05/17/23 21:02						
QC Source Sample: Non-SDG (A3E1364-02)												
Gasoline Range Organics	ND	2500	5000	ug/L	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 93 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*			*"*					

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ANALYTICAL REPORT

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0669 - EPA 5030C												**Water**
Blank (23E0669-BLK1)			Prepared: 05/16/23 10:00 Analyzed: 05/16/23 11:21									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*80-120 %*			*"*				
LCS (23E0669-BS1)			Prepared: 05/16/23 10:00 Analyzed: 05/16/23 10:27									
EPA 8260D												
Benzene	20.2	0.100	0.200	ug/L	1	20.0	---	101	80-120%	---	---	
Toluene	18.4	0.500	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
Ethylbenzene	19.3	0.250	0.500	ug/L	1	20.0	---	97	80-120%	---	---	
Xylenes, total	56.2	0.750	1.50	ug/L	1	60.0	---	94	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*86 %*		*80-120 %*			*"*				
Duplicate (23E0669-DUP1)			Prepared: 05/16/23 10:00 Analyzed: 05/16/23 17:41									
QC Source Sample: Non-SDG (A3E1253-01)												
Benzene	ND	1.00	2.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Xylenes, total	ND	7.50	15.0	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 112 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				
Matrix Spike (23E0669-MS1)			Prepared: 05/16/23 10:00 Analyzed: 05/16/23 15:52									
QC Source Sample: Non-SDG (A3E1310-01RE1)												
EPA 8260D												
Benzene	20.9	0.100	0.200	ug/L	1	20.0	ND	104	79-120%	---	---	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0669 - EPA 5030C							**Water**					
Matrix Spike (23E0669-MS1)			Prepared: 05/16/23 10:00		Analyzed: 05/16/23 15:52							
QC Source Sample: Non-SDG (A3E1310-01RE1)												
Toluene	19.0	0.500	1.00	ug/L	1	20.0	ND	95	80-121%	---	---	
Ethylbenzene	20.1	0.250	0.500	ug/L	1	20.0	ND	100	79-121%	---	---	
Xylenes, total	58.6	0.750	1.50	ug/L	1	60.0	ND	98	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*86 %*		*80-120 %*			*"*				
Matrix Spike Dup (23E0669-MSD1)			Prepared: 05/16/23 10:00		Analyzed: 05/16/23 16:19							
QC Source Sample: Non-SDG (A3E1310-01RE1)												
Benzene	20.9	0.100	0.200	ug/L	1	20.0	ND	105	79-120%	0.1	30%	
Toluene	18.8	0.500	1.00	ug/L	1	20.0	ND	94	80-121%	0.9	30%	
Ethylbenzene	20.0	0.250	0.500	ug/L	1	20.0	ND	100	79-121%	0.6	30%	
Xylenes, total	58.2	0.750	1.50	ug/L	1	60.0	ND	97	79-121%	0.7	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*85 %*		*80-120 %*			*"*				

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1405 - 12 22 23 1809

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0762 - EPA 5030C									**Water**			
Blank (23E0762-BLK1)			Prepared: 05/17/23 12:02 Analyzed: 05/17/23 14:12									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*106 %*		*80-120 %*			*"*				
LCS (23E0762-BS1)			Prepared: 05/17/23 12:02 Analyzed: 05/17/23 13:27									
EPA 8260D												
Benzene	19.0	0.100	0.200	ug/L	1	20.0	---	95	80-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Ethylbenzene	20.6	0.250	0.500	ug/L	1	20.0	---	103	80-120%	---	---	
Xylenes, total	67.2	0.750	1.50	ug/L	1	60.0	---	112	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				
Duplicate (23E0762-DUP1)			Prepared: 05/17/23 12:02 Analyzed: 05/17/23 21:02									
QC Source Sample: Non-SDG (A3E1364-02)												
Benzene	ND	5.00	10.0	ug/L	50	---	ND	---	---	---	30%	
Toluene	ND	25.0	50.0	ug/L	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	12.5	25.0	ug/L	50	---	ND	---	---	---	30%	
Xylenes, total	ND	37.5	75.0	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*107 %*		*80-120 %*			*"*				
Matrix Spike (23E0762-MS1)			Prepared: 05/17/23 12:02 Analyzed: 05/17/23 23:17									
QC Source Sample: Non-SDG (A3E1428-01)												
EPA 8260D												
Benzene	19.6	0.100	0.200	ug/L	1	20.0	ND	98	79-120%	---	---	

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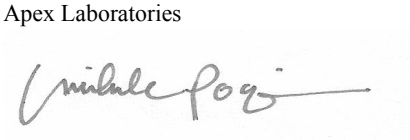

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0762 - EPA 5030C							**Water**					
Matrix Spike (23E0762-MS1)			Prepared: 05/17/23 12:02		Analyzed: 05/17/23 23:17							
QC Source Sample: Non-SDG (A3E1428-01)												
Toluene	21.0	0.500	1.00	ug/L	1	20.0	ND	105	80-121%	---	---	
Ethylbenzene	22.6	0.250	0.500	ug/L	1	20.0	ND	113	79-121%	---	---	
Xylenes, total	73.4	0.750	1.50	ug/L	1	60.0	ND	**122**	**79-121%**	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 93 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0844 - EPA 3510C (Acid Extraction)												**Water**
Blank (23E0844-BLK2)			Prepared: 05/19/23 07:20		Analyzed: 05/19/23 19:45							
EPA 8270E SIM												
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 66 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*110 %*		*50-134 %*				*"*			
LCS (23E0844-BS2)			Prepared: 05/19/23 07:20		Analyzed: 05/19/23 20:11							
EPA 8270E SIM												
1-Methylnaphthalene	6.11	0.0400	0.0800	ug/L	1	8.00	---	76	41-120%	---	---	
2-Methylnaphthalene	6.63	0.0400	0.0800	ug/L	1	8.00	---	83	40-121%	---	---	
Naphthalene	5.68	0.0400	0.0800	ug/L	1	8.00	---	71	40-121%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*98 %*		*50-134 %*				*"*			
LCS Dup (23E0844-BSD2)			Prepared: 05/19/23 07:20		Analyzed: 05/19/23 20:36							**Q-19**
EPA 8270E SIM												
1-Methylnaphthalene	6.46	0.0400	0.0800	ug/L	1	8.00	---	81	41-120%	5	30%	
2-Methylnaphthalene	5.87	0.0400	0.0800	ug/L	1	8.00	---	73	40-121%	12	30%	
Naphthalene	6.03	0.0400	0.0800	ug/L	1	8.00	---	75	40-121%	6	30%	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*97 %*		*50-134 %*				*"*			

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1405 - 12 22 23 1809

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)								Water				
Blank (23E0981-BLK1)			Prepared: 05/23/23 11:27 Analyzed: 05/23/23 23:13									
EPA 8270E SIM												
Acenaphthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*89 %*		*50-134 %*			*"*				
LCS (23E0981-BS1)			Prepared: 05/23/23 11:27 Analyzed: 05/23/23 23:38									
EPA 8270E SIM												
Acenaphthene	5.06	0.0200	0.0400	ug/L	1	8.00	---	63	47-122%	---	---	
Acenaphthylene	5.06	0.0200	0.0400	ug/L	1	8.00	---	63	41-130%	---	---	
Anthracene	6.89	0.0200	0.0400	ug/L	1	8.00	---	86	57-123%	---	---	
Benz(a)anthracene	7.02	0.0200	0.0400	ug/L	1	8.00	---	88	58-125%	---	---	
Benzo(a)pyrene	7.32	0.0200	0.0400	ug/L	1	8.00	---	92	54-128%	---	---	
Benzo(b)fluoranthene	7.40	0.0200	0.0400	ug/L	1	8.00	---	93	53-131%	---	---	
Benzo(k)fluoranthene	7.63	0.0200	0.0400	ug/L	1	8.00	---	95	57-129%	---	---	
Benzo(g,h,i)perylene	6.83	0.0200	0.0400	ug/L	1	8.00	---	85	50-134%	---	---	
Chrysene	7.29	0.0200	0.0400	ug/L	1	8.00	---	91	59-123%	---	---	

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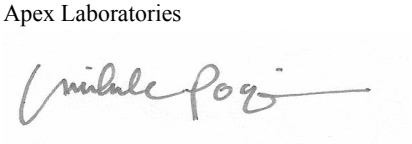

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1405 - 12 22 23 1809

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)								**Water**				
LCS (23E0981-BS1)			Prepared: 05/23/23 11:27		Analyzed: 05/23/23 23:38							
Dibenz(a,h)anthracene	7.38	0.0200	0.0400	ug/L	1	8.00	---	92	51-134%	---	---	
Fluoranthene	7.51	0.0200	0.0400	ug/L	1	8.00	---	94	57-128%	---	---	
Fluorene	5.85	0.0200	0.0400	ug/L	1	8.00	---	73	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	7.52	0.0200	0.0400	ug/L	1	8.00	---	94	52-134%	---	---	
1-Methylnaphthalene	3.68	0.0400	0.0800	ug/L	1	8.00	---	46	41-120%	---	---	
2-Methylnaphthalene	3.55	0.0400	0.0800	ug/L	1	8.00	---	44	40-121%	---	---	
Naphthalene	3.70	0.0400	0.0800	ug/L	1	8.00	---	46	40-121%	---	---	
Phenanthrene	6.80	0.0200	0.0400	ug/L	1	8.00	---	85	59-120%	---	---	
Pyrene	7.58	0.0200	0.0400	ug/L	1	8.00	---	95	57-126%	---	---	
Dibenzofuran	5.37	0.0200	0.0400	ug/L	1	8.00	---	67	53-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*86 %*		*50-134 %*			*"*				
LCS Dup (23E0981-BSD1)			Prepared: 05/23/23 11:27		Analyzed: 05/24/23 00:03							**Q-19**
EPA 8270E SIM												
Acenaphthene	5.48	0.0200	0.0400	ug/L	1	8.00	---	68	47-122%	8	30%	
Acenaphthylene	5.32	0.0200	0.0400	ug/L	1	8.00	---	66	41-130%	5	30%	
Anthracene	7.00	0.0200	0.0400	ug/L	1	8.00	---	88	57-123%	2	30%	
Benz(a)anthracene	7.30	0.0200	0.0400	ug/L	1	8.00	---	91	58-125%	4	30%	
Benzo(a)pyrene	7.63	0.0200	0.0400	ug/L	1	8.00	---	95	54-128%	4	30%	
Benzo(b)fluoranthene	7.55	0.0200	0.0400	ug/L	1	8.00	---	94	53-131%	2	30%	
Benzo(k)fluoranthene	8.04	0.0200	0.0400	ug/L	1	8.00	---	100	57-129%	5	30%	
Benzo(g,h,i)perylene	7.15	0.0200	0.0400	ug/L	1	8.00	---	89	50-134%	5	30%	
Chrysene	7.61	0.0200	0.0400	ug/L	1	8.00	---	95	59-123%	4	30%	
Dibenz(a,h)anthracene	7.60	0.0200	0.0400	ug/L	1	8.00	---	95	51-134%	3	30%	
Fluoranthene	7.90	0.0200	0.0400	ug/L	1	8.00	---	99	57-128%	5	30%	
Fluorene	6.21	0.0200	0.0400	ug/L	1	8.00	---	78	52-124%	6	30%	
Indeno(1,2,3-cd)pyrene	7.92	0.0200	0.0400	ug/L	1	8.00	---	99	52-134%	5	30%	
1-Methylnaphthalene	4.01	0.0400	0.0800	ug/L	1	8.00	---	50	41-120%	9	30%	
2-Methylnaphthalene	3.85	0.0400	0.0800	ug/L	1	8.00	---	48	40-121%	8	30%	
Naphthalene	3.94	0.0400	0.0800	ug/L	1	8.00	---	49	40-121%	6	30%	
Phenanthrene	6.99	0.0200	0.0400	ug/L	1	8.00	---	87	59-120%	3	30%	
Pyrene	7.90	0.0200	0.0400	ug/L	1	8.00	---	99	57-126%	4	30%	
Dibenzofuran	5.75	0.0200	0.0400	ug/L	1	8.00	---	72	53-120%	7	30%	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)												**Water**
LCS Dup (23E0981-BSD1)			Prepared: 05/23/23 11:27 Analyzed: 05/24/23 00:03									**Q-19**
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*	*Limits: 44-120 %*	*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*88 %*	*50-134 %*	*"*							

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0748 - EPA 3015A												**Water**
Blank (23E0748-BLK2)			Prepared: 05/17/23 09:52		Analyzed: 05/17/23 16:03							
EPA 6020B												
Barium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (23E0748-BS2)			Prepared: 05/17/23 09:52		Analyzed: 05/17/23 16:08							
EPA 6020B												
Barium	60.5	1.00	2.00	ug/L	1	55.6	---	109	80-120%	---	---	Q-16
Duplicate (23E0748-DUP2)			Prepared: 05/17/23 09:52		Analyzed: 05/17/23 16:17							
QC Source Sample: Non-SDG (A3E1181-01RE1)												
Barium	ND	1.00	2.00	ug/L	1	---	ND	---	---	---	20%	Q-16
Matrix Spike (23E0748-MS2)			Prepared: 05/17/23 09:52		Analyzed: 05/17/23 16:22							
QC Source Sample: Non-SDG (A3E1181-01RE1)												
EPA 6020B												
Barium	60.4	1.00	2.00	ug/L	1	55.6	ND	109	75-125%	---	---	Q-16

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E1016 - Matrix Matched Direct Inject									Water			
Blank (23E1016-BLK1)			Prepared: 05/24/23 10:29 Analyzed: 05/25/23 11:55									
EPA 6020B (Diss)												
Barium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
LCS (23E1016-BS1)			Prepared: 05/24/23 10:29 Analyzed: 05/25/23 12:00									
EPA 6020B (Diss)												
Barium	57.9	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Duplicate (23E1016-DUP1)			Prepared: 05/24/23 10:29 Analyzed: 05/25/23 12:20									
QC Source Sample: FMW-158-051523 (A3E1405-02)												
EPA 6020B (Diss)												
Barium	**82.2**	0.500	1.00	ug/L	1	---	82.0	---	---	0.2	20%	
Matrix Spike (23E1016-MS1)			Prepared: 05/24/23 10:29 Analyzed: 05/25/23 12:24									
QC Source Sample: FMW-158-051523 (A3E1405-02)												
EPA 6020B (Diss)												
Barium	137	0.500	1.00	ug/L	1	55.6	82.0	99	75-125%	---	---	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E1023							
A3E1405-01	Water	NWTPH-Dx LL	05/15/23 13:33	05/24/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1405-02	Water	NWTPH-Dx LL	05/15/23 14:00	05/24/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1405-03	Water	NWTPH-Dx LL	05/15/23 15:40	05/24/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1405-04	Water	NWTPH-Dx LL	05/15/23 15:45	05/24/23 11:28	1040mL/2mL	1000mL/2mL	0.96

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0762							
A3E1405-01RE1	Water	NWTPH-Gx (MS)	05/15/23 13:33	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-02RE1	Water	NWTPH-Gx (MS)	05/15/23 14:00	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-03RE1	Water	NWTPH-Gx (MS)	05/15/23 15:40	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-04RE1	Water	NWTPH-Gx (MS)	05/15/23 15:45	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0762							
A3E1405-01RE1	Water	EPA 8260D	05/15/23 13:33	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-02RE1	Water	EPA 8260D	05/15/23 14:00	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-03RE1	Water	EPA 8260D	05/15/23 15:40	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00
A3E1405-04RE1	Water	EPA 8260D	05/15/23 15:45	05/17/23 12:48	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0844							
A3E1405-01	Water	EPA 8270E SIM	05/15/23 13:33	05/19/23 07:20	1060mL/2mL	1000mL/2mL	0.94
A3E1405-02	Water	EPA 8270E SIM	05/15/23 14:00	05/19/23 07:20	1050mL/2mL	1000mL/2mL	0.95
A3E1405-03	Water	EPA 8270E SIM	05/15/23 15:40	05/19/23 07:20	1050mL/2mL	1000mL/2mL	0.95
A3E1405-04	Water	EPA 8270E SIM	05/15/23 15:45	05/19/23 07:20	1050mL/2mL	1000mL/2mL	0.95

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0748							
A3E1405-02RE1	Water	EPA 6020B	05/15/23 14:00	05/17/23 09:52	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E1016							
A3E1405-02	Water	EPA 6020B (Diss)	05/15/23 14:00	05/24/23 10:29	45mL/50mL	45mL/50mL	1.00

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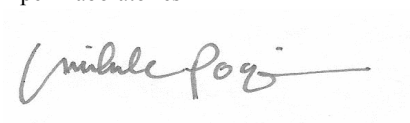

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-16	Reanalysis of an original Batch QC sample.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
S-06	Surrogate recovery is outside of established control limits.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

Apex Laboratories

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
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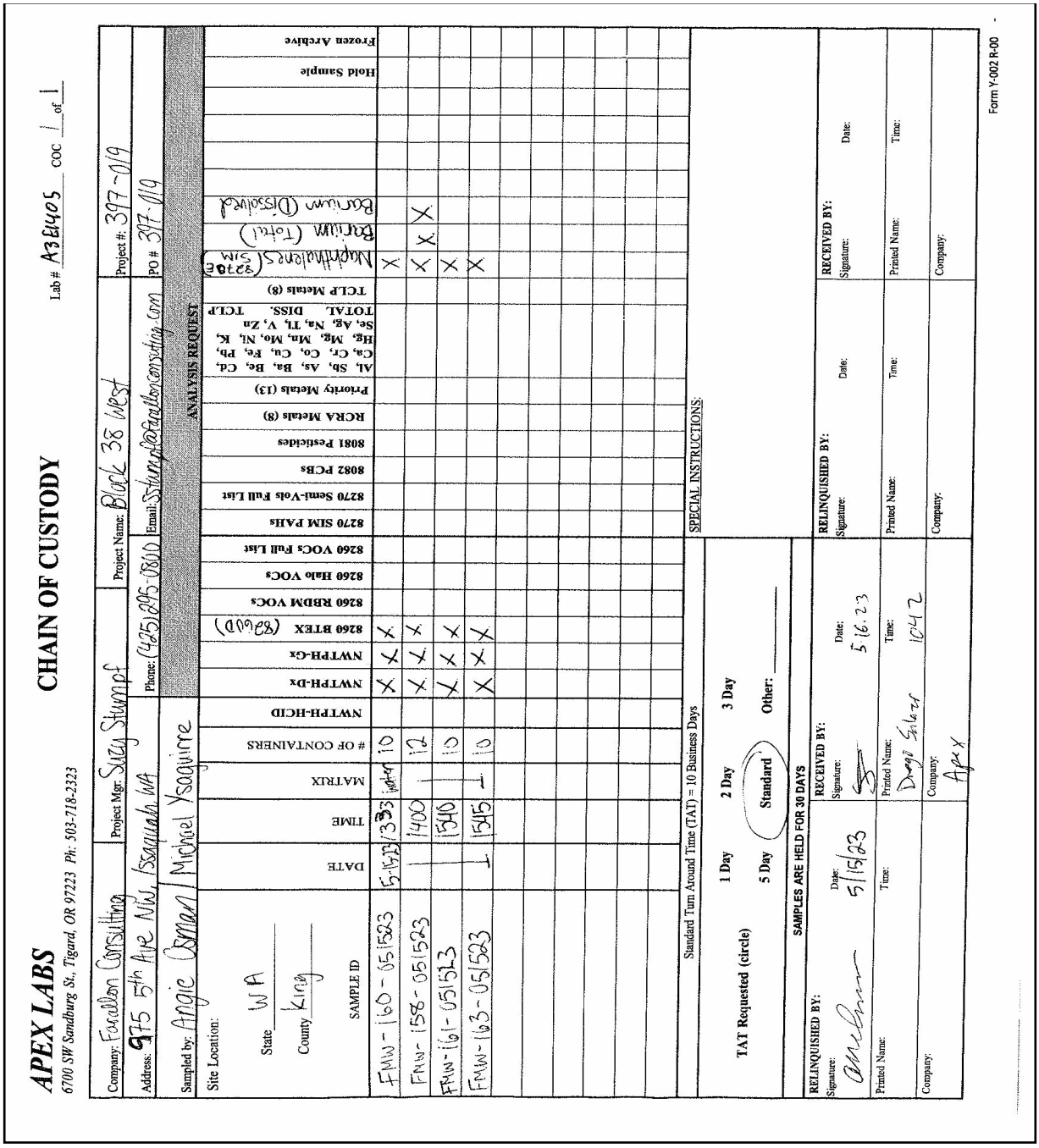

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3E1405 COC 1 of 1

Company: Farallon Consulting | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Issaquah WA | Phone: (425)295-0810 | Email: Sstumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osman / Michael Ysaguirre

Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX (8260D)	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Manganese (TOTAL) (6010C SIM)	Barium (Total)	Barium (Dissolved)	Hold Sample	Frozen Archive
FMW-160-051523	5/15/23	1330	water	10		X	X	X												X	X	X		
FMW-158-051523	1	1400		12		X	X	X												X	X	X		
FMW-161-051523		1540		10		X	X	X												X	X	X		
FMW-163-051523		1545		10		X	X	X												X	X	X		

Standard Turn Around Time (TAT) = 10 Business Days

SPECIAL INSTRUCTIONS:

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: [signature] Date: 5/15/23 Printed Name: Time: Company:

RECEIVED BY: Signature: [signature] Date: 5.16.23 Printed Name: Dragi Silva Time: 1044 Company: Apex

RELINQUISHED BY: Signature: Date: Printed Name: Time: Company:

RECEIVED BY: Signature: Date: Printed Name: Time: Company:

RELINQUISHED BY: Signature: Date: Printed Name: Time: Company:

RECEIVED BY: Signature: Date: Printed Name: Time: Company:

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1405 - 12 22 23 1809**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3 E1405

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 5.16.23 @ 1042 By: DJS

Delivered by: Apex__Client__ESS___FedEx~~X~~_UPS__Radio___Morgan ___SDS___Evergreen___Other ___

Cooler Inspection Date/time inspected: 5-16-23 @ 1043 By: DJS

Chain of Custody included? Yes X No _____

Signed/dated by client? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.1	4.8	4.7				
Custody seals? (Y/N)	N	N	N				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	N	N	N				
Ice type: (Gel/Real/Other)	Real	Real	Real				
Condition (In/Out):	In	In	In				

Cooler out of temp? (Y/(N)) Possible reason why: _____

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 5.16.23 @ 1145 By: DJS

All samples intact? Yes~~X~~ No X Comments: DJS 5.16.23 1/6 vials received broken for FMW-161-051523.

Bottle labels/COCs agree? Yes X No ___ Comments: _____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes X No ___ NA ___ 315

Comments FMW-160-051523 = 2/6 HS. FMW-158-05523 = 1/6 HS. FMW-161-051523 = 3/6 HS accepted 123

Water samples: pH checked: Yes~~X~~ No___NA___ pH appropriate? Yes X No___NA____

Comments: _____

Additional information: 3983 4618 5812

Labeled by: DJS Witness: VD Cooler Inspected by: DJS

Form Y-003 R-00

Apex Laboratories

Michele Poquiz

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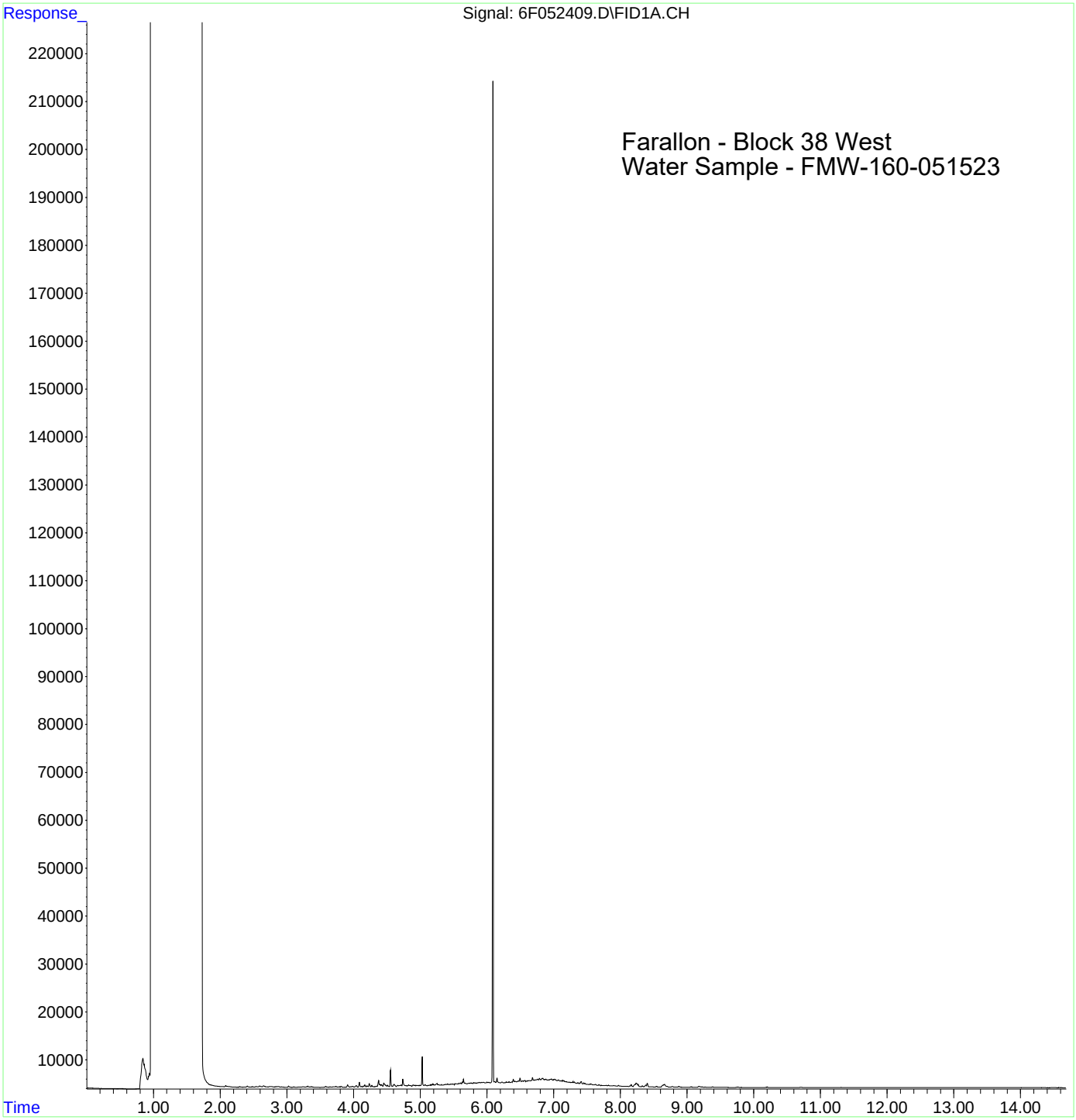
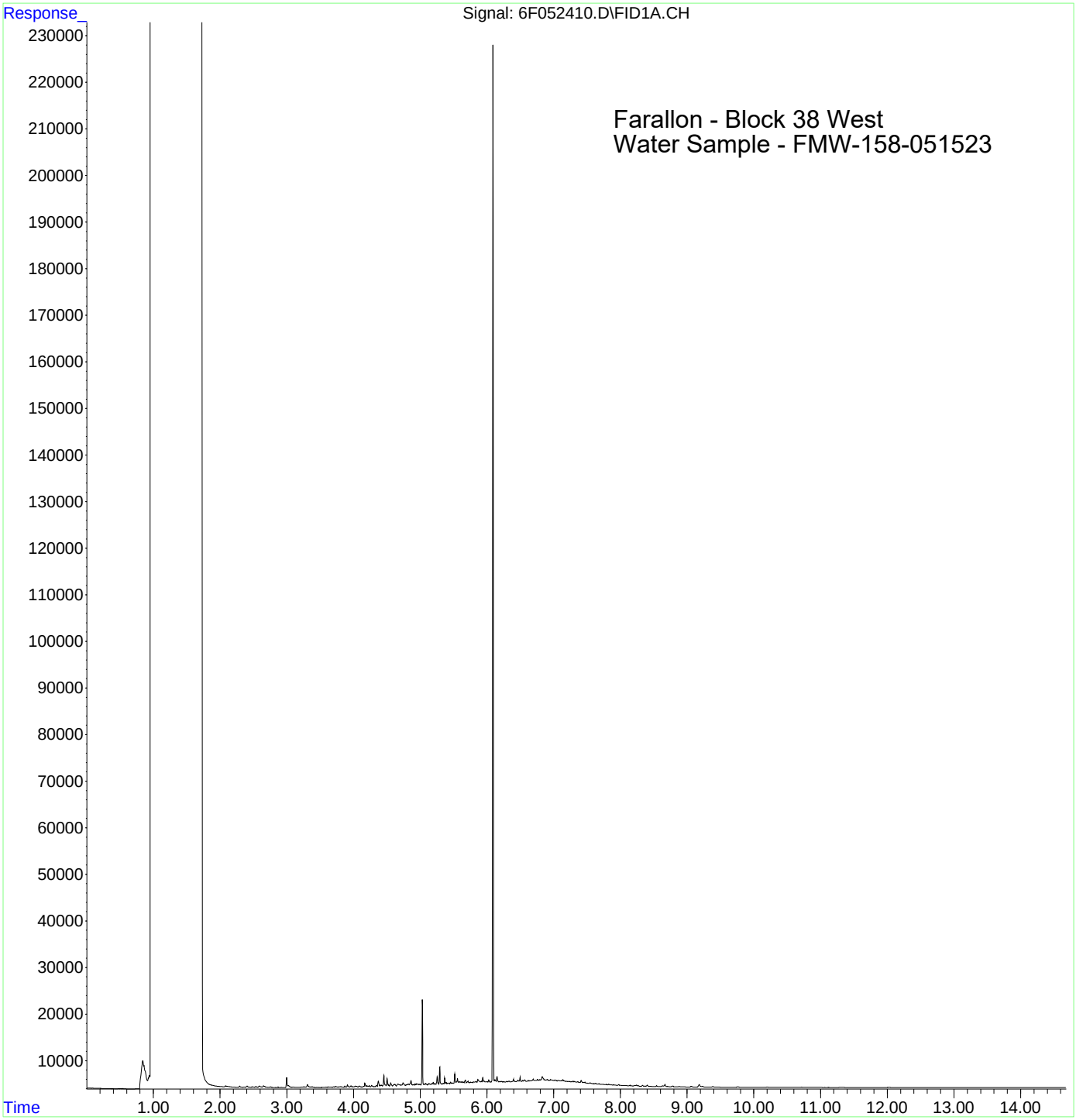
Michele Poquiz For Kurt Johnson, Senior Chemist

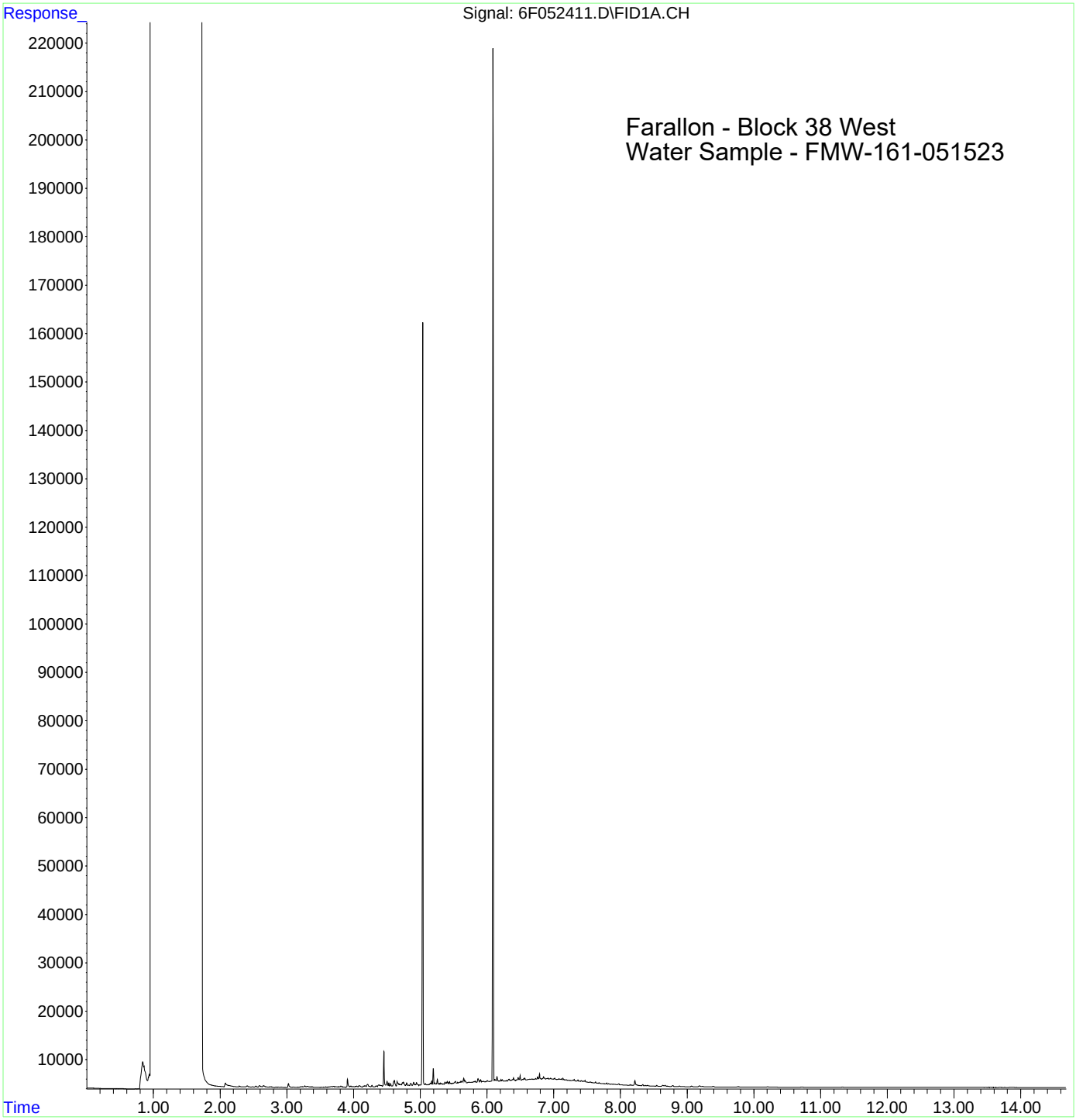
File   :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052409.D
Operator   : BLL
Acquired   : 24 May 2023 10:33 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1405-01
Misc Info :
Vial Number: 6



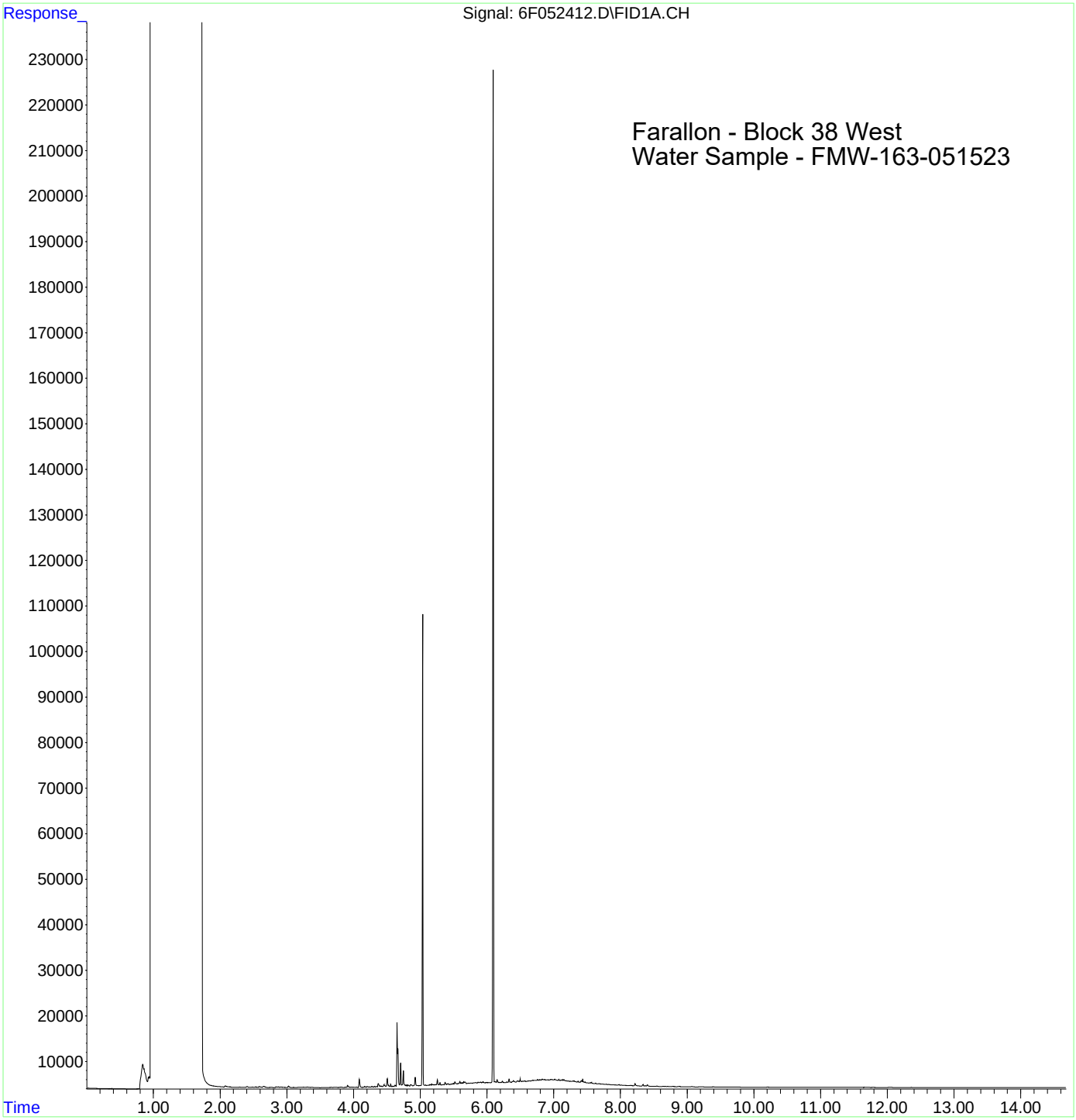
File   :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052410.D
Operator   : BLL
Acquired   : 24 May 2023 10:53 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1405-02
Misc Info :
Vial Number: 7



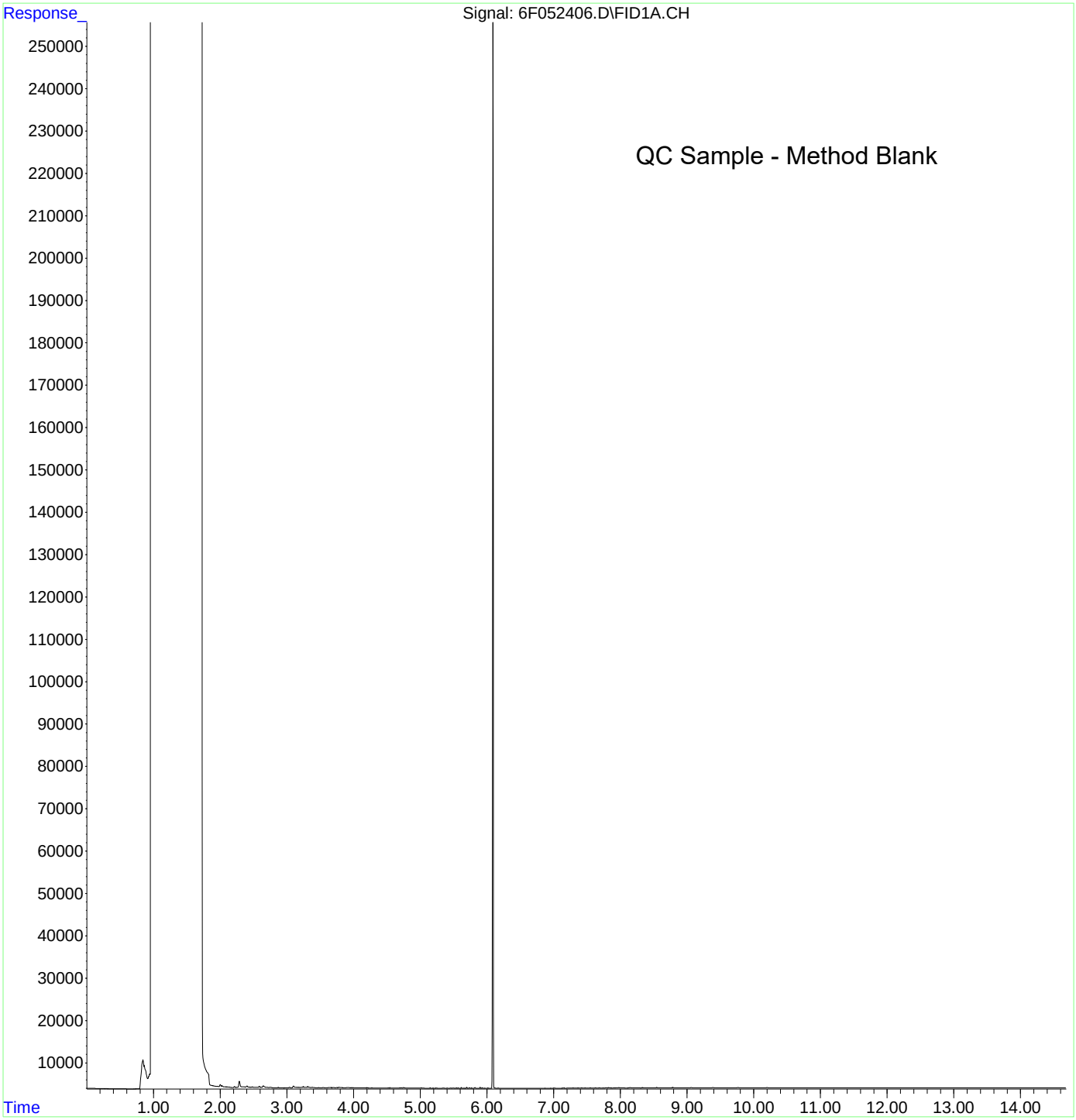
File   :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052411.D
Operator   : BLL
Acquired   : 24 May 2023 11:14 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1405-03
Misc Info :
Vial Number: 8



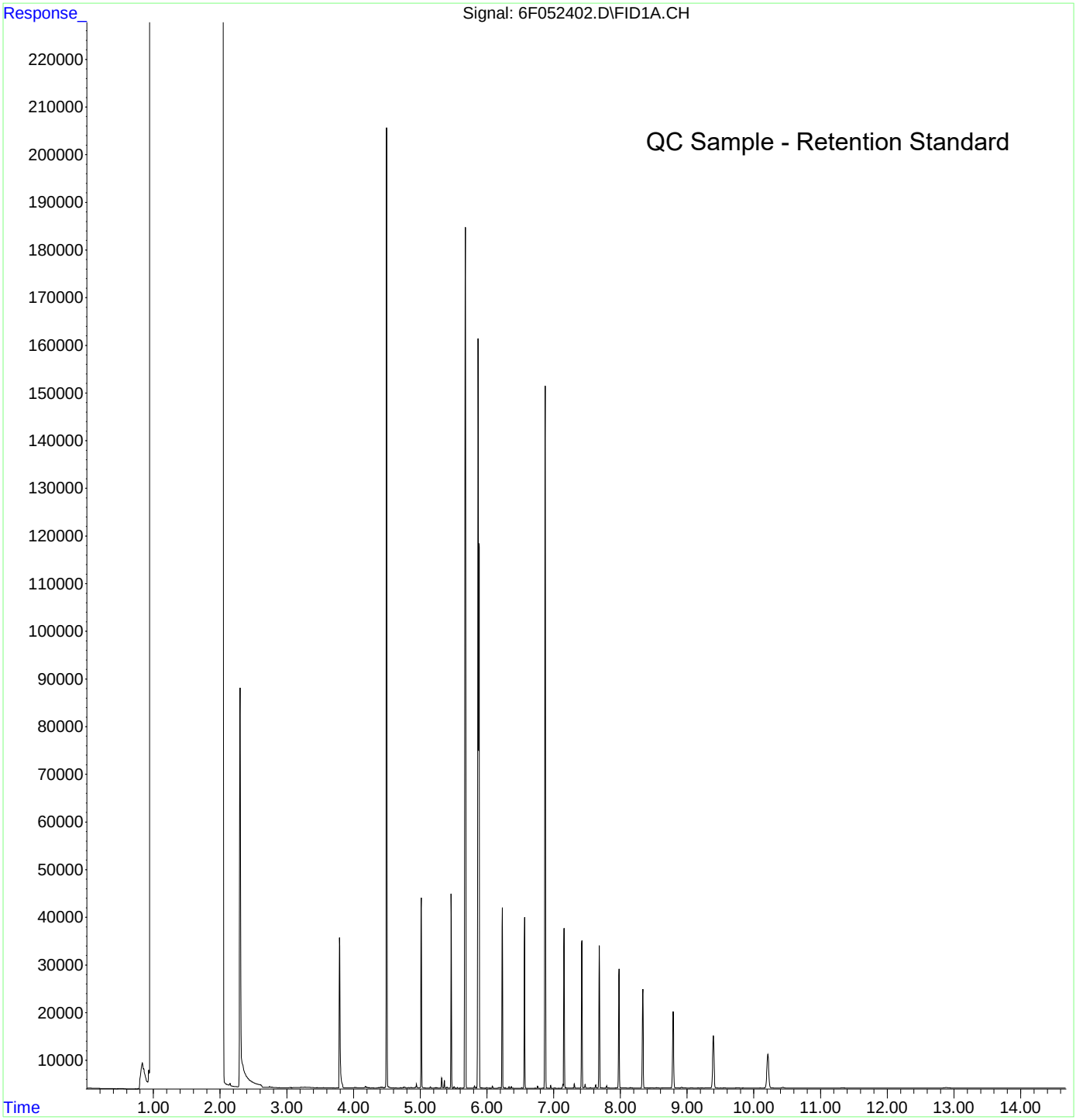
File   :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052412.D
Operator   : BLL
Acquired   : 24 May 2023 11:34 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3E1405-04
Misc Info :
Vial Number: 9



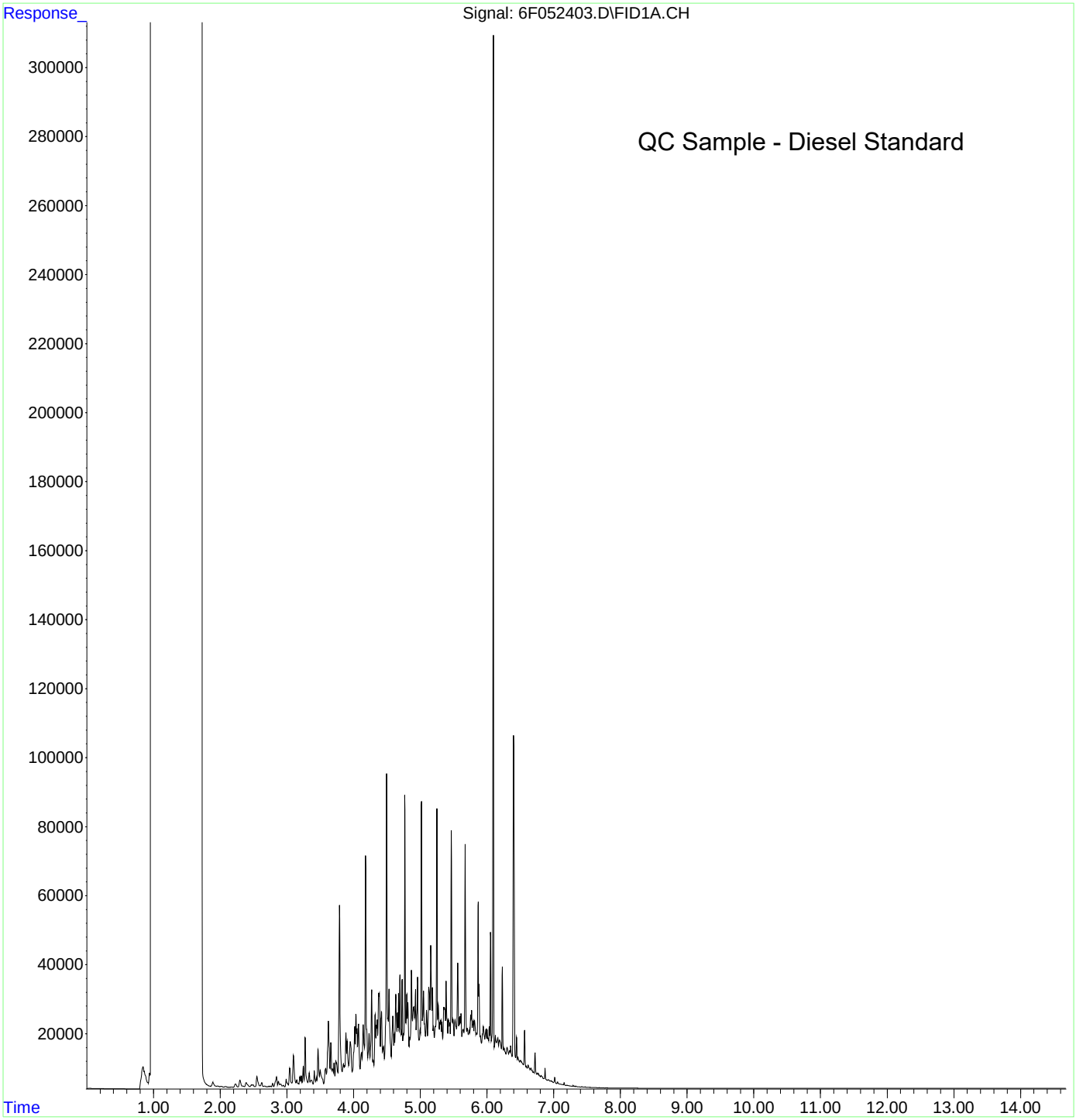
File   :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052406.D
Operator   : BLL
Acquired   : 24 May 2023   9:32 pm using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 23E1023-BLK1
Misc Info :
Vial Number: 3



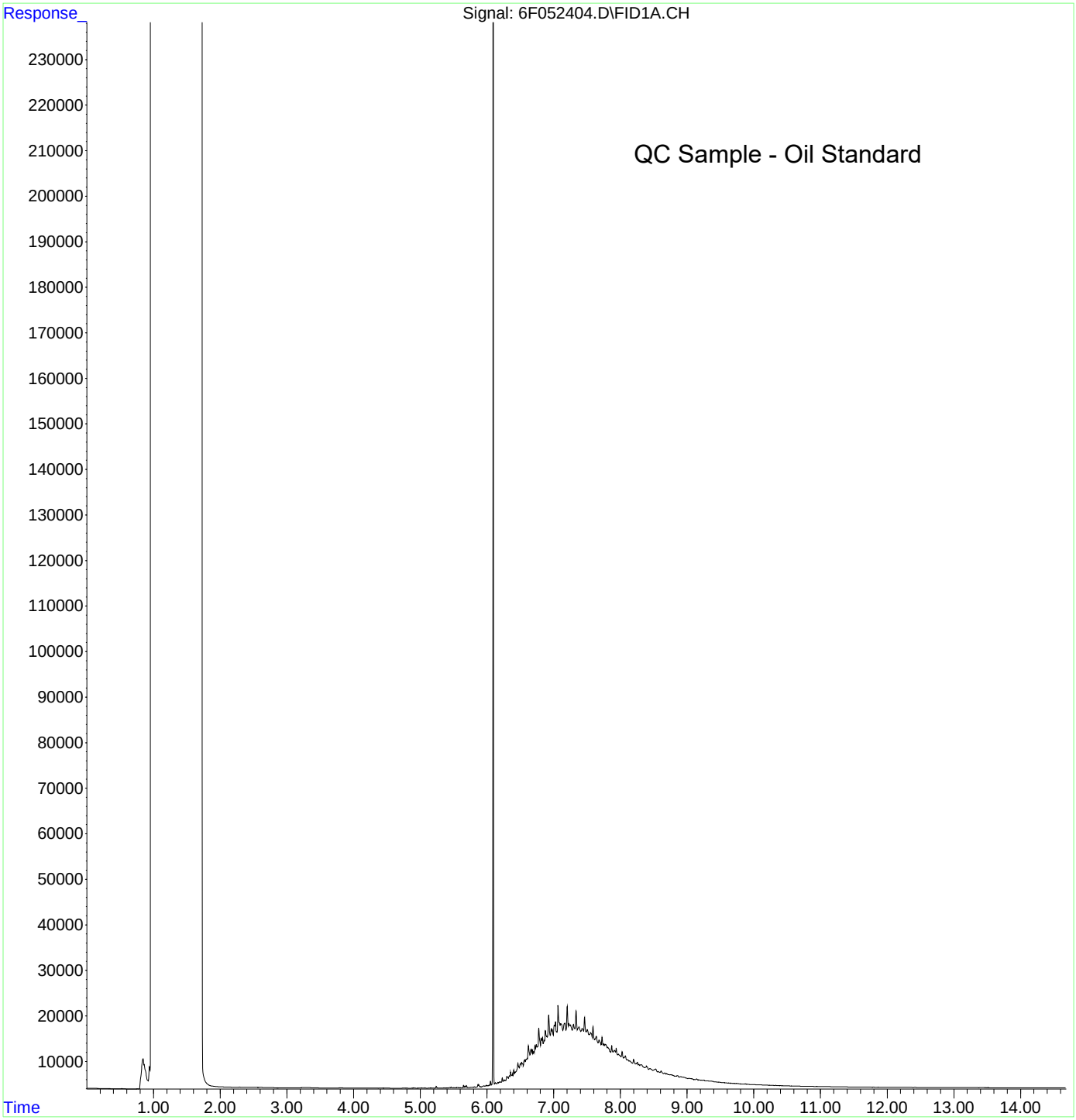
File :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052402.D
Operator : BLL
Acquired : 24 May 2023 3:22 pm using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 3E24066-RES1
Misc Info :
Vial Number: 94



File :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052403.D
Operator : BLL
Acquired : 24 May 2023 3:42 pm using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 3E24066-CCV1
Misc Info :
Vial Number: 1



File :M:\DUALFID6\1\DATA\2023-05\3E24066\6F052404.D
Operator : BLL
Acquired : 24 May 2023 4:03 pm using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 3E24066-CCV2
Misc Info :
Vial Number: 2



Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Friday, December 22, 2023

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3E1514 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3E1514, which was received by the laboratory on 5/18/2023 at 10:45:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.					
(See Cooler Receipt Form for details)					
Cooler #1	0.3	degC	Cooler #2	3.3	degC
Cooler #3	5.6	degC	Cooler #4	2.0	degC
Cooler #5	1.8	degC	Cooler #6	3.9	degC
Cooler #7	5.6	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

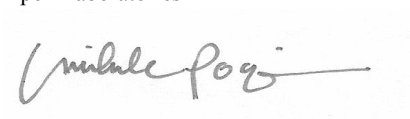
Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-155-051623	A3E1514-01	Water	05/16/23 07:45	05/18/23 10:45
FMW-156-051623	A3E1514-02	Water	05/16/23 08:10	05/18/23 10:45
OW-1-051623	A3E1514-03	Water	05/16/23 09:20	05/18/23 10:45
FMW-154-051623	A3E1514-04	Water	05/16/23 09:45	05/18/23 10:45
FMW-157-051623	A3E1514-05	Water	05/16/23 10:47	05/18/23 10:45
OW-2-051623	A3E1514-06	Water	05/16/23 11:15	05/18/23 10:45
FMW-152-051623	A3E1514-07	Water	05/16/23 12:45	05/18/23 10:45
FMW-150-051623	A3E1514-08	Water	05/16/23 15:15	05/18/23 10:45
FMW-137-051623	A3E1514-09	Water	05/16/23 16:20	05/18/23 10:45
FMW-164-051623	A3E1514-10	Water	05/16/23 16:50	05/18/23 10:45
FMW-138-051623	A3E1514-11	Water	05/16/23 18:00	05/18/23 10:45
FMW-162-051623	A3E1514-12	Water	05/16/23 17:51	05/18/23 10:45
FMW-159-051623	A3E1514-13	Water	05/16/23 19:20	05/18/23 10:45
FMW-153-051623	A3E1514-14	Water	05/16/23 19:50	05/18/23 10:45
FMW-151-051623	A3E1514-15	Water	05/16/23 20:48	05/18/23 10:45
OW-3-051723	A3E1514-16	Water	05/17/23 12:32	05/18/23 10:45
FMW-165-051723	A3E1514-17	Water	05/17/23 15:52	05/18/23 10:45

Apex Laboratories



Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL CASE NARRATIVE

A3E1514 **Apex Laboratories**

Amended Report Revision 2:

Reporting to Reporting Limits (RLs)-

This report supersedes all previous reports.

Per client request, this report has been amended to report all NWTPH-Dx data to the RLs.

Michele Poquiz
Forensics Project Manager
12/22/2023

Amended Report Revision 1:

Additional Data-

This report supersedes all previous reports.

The final report has been amended to report BTEX data for sample FMW-154-051623 (APEX ID: A3E1514-04).

Michele Poquiz
Forensics Project Manager
7/3/23

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**287**	---	75.5	ug/L	1	05/22/23 19:08	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/22/23 19:08	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*05/22/23 19:08*	*NWTPH-Dx LL*	
FMW-156-051623 (A3E1514-02)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**170**	---	76.9	ug/L	1	05/22/23 19:30	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/22/23 19:30	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*05/22/23 19:30*	*NWTPH-Dx LL*	
OW-1-051623 (A3E1514-03)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**332**	---	75.5	ug/L	1	05/22/23 19:53	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/22/23 19:53	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 111 %*		*Limits: 50-150 %*	*1*	*05/22/23 19:53*	*NWTPH-Dx LL*	
FMW-154-051623 (A3E1514-04)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**318**	---	76.9	ug/L	1	05/22/23 20:14	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/22/23 20:14	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 113 %*		*Limits: 50-150 %*	*1*	*05/22/23 20:14*	*NWTPH-Dx LL*	
FMW-157-051623 (A3E1514-05)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**161**	---	75.5	ug/L	1	05/22/23 20:36	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	05/22/23 20:36	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 117 %*		*Limits: 50-150 %*	*1*	*05/22/23 20:36*	*NWTPH-Dx LL*	
OW-2-051623 (A3E1514-06)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**107**	---	76.9	ug/L	1	05/22/23 20:58	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/22/23 20:58	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 109 %*		*Limits: 50-150 %*	*1*	*05/22/23 20:58*	*NWTPH-Dx LL*	
FMW-152-051623 (A3E1514-07)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**143**	---	75.5	ug/L	1	05/22/23 21:19	NWTPH-Dx LL	
Oil	ND	---	151	ug/L	1	05/22/23 21:19	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 116 %*		*Limits: 50-150 %*	*1*	*05/22/23 21:19*	*NWTPH-Dx LL*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-150-051623 (A3E1514-08)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**92.4**	---	76.9	ug/L	1	05/22/23 21:41	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/22/23 21:41	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 111 %*		*Limits: 50-150 %*	*1*	*05/22/23 21:41*	*NWTPH-Dx LL*	
FMW-164-051623 (A3E1514-10)				**Matrix: Water**		**Batch: 23E0901**		
Diesel	**82.9**	---	76.9	ug/L	1	05/22/23 22:02	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	05/22/23 22:02	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*05/22/23 22:02*	*NWTPH-Dx LL*	
FMW-162-051623 (A3E1514-12)				**Matrix: Water**		**Batch: 23E0956**		
Diesel	**212**	---	74.8	ug/L	1	05/24/23 09:28	NWTPH-Dx LL	**F-03, F-11**
Oil	ND	---	150	ug/L	1	05/24/23 09:28	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 112 %*		*Limits: 50-150 %*	*1*	*05/24/23 09:28*	*NWTPH-Dx LL*	
FMW-159-051623 (A3E1514-13)				**Matrix: Water**		**Batch: 23E0956**		
Diesel	**102**	---	74.8	ug/L	1	05/24/23 09:50	NWTPH-Dx LL	**F-11**
Oil	ND	---	150	ug/L	1	05/24/23 09:50	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 112 %*		*Limits: 50-150 %*	*1*	*05/24/23 09:50*	*NWTPH-Dx LL*	
FMW-153-051623 (A3E1514-14)				**Matrix: Water**		**Batch: 23E0956**		
Diesel	ND	---	74.8	ug/L	1	05/24/23 10:12	NWTPH-Dx LL	
Oil	ND	---	150	ug/L	1	05/24/23 10:12	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 107 %*		*Limits: 50-150 %*	*1*	*05/24/23 10:12*	*NWTPH-Dx LL*	
FMW-151-051623 (A3E1514-15)				**Matrix: Water**		**Batch: 23E0956**		
Diesel	**287**	---	74.8	ug/L	1	05/24/23 10:33	NWTPH-Dx LL	**F-11**
Oil	ND	---	150	ug/L	1	05/24/23 10:33	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 120 %*		*Limits: 50-150 %*	*1*	*05/24/23 10:33*	*NWTPH-Dx LL*	
OW-3-051723 (A3E1514-16)				**Matrix: Water**		**Batch: 23E0956**		
Diesel	**84.8**	---	74.8	ug/L	1	05/24/23 10:55	NWTPH-Dx LL	**F-11**
Oil	ND	---	150	ug/L	1	05/24/23 10:55	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 104 %*		*Limits: 50-150 %*	*1*	*05/24/23 10:55*	*NWTPH-Dx LL*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01RE1)				**Matrix: Water**		**Batch: 23E0865**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/19/23 16:21	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 92 %*		*Limits: 50-150 %*	*1*	*05/19/23 16:21*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*103 %*		*50-150 %*	*1*	*05/19/23 16:21*	*NWTPH-Gx (MS)*	
FMW-156-051623 (A3E1514-02RE1)				**Matrix: Water**		**Batch: 23E0865**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/19/23 18:36	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*		*Limits: 50-150 %*	*1*	*05/19/23 18:36*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*	*1*	*05/19/23 18:36*	*NWTPH-Gx (MS)*	
FMW-154-051623 (A3E1514-04RE1)				**Matrix: Water**		**Batch: 23E0865**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	05/19/23 18:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 98 %*		*Limits: 50-150 %*	*1*	*05/19/23 18:13*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*107 %*		*50-150 %*	*1*	*05/19/23 18:13*	*NWTPH-Gx (MS)*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01RE1)				**Matrix: Water**		**Batch: 23E0865**		
Benzene	ND	0.100	0.200	ug/L	1	05/19/23 16:21	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/19/23 16:21	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/19/23 16:21	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/19/23 16:21	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*96 %*	*Limits: 80-120 %*	*1*	*05/19/23 16:21*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*05/19/23 16:21*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*05/19/23 16:21*	*EPA 8260D*	
FMW-156-051623 (A3E1514-02RE1)				**Matrix: Water**		**Batch: 23E0865**		
Benzene	ND	0.100	0.200	ug/L	1	05/19/23 18:36	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/19/23 18:36	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/19/23 18:36	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/19/23 18:36	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*96 %*	*Limits: 80-120 %*	*1*	*05/19/23 18:36*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*05/19/23 18:36*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*	*1*	*05/19/23 18:36*	*EPA 8260D*	
FMW-154-051623 (A3E1514-04RE1)				**Matrix: Water**		**Batch: 23E0865**		
Benzene	ND	0.100	0.200	ug/L	1	05/19/23 18:13	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	05/19/23 18:13	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	05/19/23 18:13	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	05/19/23 18:13	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*98 %*	*Limits: 80-120 %*	*1*	*05/19/23 18:13*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*05/19/23 18:13*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*	*1*	*05/19/23 18:13*	*EPA 8260D*	

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503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1514 - 12 22 23 1814

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-137-051623 (A3E1514-09RE1)				**Matrix: Water**		**Batch: 23E0865**		
cis-1,2-Dichloroethene	**20.3**	0.200	0.400	ug/L	1	05/19/23 17:06	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/19/23 17:06	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:06	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:06	EPA 8260D	
Vinyl chloride	**0.320**	0.200	0.400	ug/L	1	05/19/23 17:06	EPA 8260D	**J**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*92 %*	*Limits:*	*80-120 %*	*1*	*05/19/23 17:06*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*		*80-120 %*	*1*	*05/19/23 17:06*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*107 %*		*80-120 %*	*1*	*05/19/23 17:06*	*EPA 8260D*	
FMW-138-051623 (A3E1514-11RE1)				**Matrix: Water**		**Batch: 23E0865**		
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/19/23 17:28	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/19/23 17:28	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:28	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:28	EPA 8260D	
Vinyl chloride	ND	0.200	0.400	ug/L	1	05/19/23 17:28	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*94 %*	*Limits:*	*80-120 %*	*1*	*05/19/23 17:28*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*		*80-120 %*	*1*	*05/19/23 17:28*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*106 %*		*80-120 %*	*1*	*05/19/23 17:28*	*EPA 8260D*	
FMW-165-051723 (A3E1514-17RE1)				**Matrix: Water**		**Batch: 23E0865**		**V-01**
cis-1,2-Dichloroethene	**4.46**	0.200	0.400	ug/L	1	05/19/23 17:50	EPA 8260D	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	05/19/23 17:50	EPA 8260D	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:50	EPA 8260D	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	05/19/23 17:50	EPA 8260D	
Vinyl chloride	**0.880**	0.200	0.400	ug/L	1	05/19/23 17:50	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*94 %*	*Limits:*	*80-120 %*	*1*	*05/19/23 17:50*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*		*80-120 %*	*1*	*05/19/23 17:50*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*	*1*	*05/19/23 17:50*	*EPA 8260D*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1514 - 12 22 23 1814

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 11:30	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 11:30	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 11:30	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*79 %*	*Limits: 44-120 %*	*1*	*05/22/23 11:30*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*81 %*	*50-134 %*	*1*	*05/22/23 11:30*	*EPA 8270E SIM*	
FMW-156-051623 (A3E1514-02)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 11:55	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 11:55	EPA 8270E SIM	
Naphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 11:55	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*69 %*	*Limits: 44-120 %*	*1*	*05/22/23 11:55*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*107 %*	*50-134 %*	*1*	*05/22/23 11:55*	*EPA 8270E SIM*	
OW-1-051623 (A3E1514-03)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 12:21	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 12:21	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 12:21	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*74 %*	*Limits: 44-120 %*	*1*	*05/22/23 12:21*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*86 %*	*50-134 %*	*1*	*05/22/23 12:21*	*EPA 8270E SIM*	
FMW-154-051623 (A3E1514-04)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	05/22/23 12:46	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	05/22/23 12:46	EPA 8270E SIM	
Naphthalene	**0.0678**	0.0392	0.0784	ug/L	1	05/22/23 12:46	EPA 8270E SIM	**J**
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*73 %*	*Limits: 44-120 %*	*1*	*05/22/23 12:46*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*92 %*	*50-134 %*	*1*	*05/22/23 12:46*	*EPA 8270E SIM*	
FMW-157-051623 (A3E1514-05)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 13:11	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 13:11	EPA 8270E SIM	
Naphthalene	ND	0.0404	0.0808	ug/L	1	05/22/23 13:11	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*05/22/23 13:11*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*95 %*	*50-134 %*	*1*	*05/22/23 13:11*	*EPA 8270E SIM*	

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1514 - 12 22 23 1814

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-2-051623 (A3E1514-06)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	05/22/23 13:37	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	05/22/23 13:37	EPA 8270E SIM	
Naphthalene	ND	0.0385	0.0769	ug/L	1	05/22/23 13:37	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*65 %*	*Limits: 44-120 %*	*1*	*05/22/23 13:37*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*93 %*	*50-134 %*	*1*	*05/22/23 13:37*	*EPA 8270E SIM*	
FMW-152-051623 (A3E1514-07)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0396	0.0792	ug/L	1	05/22/23 14:02	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0396	0.0792	ug/L	1	05/22/23 14:02	EPA 8270E SIM	
Naphthalene	ND	0.0396	0.0792	ug/L	1	05/22/23 14:02	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*77 %*	*Limits: 44-120 %*	*1*	*05/22/23 14:02*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*93 %*	*50-134 %*	*1*	*05/22/23 14:02*	*EPA 8270E SIM*	
FMW-150-051623 (A3E1514-08)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 14:27	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 14:27	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 14:27	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*53 %*	*Limits: 44-120 %*	*1*	*05/22/23 14:27*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*92 %*	*50-134 %*	*1*	*05/22/23 14:27*	*EPA 8270E SIM*	
FMW-164-051623 (A3E1514-10RE1)				**Matrix: Water**		**Batch: 23E0981**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 00:54	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 00:54	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 00:54	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*46 %*	*Limits: 44-120 %*	*1*	*05/24/23 00:54*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*73 %*	*50-134 %*	*1*	*05/24/23 00:54*	*EPA 8270E SIM*	
FMW-162-051623 (A3E1514-12)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 15:18	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 15:18	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 15:18	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*56 %*	*Limits: 44-120 %*	*1*	*05/22/23 15:18*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*83 %*	*50-134 %*	*1*	*05/22/23 15:18*	*EPA 8270E SIM*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-159-051623 (A3E1514-13RE1)				**Matrix: Water**		**Batch: 23E0981**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:19	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:19	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:19	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*05/24/23 01:19*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*68 %*	*50-134 %*	*1*	*05/24/23 01:19*	*EPA 8270E SIM*	
FMW-153-051623 (A3E1514-14RE1)				**Matrix: Water**		**Batch: 23E0981**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:44	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:44	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 01:44	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*53 %*	*Limits: 44-120 %*	*1*	*05/24/23 01:44*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*79 %*	*50-134 %*	*1*	*05/24/23 01:44*	*EPA 8270E SIM*	
FMW-151-051623 (A3E1514-15)				**Matrix: Water**		**Batch: 23E0844**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 16:34	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 16:34	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/22/23 16:34	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*50 %*	*Limits: 44-120 %*	*1*	*05/22/23 16:34*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*79 %*	*50-134 %*	*1*	*05/22/23 16:34*	*EPA 8270E SIM*	
OW-3-051723 (A3E1514-16RE1)				**Matrix: Water**		**Batch: 23E0981**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 02:09	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 02:09	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	05/24/23 02:09	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*48 %*	*Limits: 44-120 %*	*1*	*05/24/23 02:09*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*70 %*	*50-134 %*	*1*	*05/24/23 02:09*	*EPA 8270E SIM*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01)				**Matrix: Water**				
Batch: 23E0934								
Barium	**87.7**	1.00	2.00	ug/L	1	05/23/23 19:39	EPA 6020B	
Mercury	ND	0.0400	0.0800	ug/L	1	05/23/23 19:39	EPA 6020B	
FMW-156-051623 (A3E1514-02)				**Matrix: Water**				
Batch: 23E0934								
Barium	**44.5**	1.00	2.00	ug/L	1	05/23/23 19:54	EPA 6020B	
FMW-154-051623 (A3E1514-04)				**Matrix: Water**				
Batch: 23E0934								
Barium	**95.5**	1.00	2.00	ug/L	1	05/23/23 19:59	EPA 6020B	

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ANALYTICAL REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-051623 (A3E1514-01)				**Matrix: Water**				
Batch: 23E1016								
Barium	**89.4**	0.500	1.00	ug/L	1	05/25/23 12:29	EPA 6020B (Diss)	
Mercury	ND	0.0400	0.0800	ug/L	1	05/25/23 12:29	EPA 6020B (Diss)	
FMW-156-051623 (A3E1514-02)				**Matrix: Water**				
Batch: 23E1016								
Barium	**44.2**	0.500	1.00	ug/L	1	05/25/23 12:34	EPA 6020B (Diss)	
FMW-154-051623 (A3E1514-04)				**Matrix: Water**				
Batch: 23E1016								
Barium	**91.1**	0.500	1.00	ug/L	1	05/25/23 12:39	EPA 6020B (Diss)	

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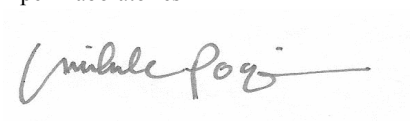

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0901 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (23E0901-BLK1)			Prepared: 05/22/23 07:11		Analyzed: 05/22/23 18:03							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 114 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23E0901-BS1)			Prepared: 05/22/23 07:11		Analyzed: 05/22/23 18:24							
NWTPH-Dx LL												
Diesel	423	---	80.0	ug/L	1	500	---	85	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 116 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23E0901-BSD1)			Prepared: 05/22/23 07:11		Analyzed: 05/22/23 18:46							**Q-19**
NWTPH-Dx LL												
Diesel	430	---	80.0	ug/L	1	500	---	86	36-132%	2	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 124 %*	*Limits: 50-150 %*		*Dilution: 1x*							
Batch 23E0956 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (23E0956-BLK1)			Prepared: 05/23/23 07:08		Analyzed: 05/24/23 08:22							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 107 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23E0956-BS1)			Prepared: 05/23/23 07:08		Analyzed: 05/24/23 08:44							
NWTPH-Dx LL												
Diesel	307	---	80.0	ug/L	1	500	---	61	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 117 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23E0956-BSD1)			Prepared: 05/23/23 07:08		Analyzed: 05/24/23 09:05							**Q-19**
NWTPH-Dx LL												
Diesel	330	---	80.0	ug/L	1	500	---	66	36-132%	7	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 130 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0865 - EPA 5030C									Water			
Blank (23E0865-BLK1)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 12:58								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*			*"*					
LCS (23E0865-BS2)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 11:51								
NWTPH-Gx (MS)												
Gasoline Range Organics	533	50.0	100	ug/L	1	500	---	107	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 98 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*			*"*					
Duplicate (23E0865-DUP1)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 13:43								
QC Source Sample: FMW-155-051623 (A3E1514-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	500	1000	ug/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*			*"*					

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0865 - EPA 5030C							**Water**					
Blank (23E0865-BLK1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 12:58									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*104 %*		*80-120 %*			*"*				
LCS (23E0865-BS1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 12:14									
EPA 8260D												
Benzene	18.4	0.100	0.200	ug/L	1	20.0	---	92	80-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	---	100	80-120%	---	---	
Ethylbenzene	20.4	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Xylenes, total	66.8	0.750	1.50	ug/L	1	60.0	---	111	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Duplicate (23E0865-DUP1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 13:43									
QC Source Sample: FMW-155-051623 (A3E1514-01)												
EPA 8260D												
Benzene	ND	1.00	2.00	ug/L	10	---	ND	---	---	---	30%	
Toluene	ND	5.00	10.0	ug/L	10	---	ND	---	---	---	30%	
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Xylenes, total	ND	7.50	15.0	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 94 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (23E0865-MS1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 18:58									
QC Source Sample: FMW-156-051623 (A3E1514-02RE1)												
EPA 8260D												

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0865 - EPA 5030C							**Water**					
Matrix Spike (23E0865-MS1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 18:58									
QC Source Sample: FMW-156-051623 (A3E1514-02RE1)												
Benzene	19.6	0.100	0.200	ug/L	1	20.0	ND	98	79-120%	---	---	
Toluene	21.3	0.500	1.00	ug/L	1	20.0	ND	107	80-121%	---	---	
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Xylenes, total	72.1	0.750	1.50	ug/L	1	60.0	ND	120	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1514 - 12 22 23 1814

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0865 - EPA 5030C												**Water**
Blank (23E0865-BLK1)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 12:58								
EPA 8260D												
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*			*"*					
LCS (23E0865-BS1)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 12:14								
EPA 8260D												
cis-1,2-Dichloroethene	19.6	0.200	0.400	ug/L	1	20.0	---	98	80-120%	---	---	
trans-1,2-Dichloroethene	18.3	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
Tetrachloroethene (PCE)	19.4	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	
Trichloroethene (TCE)	18.6	0.200	0.400	ug/L	1	20.0	---	93	80-120%	---	---	
Vinyl chloride	16.9	0.200	0.400	ug/L	1	20.0	---	84	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*98 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*			*"*					
Duplicate (23E0865-DUP1)				Prepared: 05/19/23 10:02 Analyzed: 05/19/23 13:43								
QC Source Sample: FMW-155-051623 (A3E1514-01)												
EPA 8260D												
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 94 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*			*"*					

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0865 - EPA 5030C							**Water**					
Matrix Spike (23E0865-MS1)			Prepared: 05/19/23 10:02 Analyzed: 05/19/23 18:58									
QC Source Sample: FMW-156-051623 (A3E1514-02RE1)												
EPA 8260D												
cis-1,2-Dichloroethene	21.0	0.200	0.400	ug/L	1	20.0	ND	105	78-123%	---	---	
trans-1,2-Dichloroethene	20.0	0.200	0.400	ug/L	1	20.0	ND	100	75-124%	---	---	
Tetrachloroethene (PCE)	22.0	0.200	0.400	ug/L	1	20.0	ND	110	74-129%	---	---	
Trichloroethene (TCE)	19.3	0.200	0.400	ug/L	1	20.0	ND	97	79-123%	---	---	
Vinyl chloride	20.0	0.200	0.400	ug/L	1	20.0	ND	100	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0844 - EPA 3510C (Acid Extraction)												**Water**
Blank (23E0844-BLK2)			Prepared: 05/19/23 07:20 Analyzed: 05/19/23 19:45									
EPA 8270E SIM												
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 66 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*110 %*		*50-134 %*				*"*			
LCS (23E0844-BS2)			Prepared: 05/19/23 07:20 Analyzed: 05/19/23 20:11									
EPA 8270E SIM												
1-Methylnaphthalene	6.11	0.0400	0.0800	ug/L	1	8.00	---	76	41-120%	---	---	
2-Methylnaphthalene	6.63	0.0400	0.0800	ug/L	1	8.00	---	83	40-121%	---	---	
Naphthalene	5.68	0.0400	0.0800	ug/L	1	8.00	---	71	40-121%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*98 %*		*50-134 %*				*"*			
LCS Dup (23E0844-BSD2)			Prepared: 05/19/23 07:20 Analyzed: 05/19/23 20:36									**Q-19**
EPA 8270E SIM												
1-Methylnaphthalene	6.46	0.0400	0.0800	ug/L	1	8.00	---	81	41-120%	5	30%	
2-Methylnaphthalene	5.87	0.0400	0.0800	ug/L	1	8.00	---	73	40-121%	12	30%	
Naphthalene	6.03	0.0400	0.0800	ug/L	1	8.00	---	75	40-121%	6	30%	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*97 %*		*50-134 %*				*"*			

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)							**Water**					
Blank (23E0981-BLK1)			Prepared: 05/23/23 11:27 Analyzed: 05/23/23 23:13									
EPA 8270E SIM												
Acenaphthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*89 %*		*50-134 %*			*"*				
LCS (23E0981-BS1)			Prepared: 05/23/23 11:27 Analyzed: 05/23/23 23:38									
EPA 8270E SIM												
Acenaphthene	5.06	0.0200	0.0400	ug/L	1	8.00	---	63	47-122%	---	---	
Acenaphthylene	5.06	0.0200	0.0400	ug/L	1	8.00	---	63	41-130%	---	---	
Anthracene	6.89	0.0200	0.0400	ug/L	1	8.00	---	86	57-123%	---	---	
Benz(a)anthracene	7.02	0.0200	0.0400	ug/L	1	8.00	---	88	58-125%	---	---	
Benzo(a)pyrene	7.32	0.0200	0.0400	ug/L	1	8.00	---	92	54-128%	---	---	
Benzo(b)fluoranthene	7.40	0.0200	0.0400	ug/L	1	8.00	---	93	53-131%	---	---	
Benzo(k)fluoranthene	7.63	0.0200	0.0400	ug/L	1	8.00	---	95	57-129%	---	---	
Benzo(g,h,i)perylene	6.83	0.0200	0.0400	ug/L	1	8.00	---	85	50-134%	---	---	
Chrysene	7.29	0.0200	0.0400	ug/L	1	8.00	---	91	59-123%	---	---	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A3E1514 - 12 22 23 1814

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)								**Water**				
LCS (23E0981-BS1)			Prepared: 05/23/23 11:27		Analyzed: 05/23/23 23:38							
Dibenz(a,h)anthracene	7.38	0.0200	0.0400	ug/L	1	8.00	---	92	51-134%	---	---	
Fluoranthene	7.51	0.0200	0.0400	ug/L	1	8.00	---	94	57-128%	---	---	
Fluorene	5.85	0.0200	0.0400	ug/L	1	8.00	---	73	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	7.52	0.0200	0.0400	ug/L	1	8.00	---	94	52-134%	---	---	
1-Methylnaphthalene	3.68	0.0400	0.0800	ug/L	1	8.00	---	46	41-120%	---	---	
2-Methylnaphthalene	3.55	0.0400	0.0800	ug/L	1	8.00	---	44	40-121%	---	---	
Naphthalene	3.70	0.0400	0.0800	ug/L	1	8.00	---	46	40-121%	---	---	
Phenanthrene	6.80	0.0200	0.0400	ug/L	1	8.00	---	85	59-120%	---	---	
Pyrene	7.58	0.0200	0.0400	ug/L	1	8.00	---	95	57-126%	---	---	
Dibenzofuran	5.37	0.0200	0.0400	ug/L	1	8.00	---	67	53-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*				*Dilution: 1x*			
p-Terphenyl-d14 (Surr)			*86 %*		*50-134 %*				*"*			
LCS Dup (23E0981-BSD1)			Prepared: 05/23/23 11:27		Analyzed: 05/24/23 00:03							**Q-19**
EPA 8270E SIM												
Acenaphthene	5.48	0.0200	0.0400	ug/L	1	8.00	---	68	47-122%	8	30%	
Acenaphthylene	5.32	0.0200	0.0400	ug/L	1	8.00	---	66	41-130%	5	30%	
Anthracene	7.00	0.0200	0.0400	ug/L	1	8.00	---	88	57-123%	2	30%	
Benz(a)anthracene	7.30	0.0200	0.0400	ug/L	1	8.00	---	91	58-125%	4	30%	
Benzo(a)pyrene	7.63	0.0200	0.0400	ug/L	1	8.00	---	95	54-128%	4	30%	
Benzo(b)fluoranthene	7.55	0.0200	0.0400	ug/L	1	8.00	---	94	53-131%	2	30%	
Benzo(k)fluoranthene	8.04	0.0200	0.0400	ug/L	1	8.00	---	100	57-129%	5	30%	
Benzo(g,h,i)perylene	7.15	0.0200	0.0400	ug/L	1	8.00	---	89	50-134%	5	30%	
Chrysene	7.61	0.0200	0.0400	ug/L	1	8.00	---	95	59-123%	4	30%	
Dibenz(a,h)anthracene	7.60	0.0200	0.0400	ug/L	1	8.00	---	95	51-134%	3	30%	
Fluoranthene	7.90	0.0200	0.0400	ug/L	1	8.00	---	99	57-128%	5	30%	
Fluorene	6.21	0.0200	0.0400	ug/L	1	8.00	---	78	52-124%	6	30%	
Indeno(1,2,3-cd)pyrene	7.92	0.0200	0.0400	ug/L	1	8.00	---	99	52-134%	5	30%	
1-Methylnaphthalene	4.01	0.0400	0.0800	ug/L	1	8.00	---	50	41-120%	9	30%	
2-Methylnaphthalene	3.85	0.0400	0.0800	ug/L	1	8.00	---	48	40-121%	8	30%	
Naphthalene	3.94	0.0400	0.0800	ug/L	1	8.00	---	49	40-121%	6	30%	
Phenanthrene	6.99	0.0200	0.0400	ug/L	1	8.00	---	87	59-120%	3	30%	
Pyrene	7.90	0.0200	0.0400	ug/L	1	8.00	---	99	57-126%	4	30%	
Dibenzofuran	5.75	0.0200	0.0400	ug/L	1	8.00	---	72	53-120%	7	30%	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0981 - EPA 3510C (Acid Extraction)								**Water**				
LCS Dup (23E0981-BSD1)				Prepared: 05/23/23 11:27 Analyzed: 05/24/23 00:03								**Q-19**
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*	*Limits: 44-120 %*	*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*88 %*	*50-134 %*	*"*							

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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E0934 - EPA 3015A											**Water**	
Blank (23E0934-BLK1)			Prepared: 05/22/23 14:28		Analyzed: 05/23/23 19:19							
EPA 6020B												
Barium	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
LCS (23E0934-BS1)			Prepared: 05/22/23 14:28		Analyzed: 05/23/23 19:24							
EPA 6020B												
Barium	57.7	1.00	2.00	ug/L	1	55.6	---	104	80-120%	---	---	
Mercury	1.03	0.0400	0.0800	ug/L	1	1.11	---	93	80-120%	---	---	
Duplicate (23E0934-DUP1)			Prepared: 05/22/23 14:28		Analyzed: 05/23/23 19:44							
QC Source Sample: FMW-155-051623 (A3E1514-01)												
EPA 6020B												
Barium	**89.7**	1.00	2.00	ug/L	1	---	87.7	---	---	2	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Matrix Spike (23E0934-MS1)			Prepared: 05/22/23 14:28		Analyzed: 05/23/23 19:49							
QC Source Sample: FMW-155-051623 (A3E1514-01)												
EPA 6020B												
Barium	151	1.00	2.00	ug/L	1	55.6	87.7	114	75-125%	---	---	
Mercury	1.06	0.0400	0.0800	ug/L	1	1.11	ND	95	75-125%	---	---	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23E1016 - Matrix Matched Direct Inject								**Water**				
Blank (23E1016-BLK1)			Prepared: 05/24/23 10:29		Analyzed: 05/25/23 11:55							
EPA 6020B (Diss)												
Barium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
LCS (23E1016-BS1)			Prepared: 05/24/23 10:29		Analyzed: 05/25/23 12:00							
EPA 6020B (Diss)												
Barium	57.9	0.500	1.00	ug/L	1	55.6	---	104	80-120%	---	---	
Mercury	1.05	0.0400	0.0800	ug/L	1	1.11	---	94	80-120%	---	---	
Duplicate (23E1016-DUP1)			Prepared: 05/24/23 10:29		Analyzed: 05/25/23 12:20							
QC Source Sample: Non-SDG (A3E1405-02)												
Barium	**82.2**	0.500	1.00	ug/L	1	---	82.0	---	---	0.2	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Matrix Spike (23E1016-MS1)			Prepared: 05/24/23 10:29		Analyzed: 05/25/23 12:24							
QC Source Sample: Non-SDG (A3E1405-02)												
EPA 6020B (Diss)												
Barium	137	0.500	1.00	ug/L	1	55.6	82.0	99	75-125%	---	---	
Mercury	1.04	0.0400	0.0800	ug/L	1	1.11	ND	93	75-125%	---	---	

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0901							
A3E1514-01	Water	NWTPH-Dx LL	05/16/23 07:45	05/22/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1514-02	Water	NWTPH-Dx LL	05/16/23 08:10	05/22/23 11:28	1040mL/2mL	1000mL/2mL	0.96
A3E1514-03	Water	NWTPH-Dx LL	05/16/23 09:20	05/22/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1514-04	Water	NWTPH-Dx LL	05/16/23 09:45	05/22/23 11:28	1040mL/2mL	1000mL/2mL	0.96
A3E1514-05	Water	NWTPH-Dx LL	05/16/23 10:47	05/22/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1514-06	Water	NWTPH-Dx LL	05/16/23 11:15	05/22/23 11:28	1040mL/2mL	1000mL/2mL	0.96
A3E1514-07	Water	NWTPH-Dx LL	05/16/23 12:45	05/22/23 11:28	1060mL/2mL	1000mL/2mL	0.94
A3E1514-08	Water	NWTPH-Dx LL	05/16/23 15:15	05/22/23 11:28	1040mL/2mL	1000mL/2mL	0.96
A3E1514-10	Water	NWTPH-Dx LL	05/16/23 16:50	05/22/23 11:28	1040mL/2mL	1000mL/2mL	0.96
Batch: 23E0956							
A3E1514-12	Water	NWTPH-Dx LL	05/16/23 17:51	05/23/23 07:08	1070mL/2mL	1000mL/2mL	0.94
A3E1514-13	Water	NWTPH-Dx LL	05/16/23 19:20	05/23/23 07:08	1070mL/2mL	1000mL/2mL	0.94
A3E1514-14	Water	NWTPH-Dx LL	05/16/23 19:50	05/23/23 07:08	1070mL/2mL	1000mL/2mL	0.94
A3E1514-15	Water	NWTPH-Dx LL	05/16/23 20:48	05/23/23 07:08	1070mL/2mL	1000mL/2mL	0.94
A3E1514-16	Water	NWTPH-Dx LL	05/17/23 12:32	05/23/23 07:08	1070mL/2mL	1000mL/2mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0865							
A3E1514-01RE1	Water	NWTPH-Gx (MS)	05/16/23 07:45	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-02RE1	Water	NWTPH-Gx (MS)	05/16/23 08:10	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-04RE1	Water	NWTPH-Gx (MS)	05/16/23 09:45	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0865							
A3E1514-01RE1	Water	EPA 8260D	05/16/23 07:45	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-02RE1	Water	EPA 8260D	05/16/23 08:10	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-04RE1	Water	EPA 8260D	05/16/23 09:45	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00

Volatile Organic Compounds by EPA 8260D

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0865							
A3E1514-09RE1	Water	EPA 8260D	05/16/23 16:20	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-11RE1	Water	EPA 8260D	05/16/23 18:00	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00
A3E1514-17RE1	Water	EPA 8260D	05/17/23 15:52	05/19/23 11:39	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0844							
A3E1514-01	Water	EPA 8270E SIM	05/16/23 07:45	05/19/23 11:06	1060mL/2mL	1000mL/2mL	0.94
A3E1514-02	Water	EPA 8270E SIM	05/16/23 08:10	05/19/23 11:06	990mL/2mL	1000mL/2mL	1.01
A3E1514-03	Water	EPA 8270E SIM	05/16/23 09:20	05/19/23 11:06	1060mL/2mL	1000mL/2mL	0.94
A3E1514-04	Water	EPA 8270E SIM	05/16/23 09:45	05/19/23 11:06	1020mL/2mL	1000mL/2mL	0.98
A3E1514-05	Water	EPA 8270E SIM	05/16/23 10:47	05/19/23 11:06	990mL/2mL	1000mL/2mL	1.01
A3E1514-06	Water	EPA 8270E SIM	05/16/23 11:15	05/19/23 11:06	1040mL/2mL	1000mL/2mL	0.96
A3E1514-07	Water	EPA 8270E SIM	05/16/23 12:45	05/19/23 11:06	1010mL/2mL	1000mL/2mL	0.99
A3E1514-08	Water	EPA 8270E SIM	05/16/23 15:15	05/19/23 11:06	1060mL/2mL	1000mL/2mL	0.94
A3E1514-12	Water	EPA 8270E SIM	05/16/23 17:51	05/19/23 11:06	1060mL/2mL	1000mL/2mL	0.94
A3E1514-15	Water	EPA 8270E SIM	05/16/23 20:48	05/19/23 11:06	1060mL/2mL	1000mL/2mL	0.94
Batch: 23E0981							
A3E1514-10RE1	Water	EPA 8270E SIM	05/16/23 16:50	05/23/23 11:27	1060mL/2mL	1000mL/2mL	0.94
A3E1514-13RE1	Water	EPA 8270E SIM	05/16/23 19:20	05/23/23 11:27	1060mL/2mL	1000mL/2mL	0.94
A3E1514-14RE1	Water	EPA 8270E SIM	05/16/23 19:50	05/23/23 11:27	1060mL/2mL	1000mL/2mL	0.94
A3E1514-16RE1	Water	EPA 8270E SIM	05/17/23 12:32	05/23/23 11:27	1060mL/2mL	1000mL/2mL	0.94

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E0934							
A3E1514-01	Water	EPA 6020B	05/16/23 07:45	05/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3E1514-02	Water	EPA 6020B	05/16/23 08:10	05/22/23 14:28	45mL/50mL	45mL/50mL	1.00
A3E1514-04	Water	EPA 6020B	05/16/23 09:45	05/22/23 14:28	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020B (ICPMS)

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

SAMPLE PREPARATION INFORMATION

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23E1016							
A3E1514-01	Water	EPA 6020B (Diss)	05/16/23 07:45	05/24/23 10:29	45mL/50mL	45mL/50mL	1.00
A3E1514-02	Water	EPA 6020B (Diss)	05/16/23 08:10	05/24/23 10:29	45mL/50mL	45mL/50mL	1.00
A3E1514-04	Water	EPA 6020B (Diss)	05/16/23 09:45	05/24/23 10:29	45mL/50mL	45mL/50mL	1.00

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
V-01	Sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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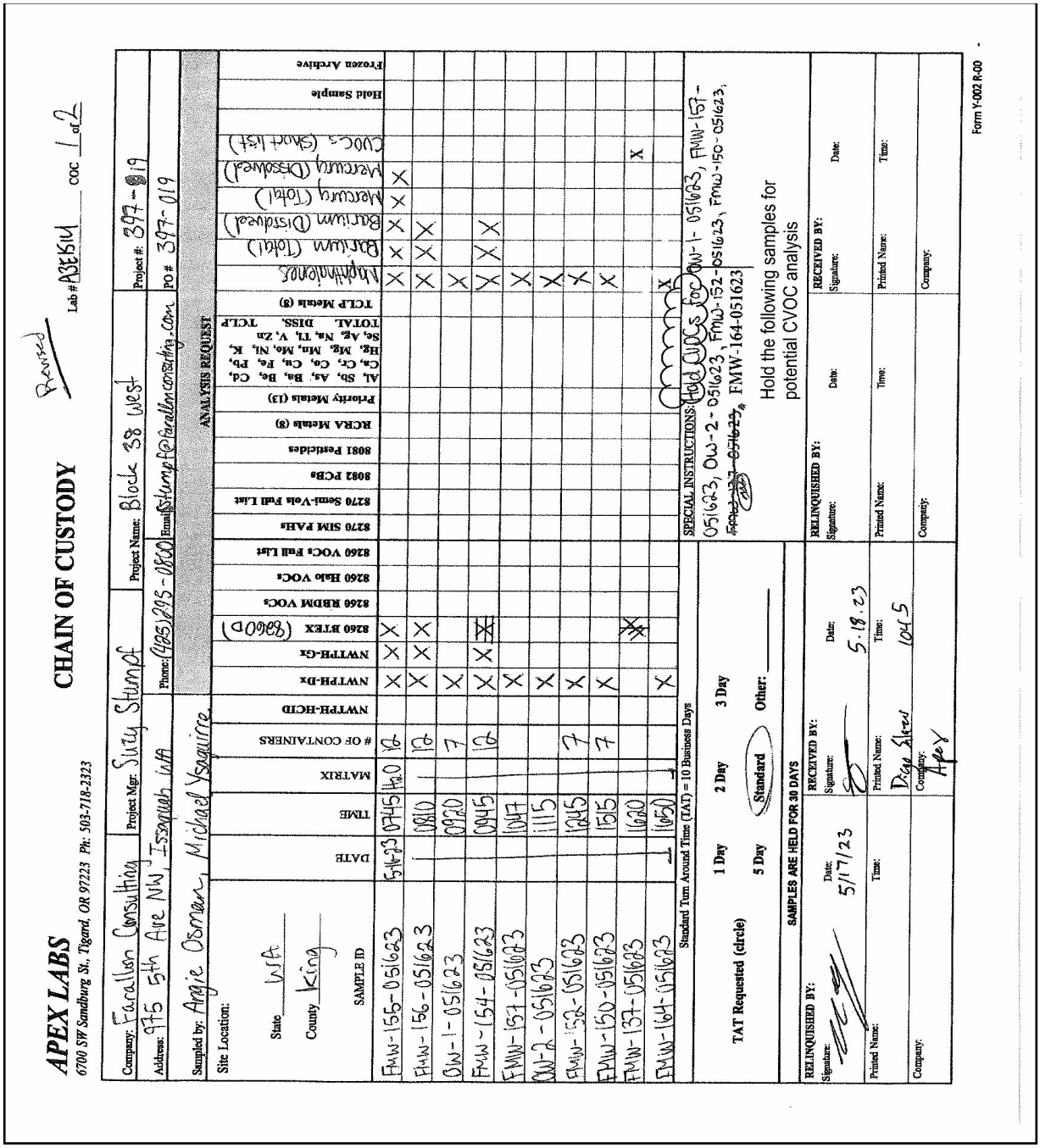
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Revised

Lab # A3E1514 COC 1 of 2

Company: Farallon Consulting | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA | Phone: (425)295-0800 | Email: SStumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osman, Michael Ysaguirre

Site Location: State WA County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX (8860D)	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Lead	Barium (Total)	Barium (Dissolved)	Mercury (Total)	Mercury (Dissolved)	COC's (Short list)	Hold Sample	Frozen Archive
FMW-155-051623	5/16/23	0745	H2O	18		X	X	X												X	X	X				
FMW-156-051623		0810		12		X	X	X												X	X	X				
OW-1-051623		0920		7		X														X	X					
FMW-154-051623		0945		12		X	X	X												X	X	X				
FMW-157-051623		1047				X	X													X	X					
OW-2-051623		1115				X														X	X					
FMW-152-051623		1245		7		X	X													X	X					
FMW-150-051623		1515		7		X	X													X	X					
FMW-137-051623		1620						X															X			
FMW-164-051623		1650		1		X	X													X	X					

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: _____

SPECIAL INSTRUCTIONS: Hold QUICS for OW-1-051623, FMW-157-051623, OW-2-051623, FMW-152-051623, FMW-150-051623, FMW-137-051623, FMW-164-051623 & Hold the following samples for potential CVOC analysis

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Date: 5/17/23 Time: Printed Name: Company:
RECEIVED BY: Signature: Date: 5.18.23 Time: Printed Name: Company: Apex
RELINQUISHED BY: Signature: Date: Time: Printed Name: Company:
RECEIVED BY: Signature: Date: Time: 1045 Printed Name: Company:

Form Y-002 R-00

Apex Laboratories

Michele Poquiz

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

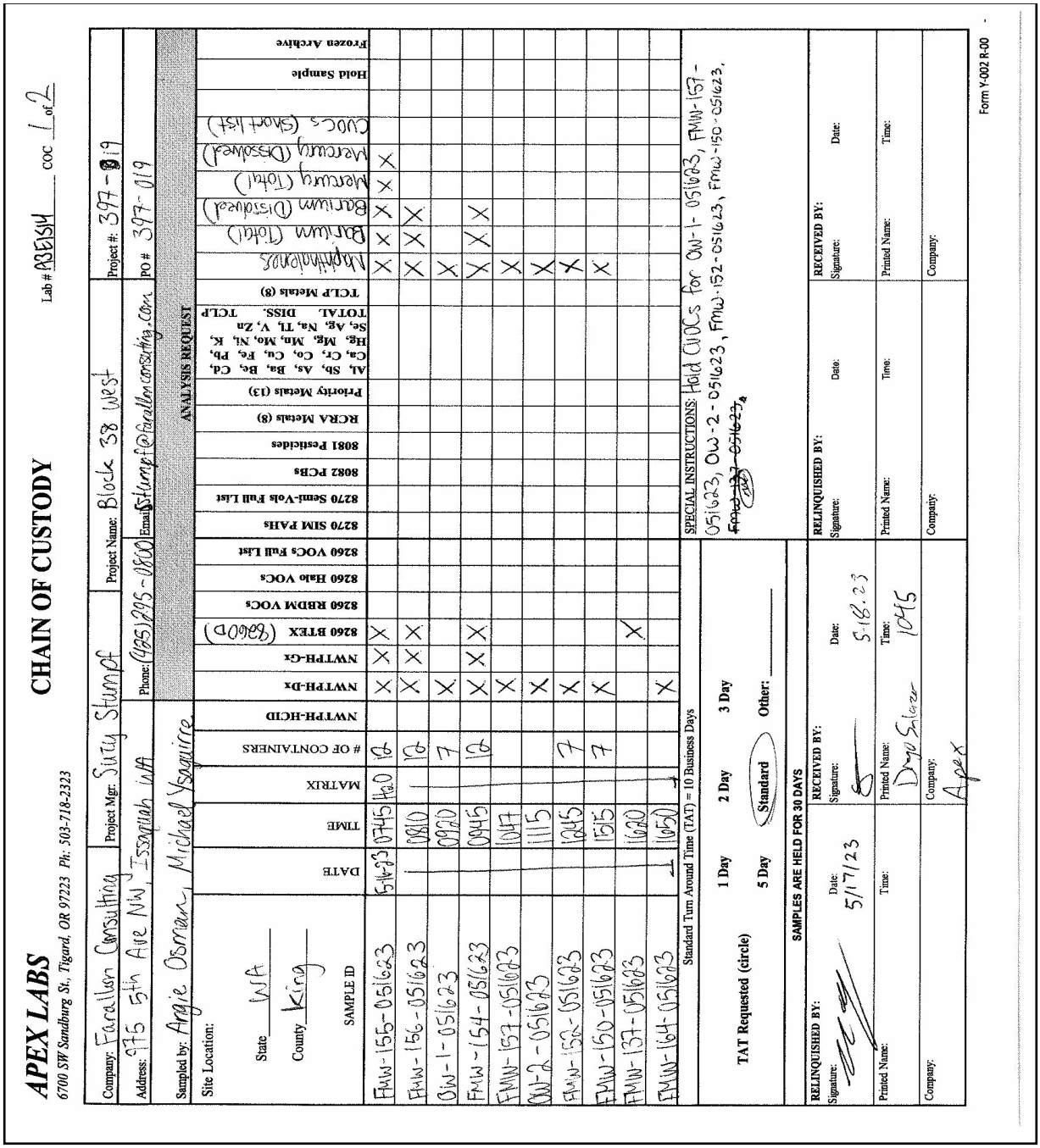
Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3E1514 COC 1 of 2

Company: Farallon Consulting | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW, Issaquah WA | Phone: (425)295-0800 | Email: Stumpf@farallonconsulting.com | PO # 397-019
Sampled by: Angie Osman, Michael Yaguirre
Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX (8260D)	8260 RRDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Manganese	Barium (Total)	Barium (Dissolved)	Mercury (Total)	Mercury (Dissolved)	Cl/Cr6 (Short list)	Hold Sample	Frozen Archive
FMW-155-051623	5/16/23	0745	H2O	12		X	X	X												X	X		X				
FMW-156-051623		0810		12		X	X	X												X	X		X				
OW-1-051623		0920		7		X														X							
FMW-154-051623		0945		12		X	X	X												X	X		X				
FMW-157-051623		1047				X														X							
OW-2-051623		1115				X														X							
FMW-152-051623		1245		7		X														X							
FMW-150-051623		1515		7		X														X							
FMW-137-051623		1620						X																			
FMW-164-051623	5/17/23	1050		1		X																					

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day **Standard** Other: _____

SPECIAL INSTRUCTIONS: Hold CrVI Cs for OW-1-051623, FMW-157-051623, OW-2-051623, FMW-152-051623, FMW-150-051623, ~~FMW-137-051623~~

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: _____ Date: 5/17/23 | RECEIVED BY: Signature: _____ Date: 5.18.23
Printed Name: _____ Time: _____ | Printed Name: Dayo Sitar Time: 1045
Company: _____ | Company: Apex

RELINQUISHED BY: Signature: _____ Date: _____ | RECEIVED BY: Signature: _____ Date: _____
Printed Name: _____ Time: _____ | Printed Name: _____ Time: _____
Company: _____ | Company: _____

RELINQUISHED BY: Signature: _____ Date: _____ | RECEIVED BY: Signature: _____ Date: _____
Printed Name: _____ Time: _____ | Printed Name: _____ Time: _____
Company: _____ | Company: _____

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Revised

Lab # A3E1514 COC 2 of 2

Company: Farallon Consulting | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019

Address: 975 5th Ave, NW Issaquah, WA | Phone: (425) 295-0800 | Email: sstumpf@farallonconsulting.com | PO # 397-019

Sampled by: Angie Osman, Michael Ysaguirre

Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalene	CVOCs (Shortlist)	Hold Sample	Frozen Archive
FMW-138-051623	5-16-23	1800						X* →													X		
FMW-162-051623	↓	1751				X														X			
FMW-159-051623	↓	1920				X														X			
FMW-153-051623	↓	1950				X														X			
FMW-151-051623	↓	2048				X														X			
OW-3-051723	5-17-23	1232				X														X			
FMW-165-051723	↓	1652						X →													X		

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day (Standard) Other: ______

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS: ~~Hold CVOCs for~~ FMW-162-051623, FMW-159-051623, FMW-153-051623, FMW-151-051623, OW-3-051723,

Hold Samples above for potential CVOCs analysis

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date: 5/17/23	Signature: [signature] Date: 5.18.23	Signature: Date:	Signature: Date:
Printed Name: Time:	Printed Name: Diego Salazar Time: 1045	Printed Name: Time:	Printed Name: Time:
Company:	Company: Apex	Company:	Company:

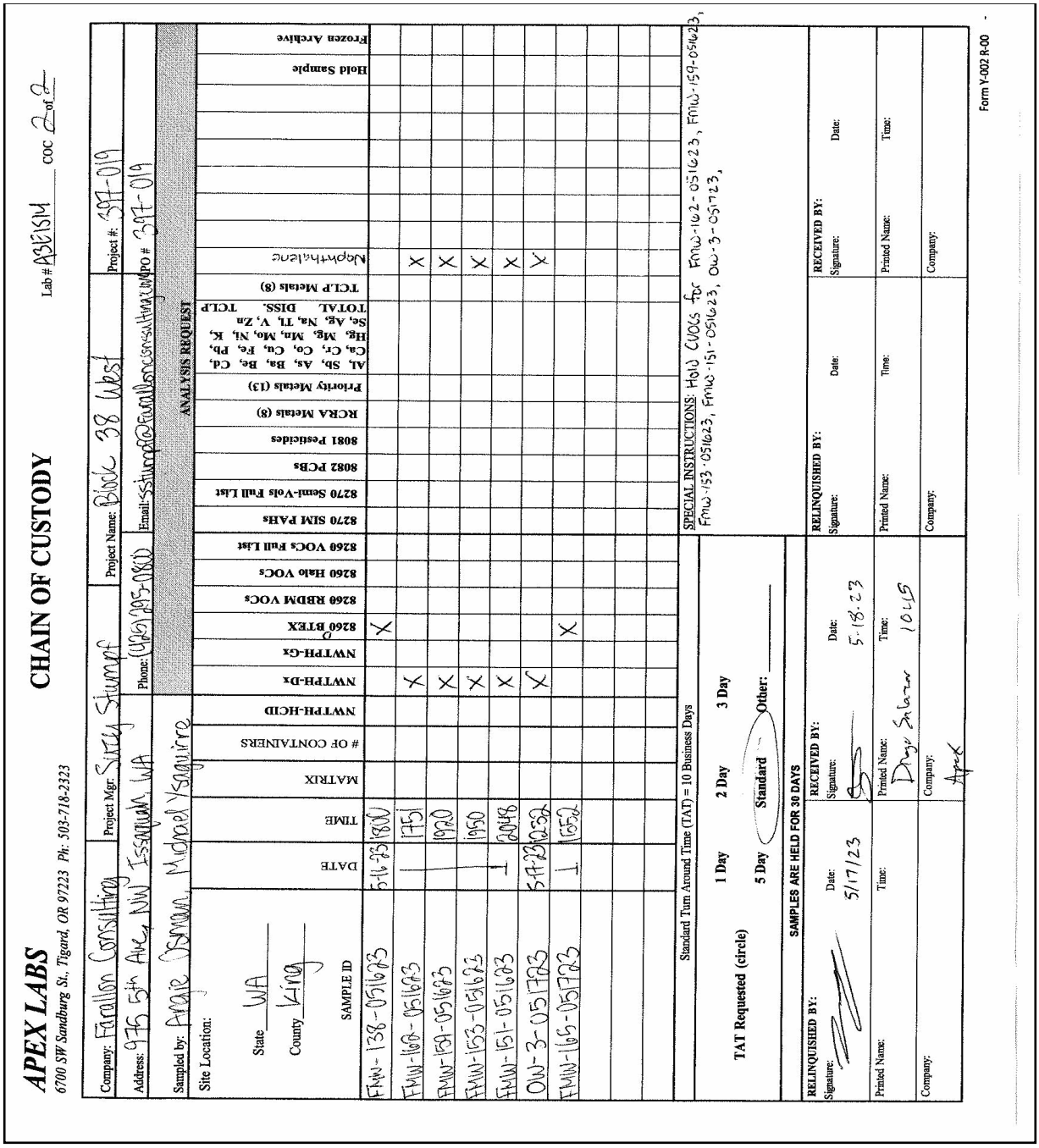
Form Y-002 R-00

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**



APEX LABS — **CHAIN OF CUSTODY**

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Lab # A3E1514 COC 2 of 2

Company: Farallon Consulting — Project Mgr: Suzy Stumpf — Project Name: Block 38 West — Project #: 397-019

Address: 975 5th Ave NW Issaquah WA — Phone: (425) 295-0800 — Email: sstumpf@farallonconsulting.com — PO # 397-019

Sampled by: Annie Osmun, Michael Yaguinre

Site Location: State WA, County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS.	TCLP Metals (8)	Naphthalene	Hold Sample	Frozen Archive
FMW-138-051623	5-16-23	1810	W			X		X												X		
FMW-168-051623		1751																				
FMW-159-051623		1920				X		X												X		
FMW-153-051623		1950				X		X												X		
FMW-151-051623	1	2048				X		X												X		
OW-3-051723	5-17-23	0952				X		X												X		
FMW-165-051723	1	1652						X														

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: ____

SPECIAL INSTRUCTIONS: Hold CUOCs for FMW-162-051623, FMW-159-051623, FMW-153-051623, FMW-151-051623, OW-3-051723,

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	5/17/23		Signature:	5-18-23	1015
Printed Name:			Printed Name:	Doug Salazar	
Company:			Company:	Apex	

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A3E1514 - 12 22 23 1814**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3E1514

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 5.18.23 @ 1045 By: DJS

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

Cooler Inspection Date/time inspected: 5-18-23 @ 1051 By: DJS

Chain of Custody included? Yes X No

Signed/dated by client? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.3	3.3	5.6	2.0	1.8	3.9	5.6
Custody seals? (Y/N)	N	N	N	N	N	N	N
Received on ice? (Y/N)	Y	Y	Y	Y	Y	Y	Y
Temp. blanks? (Y/N)	Y	Y	Y	Y	Y	Y	Y
Ice type: (Gel/Real/Other)	Real	Real	Real	Real	Real	Real	Real
Condition (In/Out):	In	In	In	In	In	In	In

Cooler out of temp? (Y)(N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 5/18/23 @ 14:08 By: APW

All samples intact? Yes__ No X Comments: OW-2-051623 1L HCl Amber broken lid. replaced, none spilled. FMW-164 1L Amber HCl broken lid. Replaced, none spilled

1/2 cont. accidentally

Bottle labels/COCs agree? Yes__ No X Comments: FMW-151-051623 1/3 VOA TO read FMW-164-051623 and 1L Ambers no time listed.

COC/container discrepancies form initiated? Yes__ No X

Containers/volumes received appropriate for analysis? Yes X No__ Comments:

Do VOA vials have visible headspace? Yes X No__ NA__

Comments FMW-155 1/6, OW-1 1/3, FMW-162 1/3, FMW-159 2/3, OW-3, 1/3, FMW-165 3/3

Water samples: pH checked: Yes X No__ NA__ pH appropriate? Yes X No__ NA__ Have HS

Comments:

Additional information: 3824 5382 8717

Labeled by: APW Witness: DJS Cooler Inspected by: APW

Form Y-003 R-00

Apex Laboratories

Michele Poquiz

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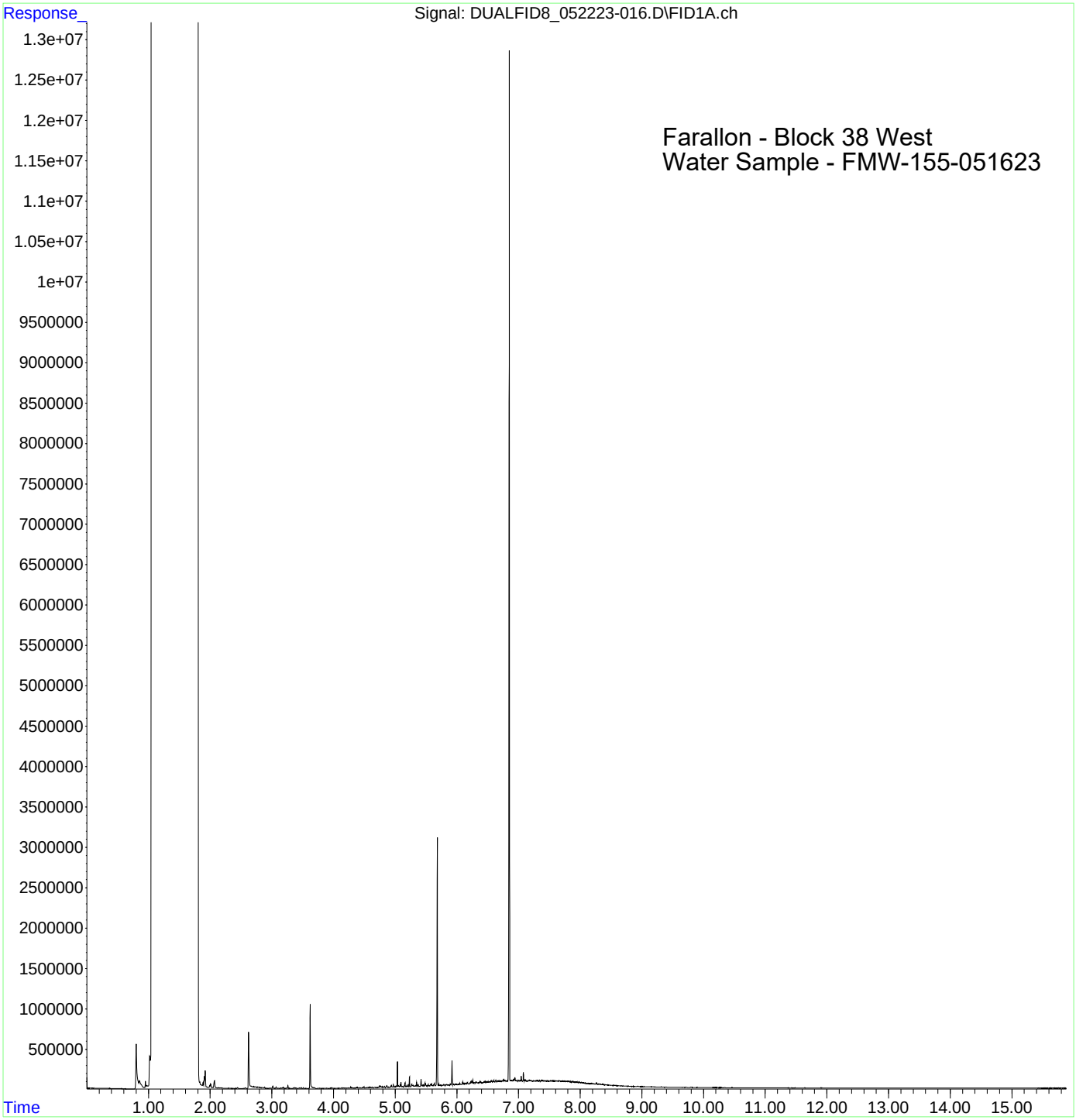
Michele Poquiz For Kurt Johnson, Senior Chemist

File :M:\DUALFID8\data\2023-05\3E22057\DUALFID8_052223-016.D
Operator :
Acquired : 22 May 2023 07:08 pm using AcqMethod DUALFID8 Acquisition.M
Instrument : FUELS8
Sample Name: A3E1514-01
Misc Info : ERR
Vial Number: 6



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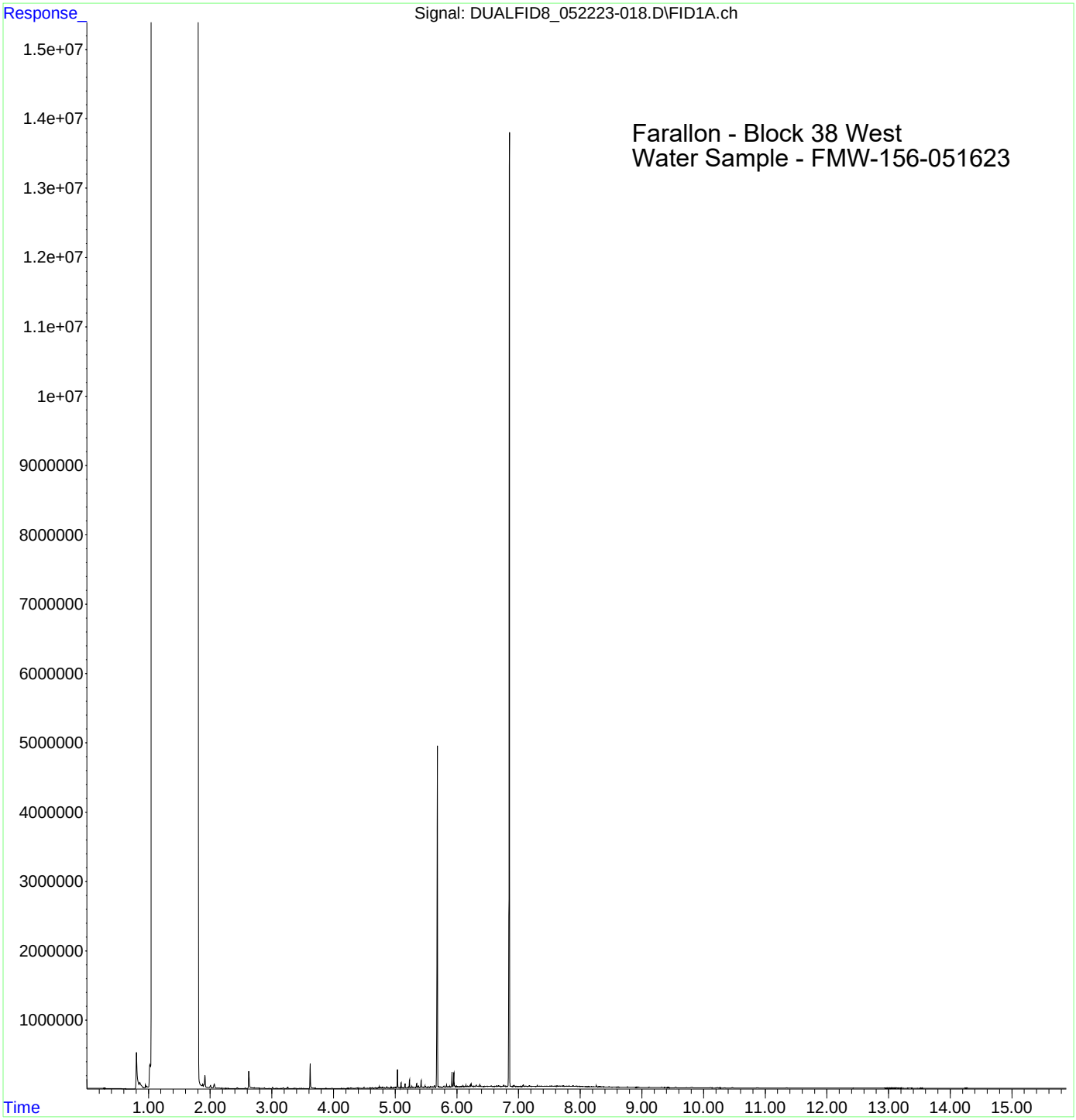
Acquired   : 22 May 2023 07:30 pm using AcqMethod DUALFID8 Acquisition.M
Instrument :   FUELS8
Sample Name: A3E1514-02
Misc Info :   ERR
Vial Number: 7



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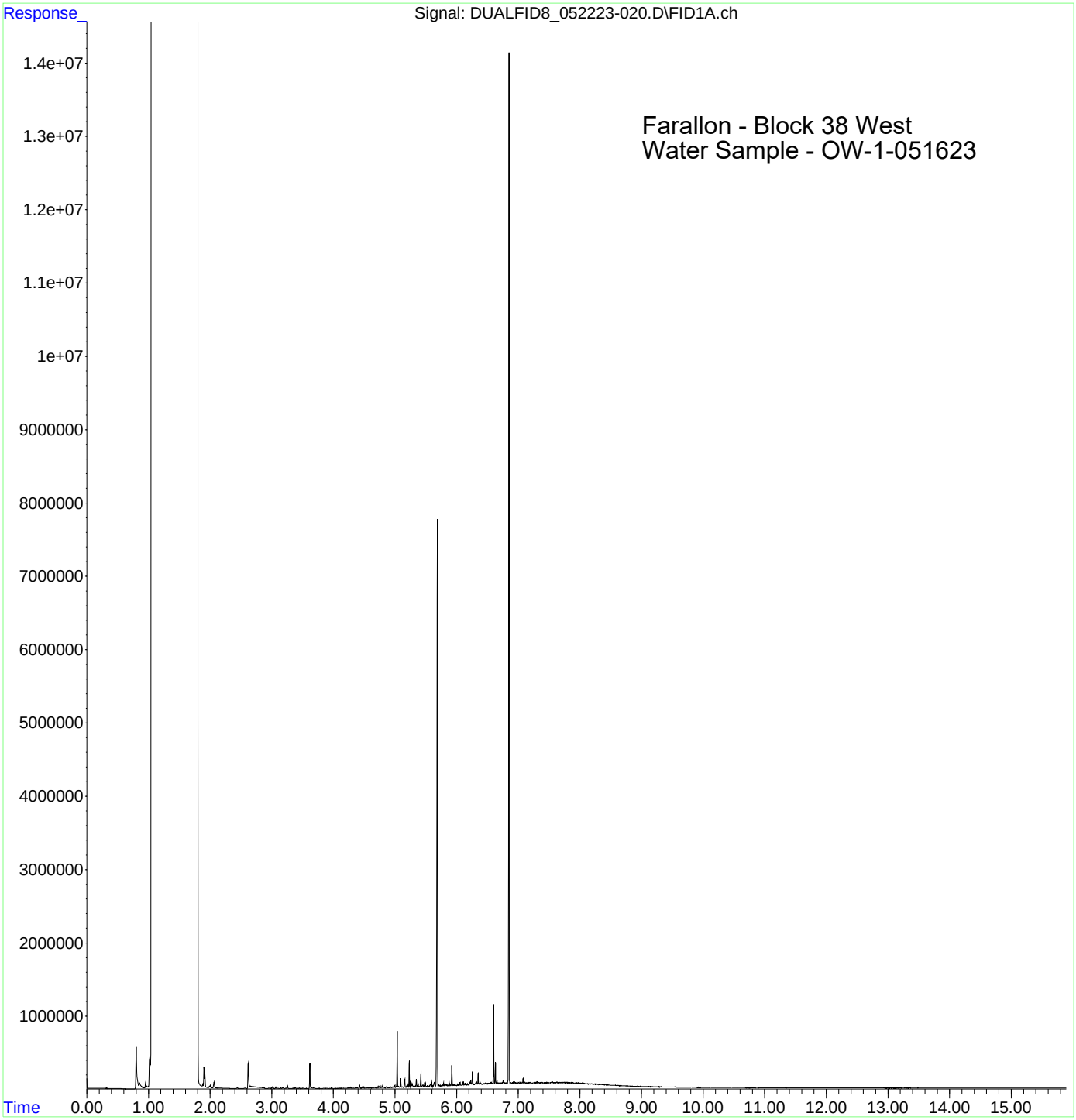
Instrument : FUELS8
Sample Name: A3E1514-03
Misc Info : ERR
Vial Number: 8



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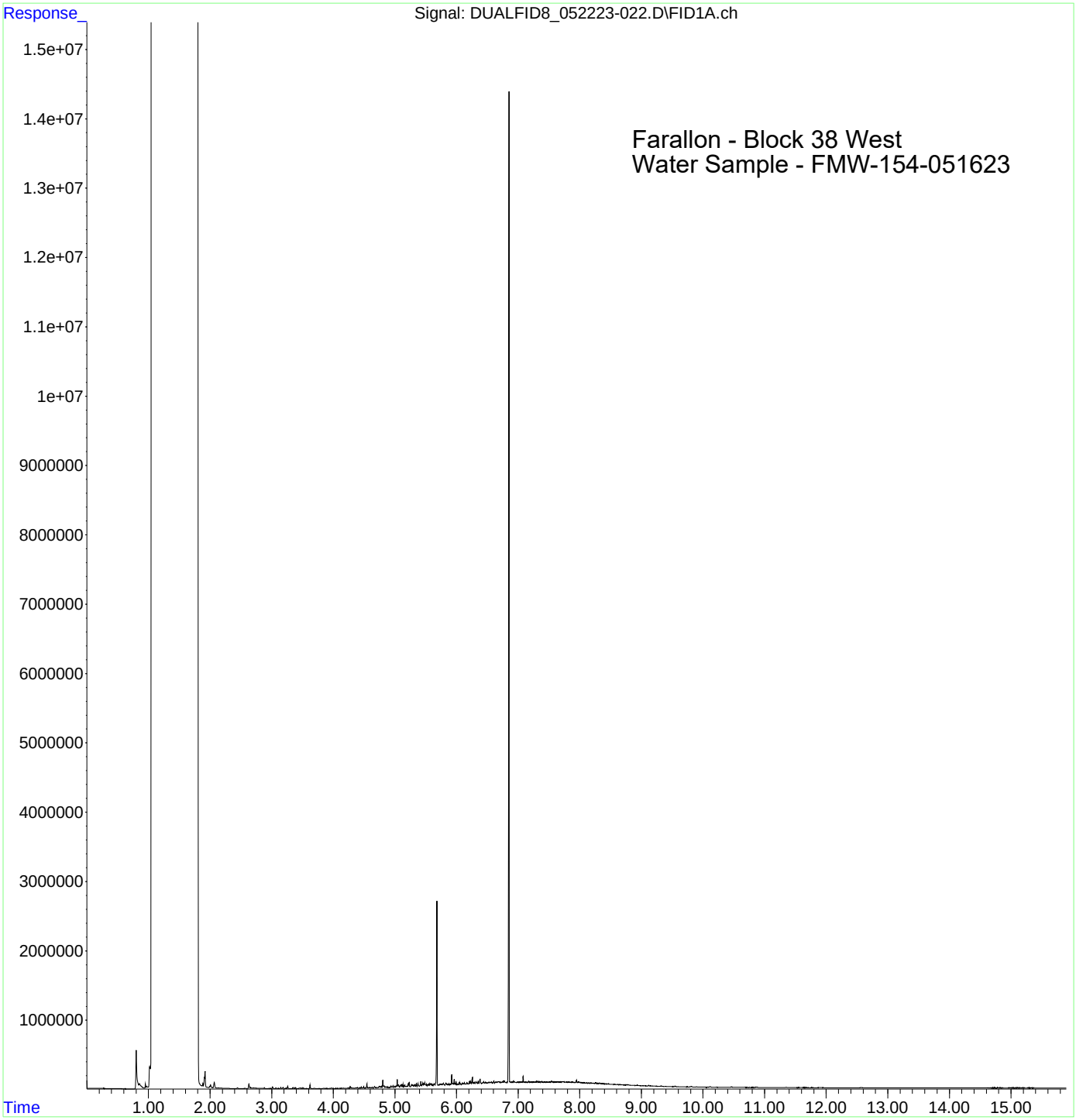
Sample Name: A3E1514-04
Misc Info :   ERR
Vial Number: 9



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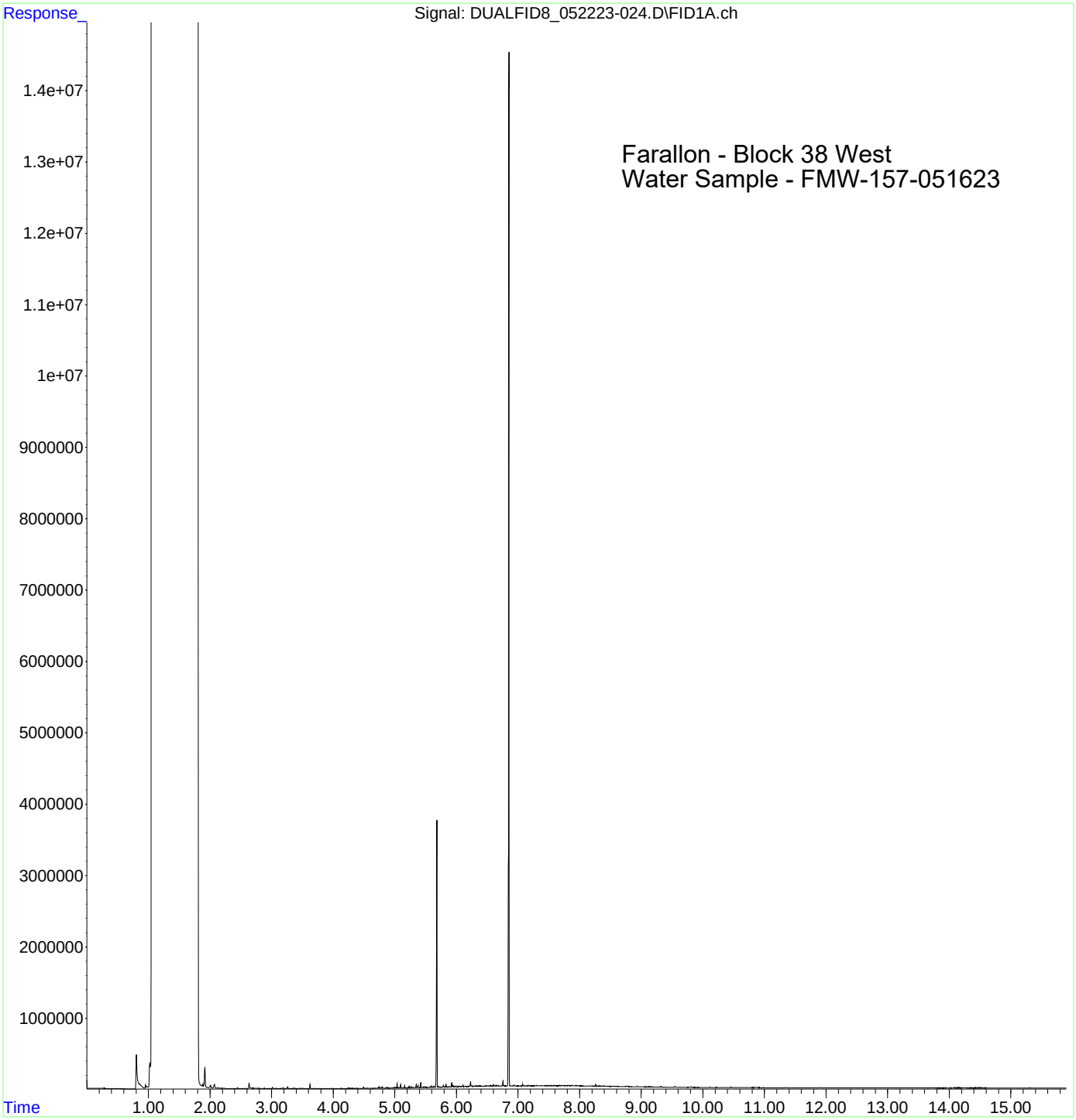
Vial Number: 10



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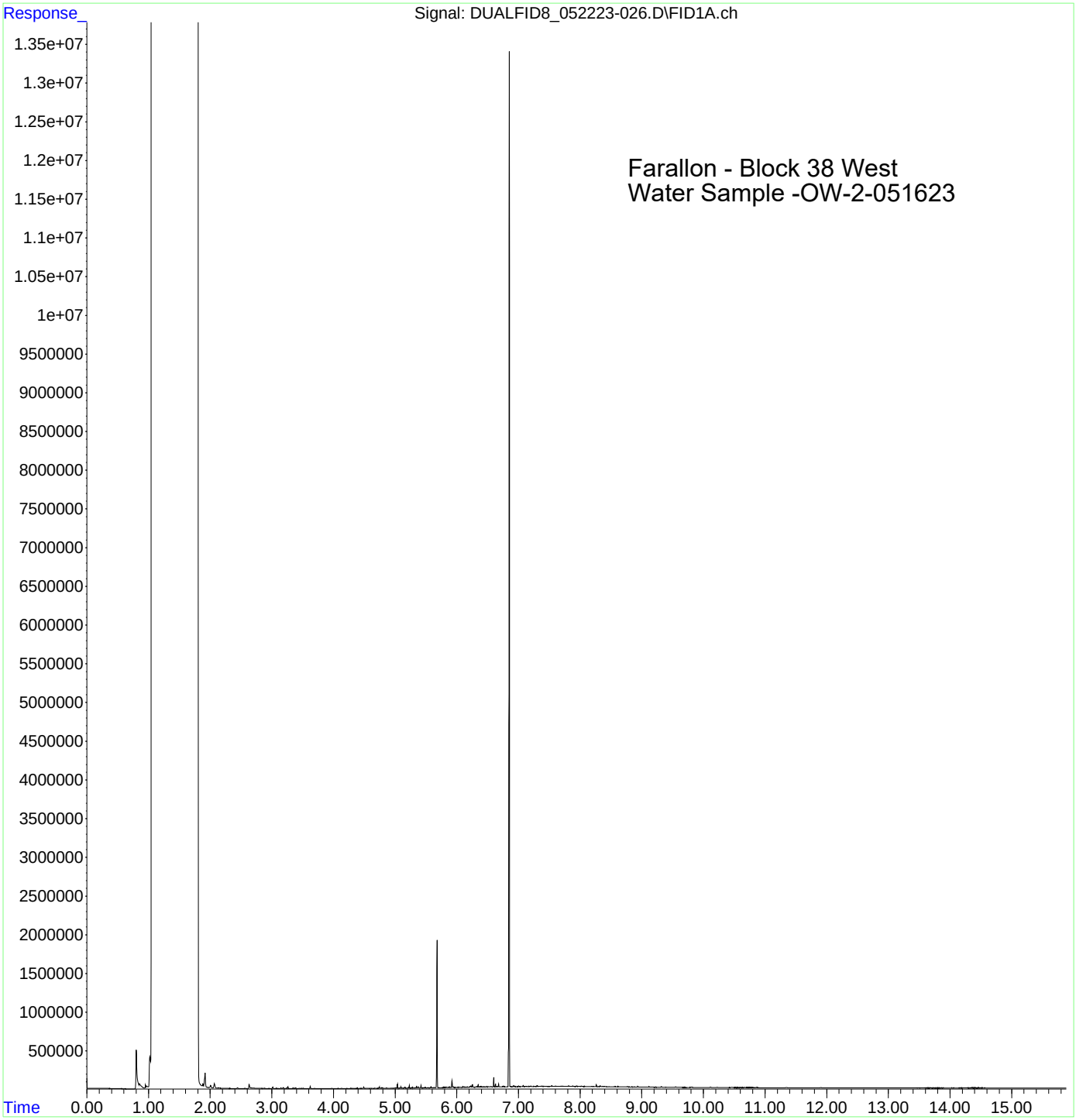
Vial Number: 11



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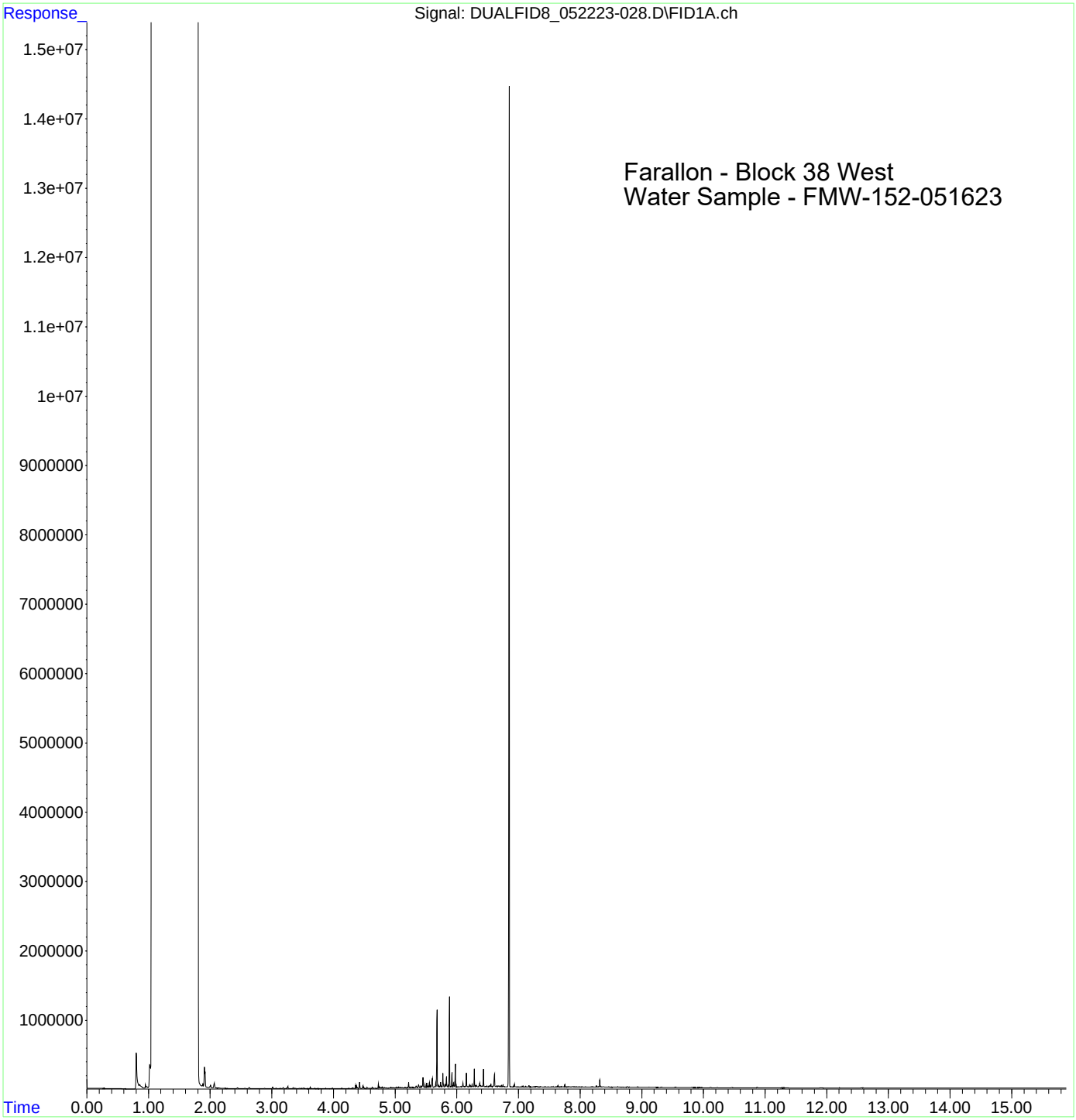
Misc Info : ERR
Vial Number: 12



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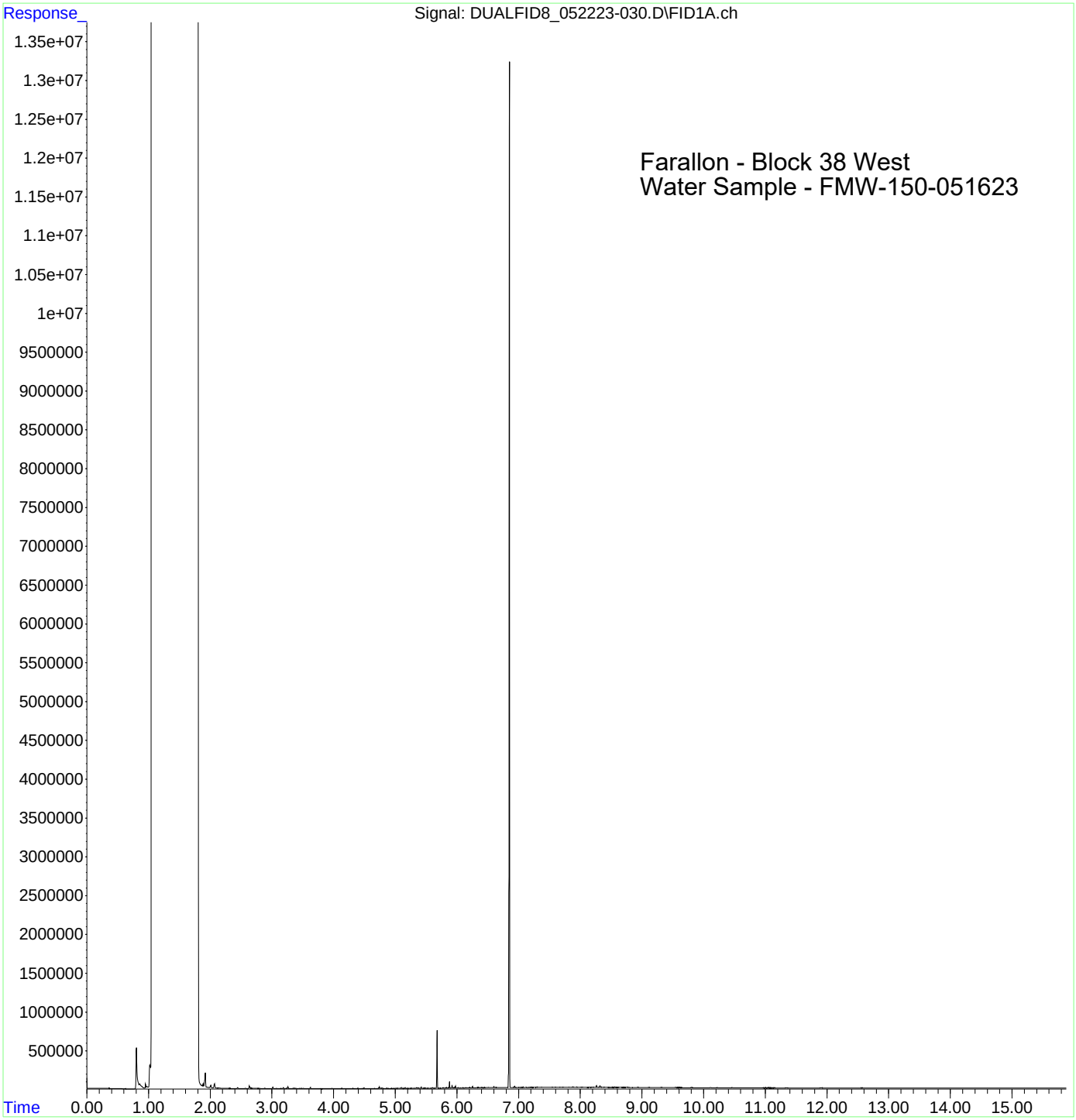
Sample Name: A3E1514-08
Misc Info : ERR
Vial Number: 13



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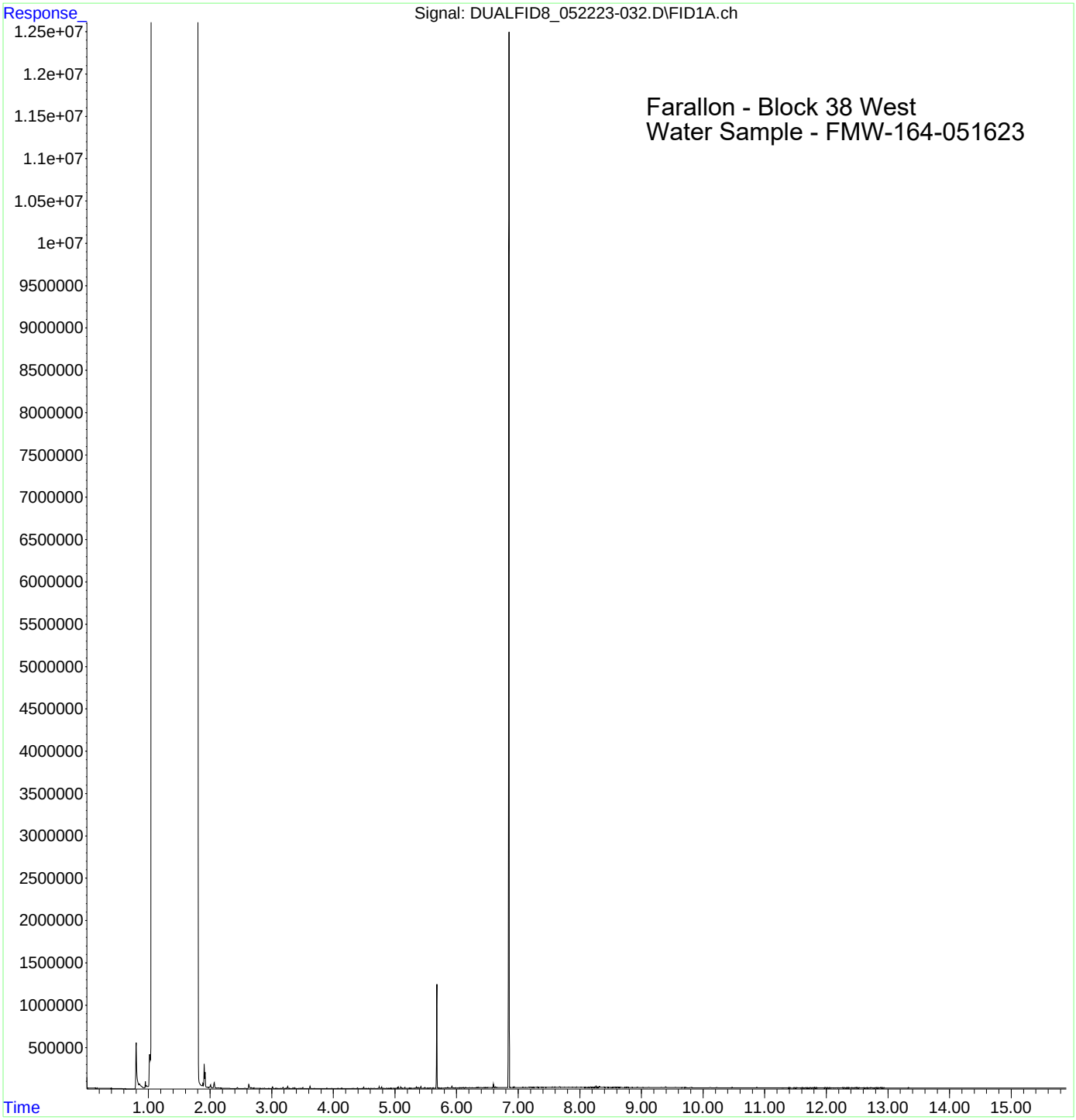
Vial Number: 14



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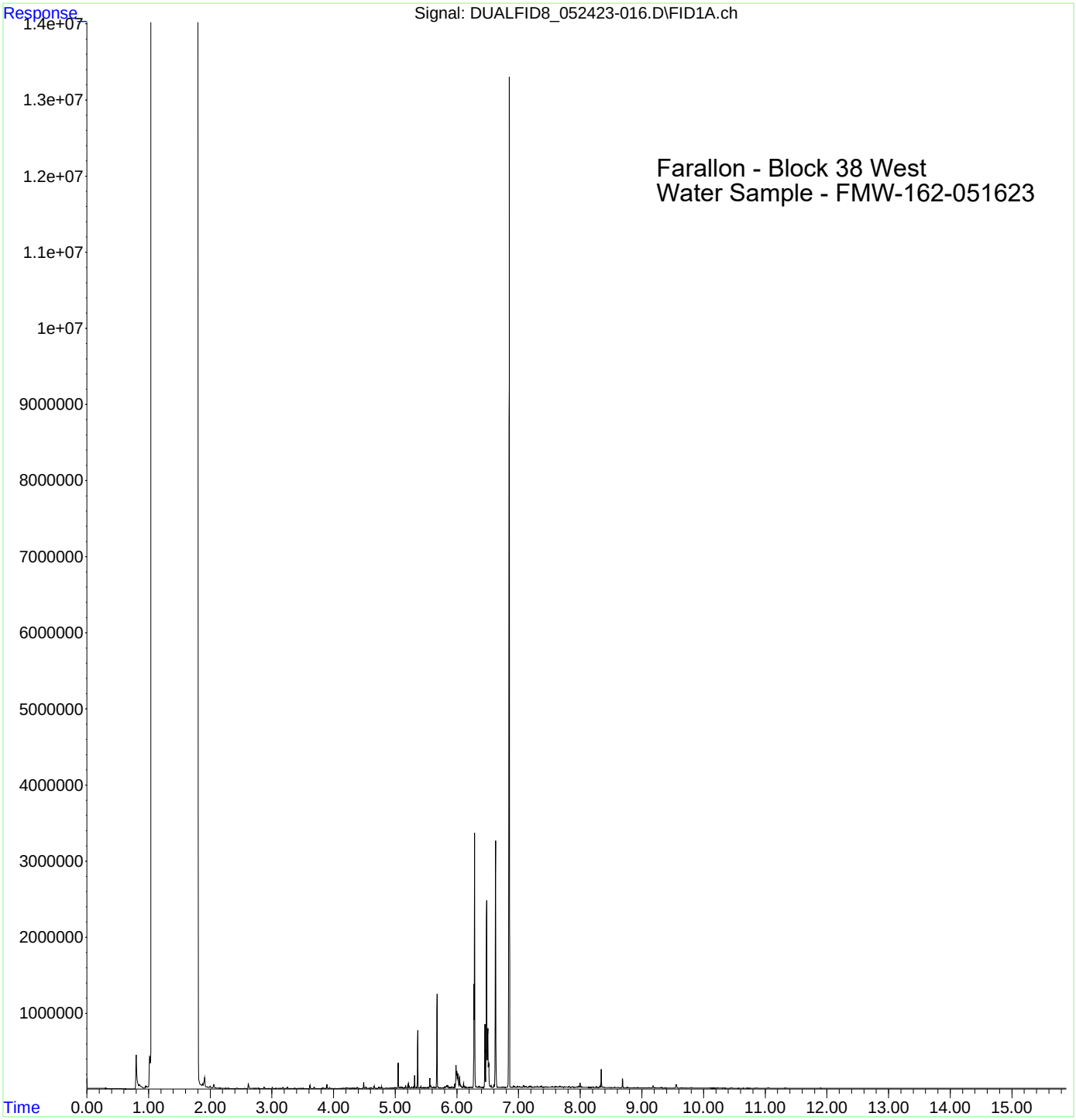
Misc Info :   ERR
Vial Number: 6



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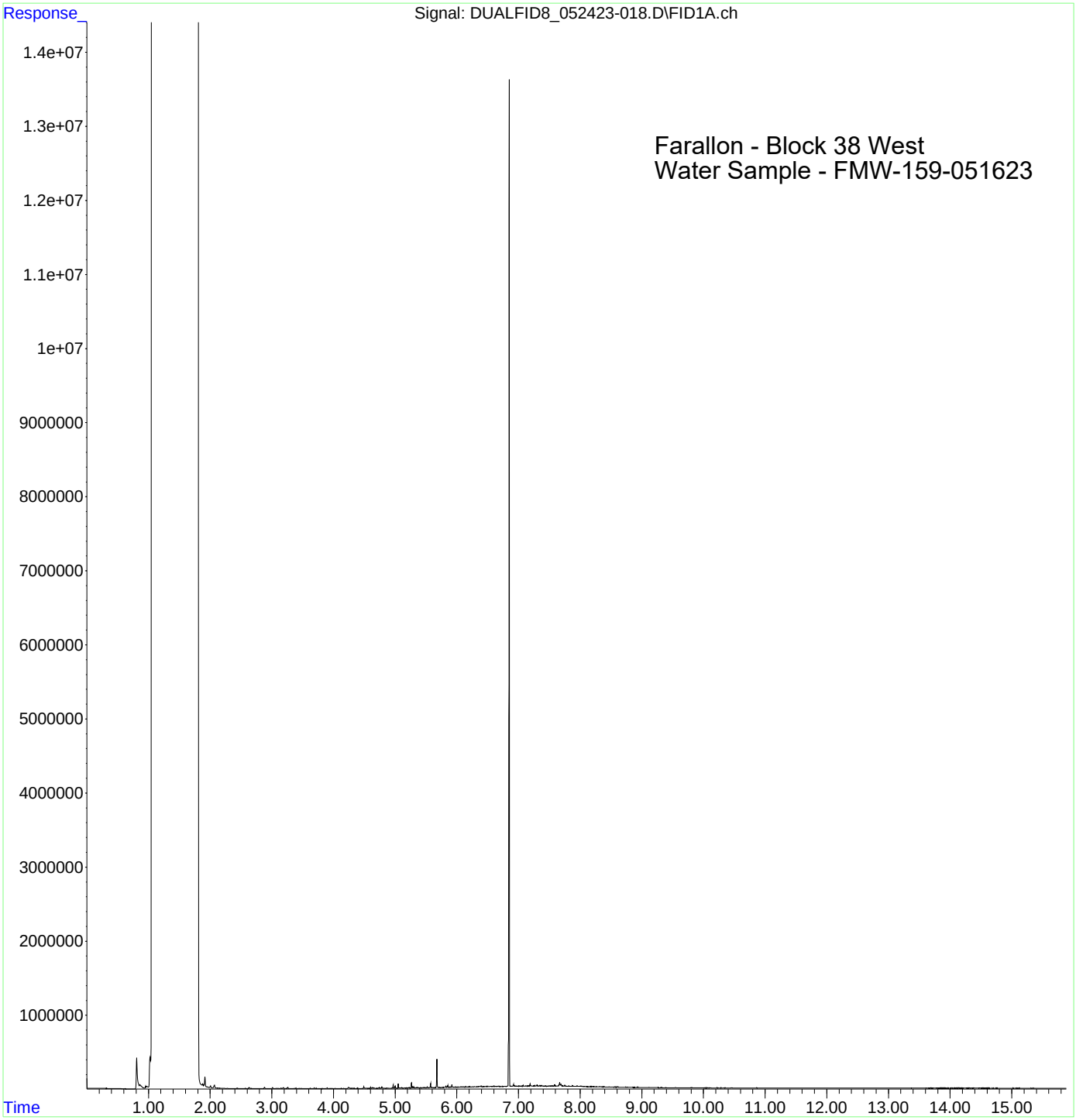
Misc Info :   ERR
Vial Number: 7



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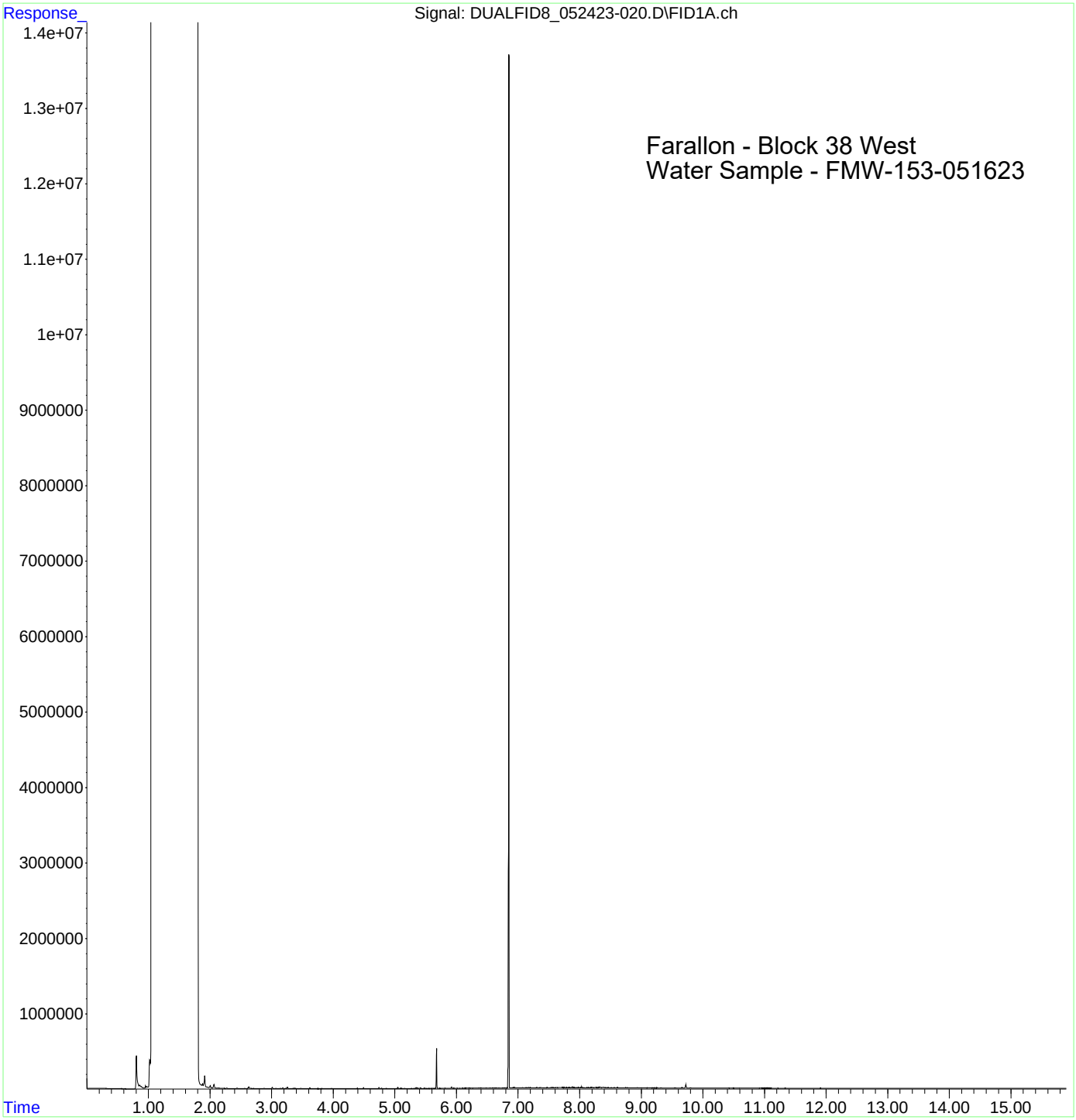

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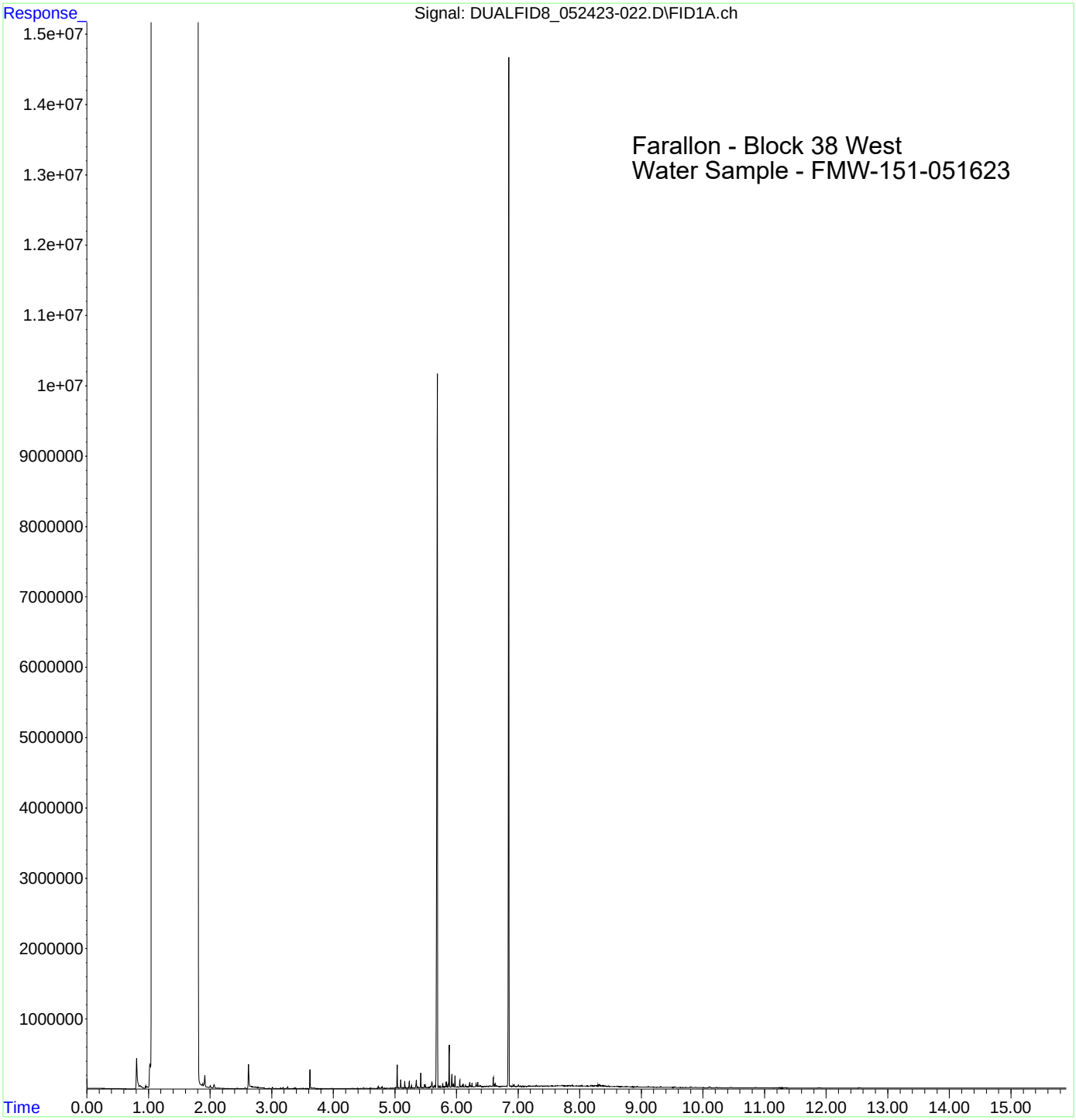
Misc Info :   ERR
Vial Number: 9



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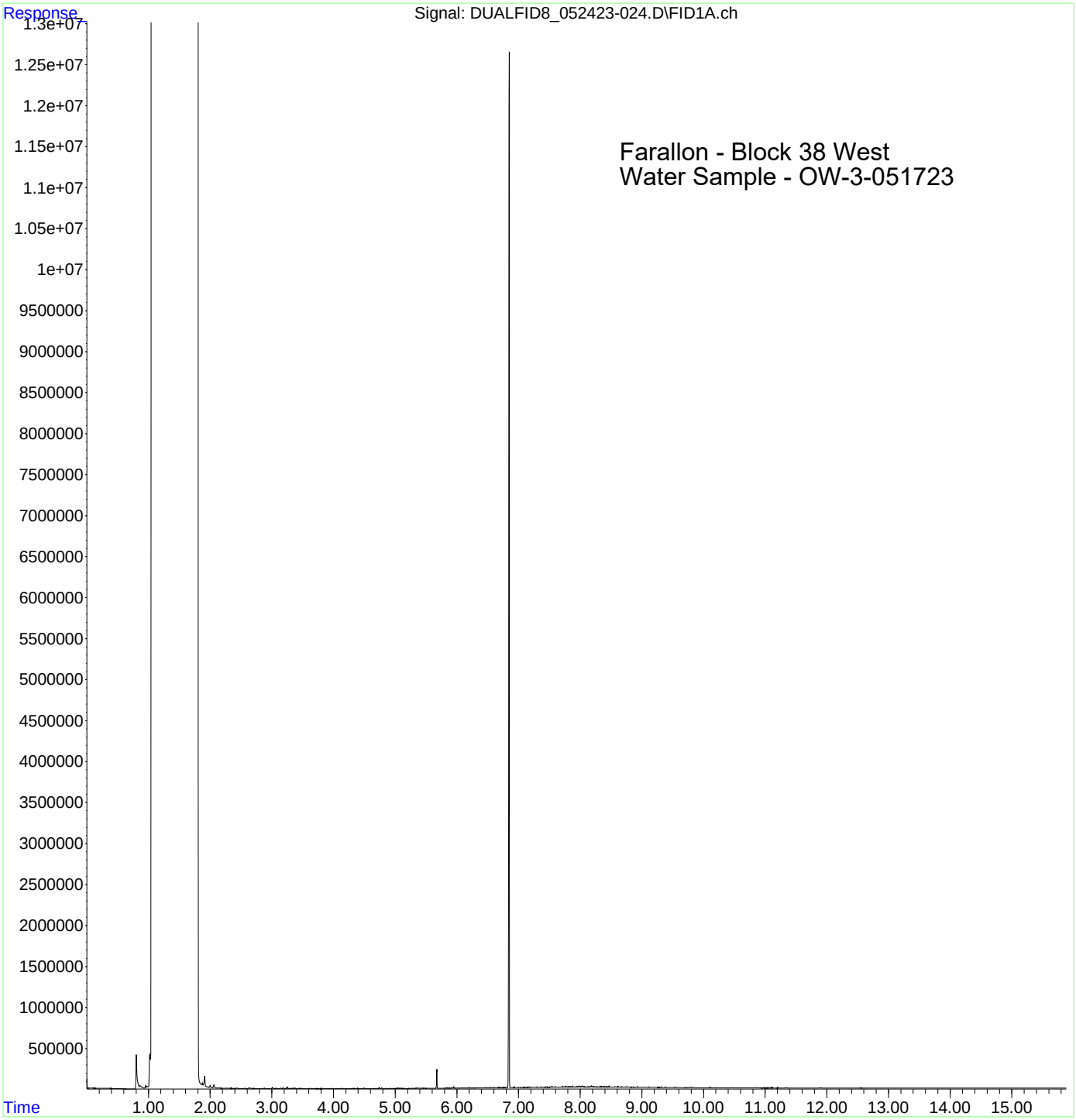
Instrument :   FUELS8
Sample Name: A3E1514-16
Misc Info :   ERR
Vial Number: 10



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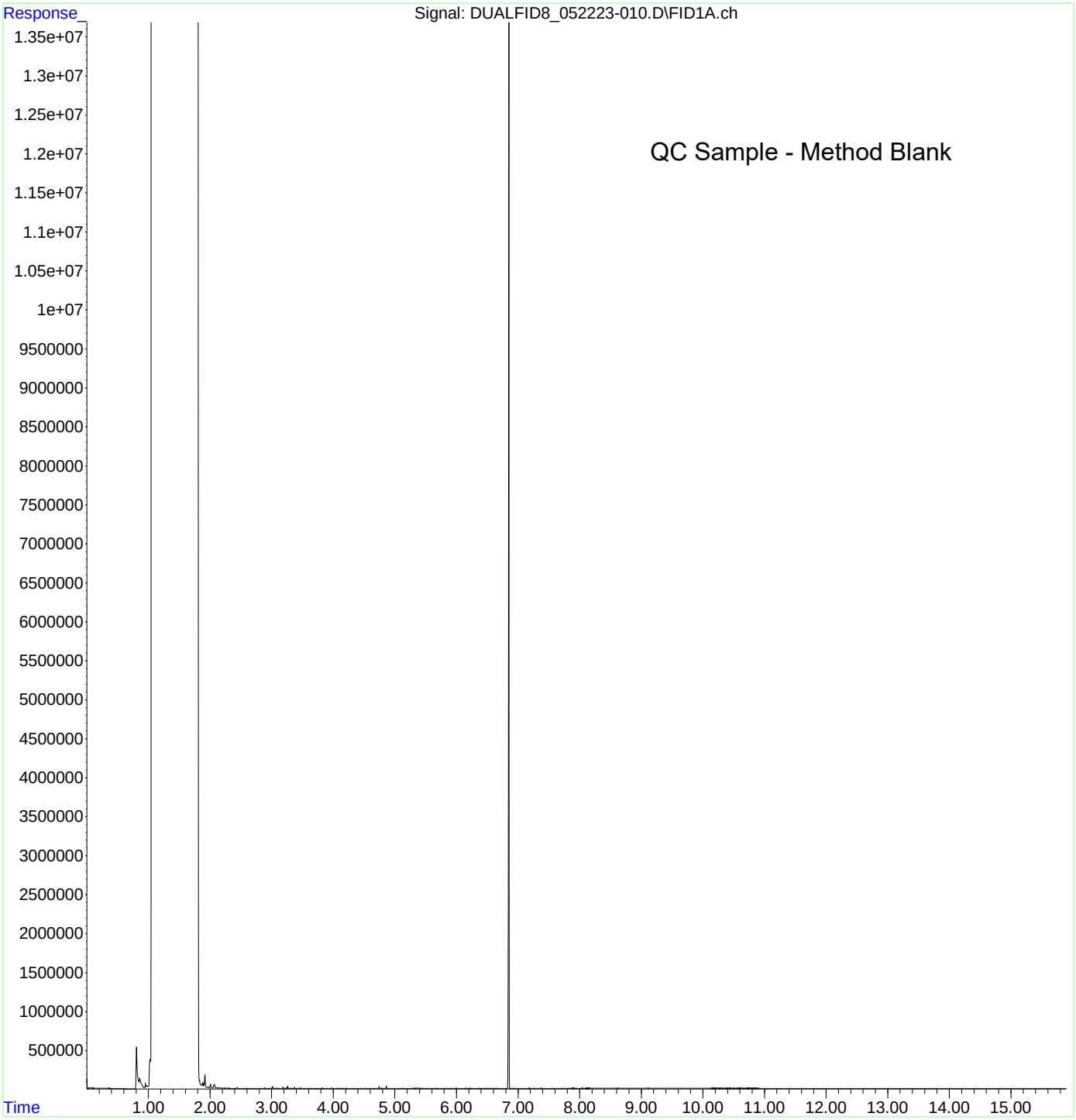
Instrument :   FUELS8
Sample Name: 23E0901-BLK1
Misc Info :   ERR
Vial Number: 3



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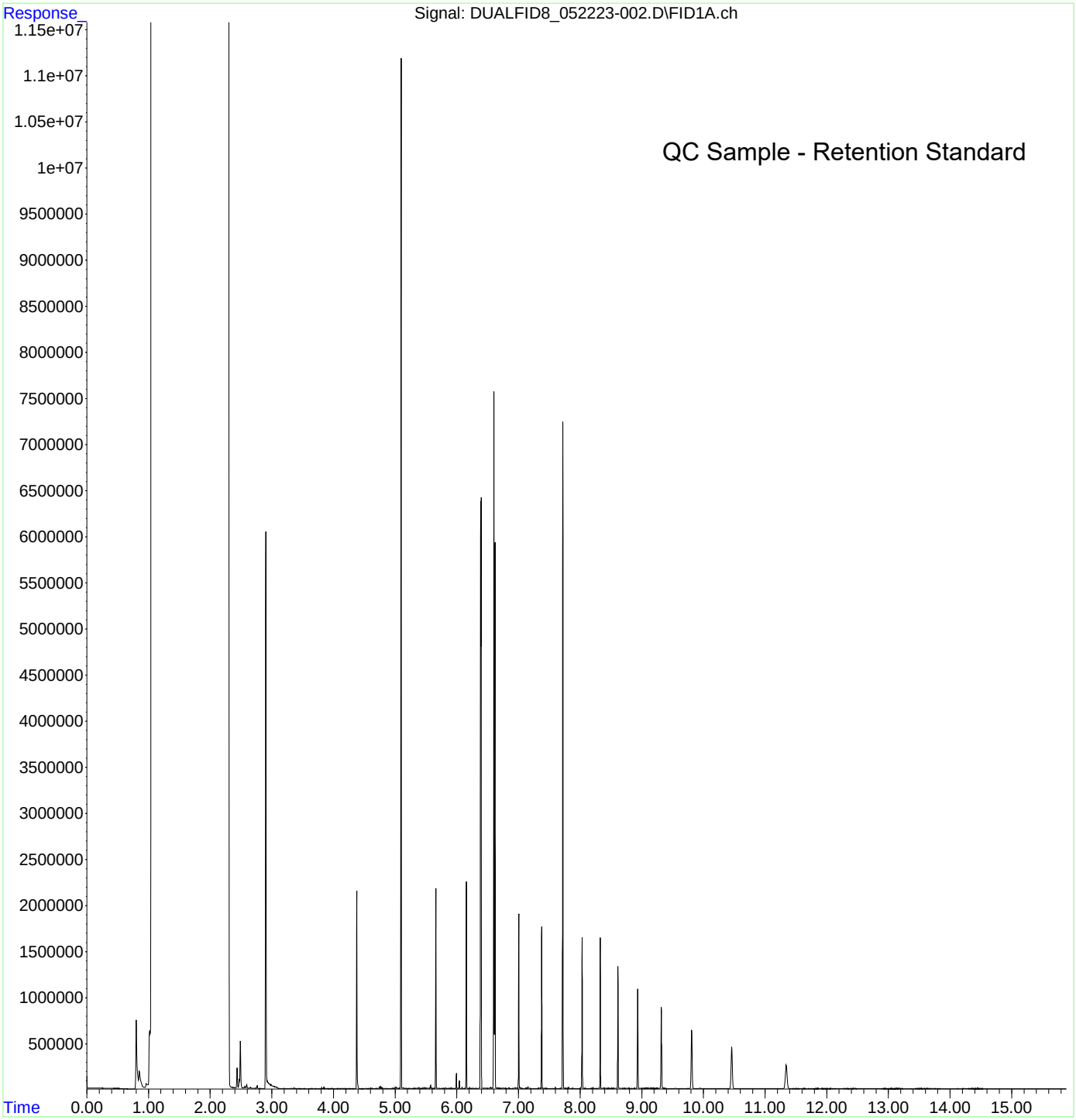
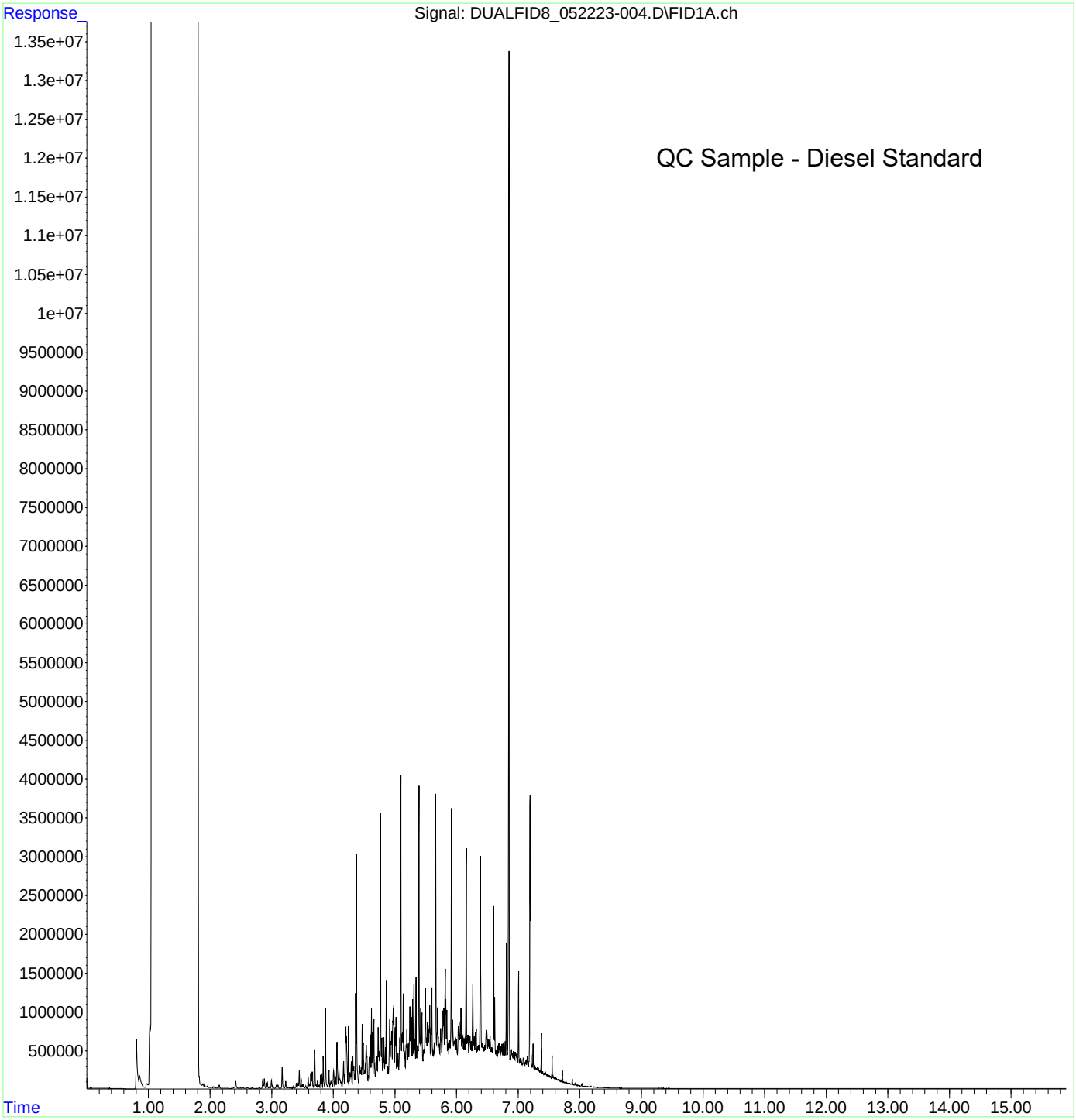
Acquired : 22 May 2023 04:30 pm using AcqMethod DUALFID8 Acquisition.M
Instrument : FUELS8
Sample Name: 3E22057-RES1
Misc Info : ERR
Vial Number: 139



File   :M:\DUALFID8\data\2023-05\3E22057\DUALFID8_052223-004.D
Operator   :
Acquired   : 22 May 2023 04:52 pm using AcqMethod DUALFID8 Acquisition.M
Instrument :   FUELS8
Sample Name: 3E22057-CCV1
Misc Info :   ERR
Vial Number: 1



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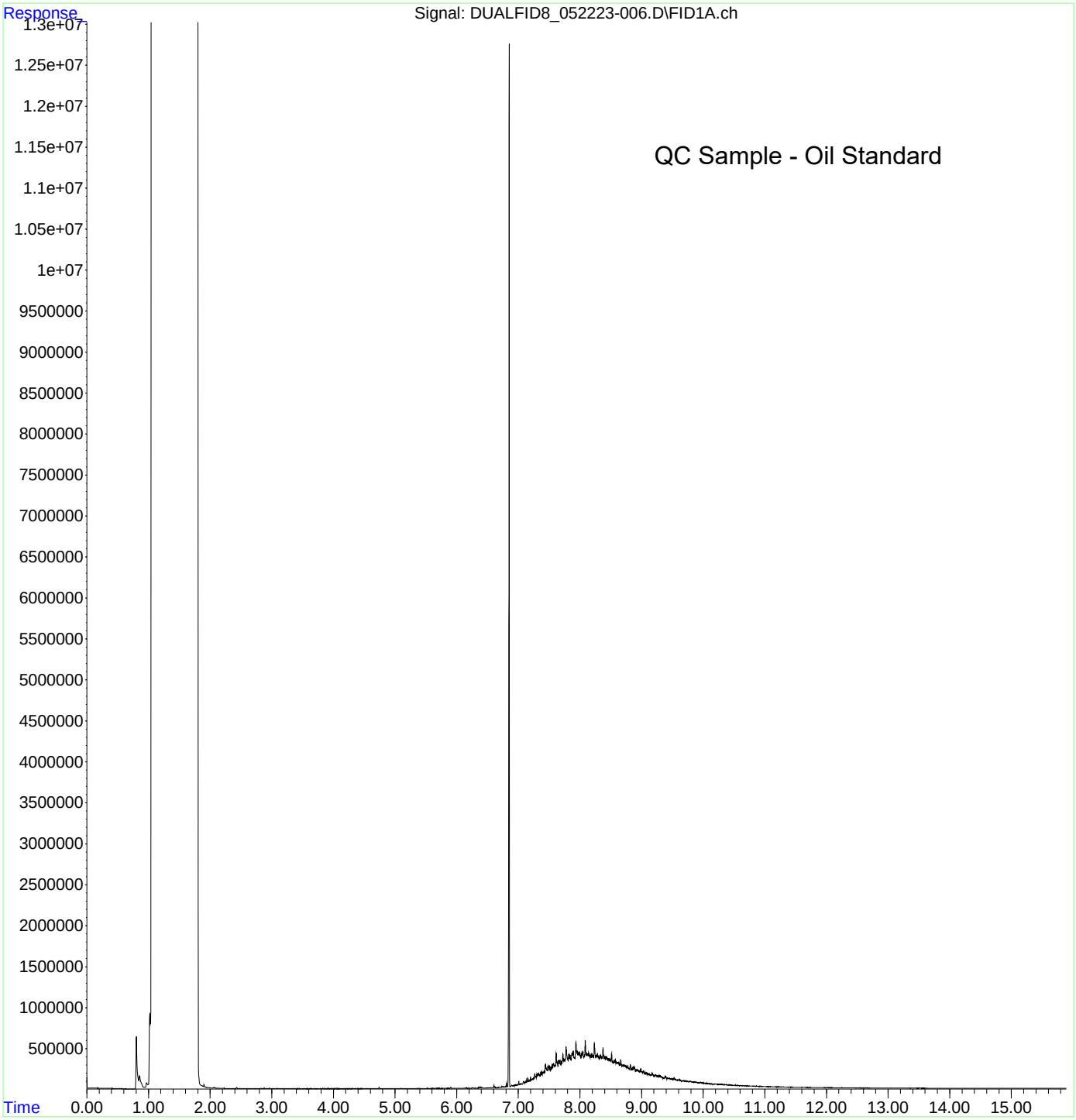
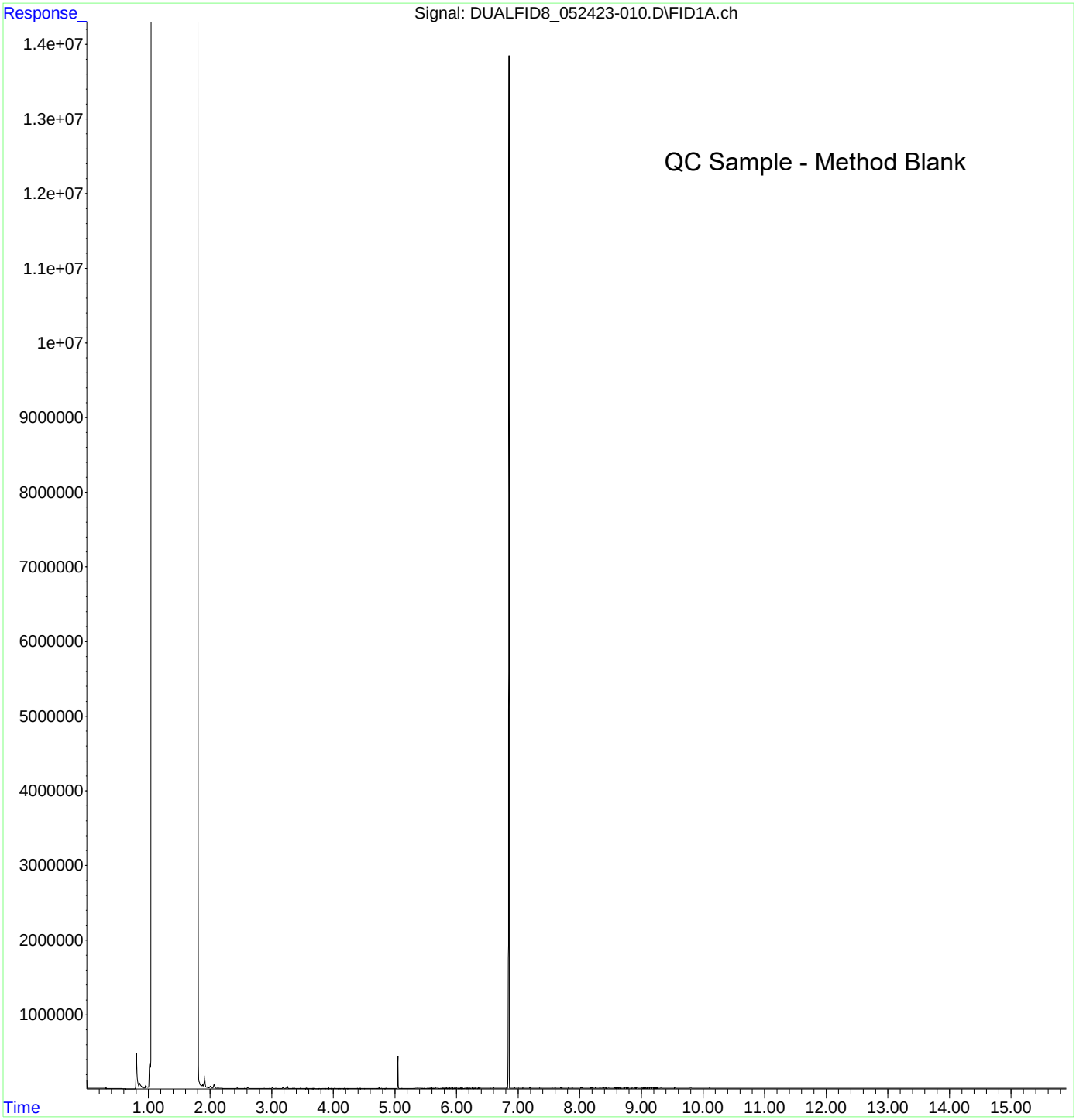
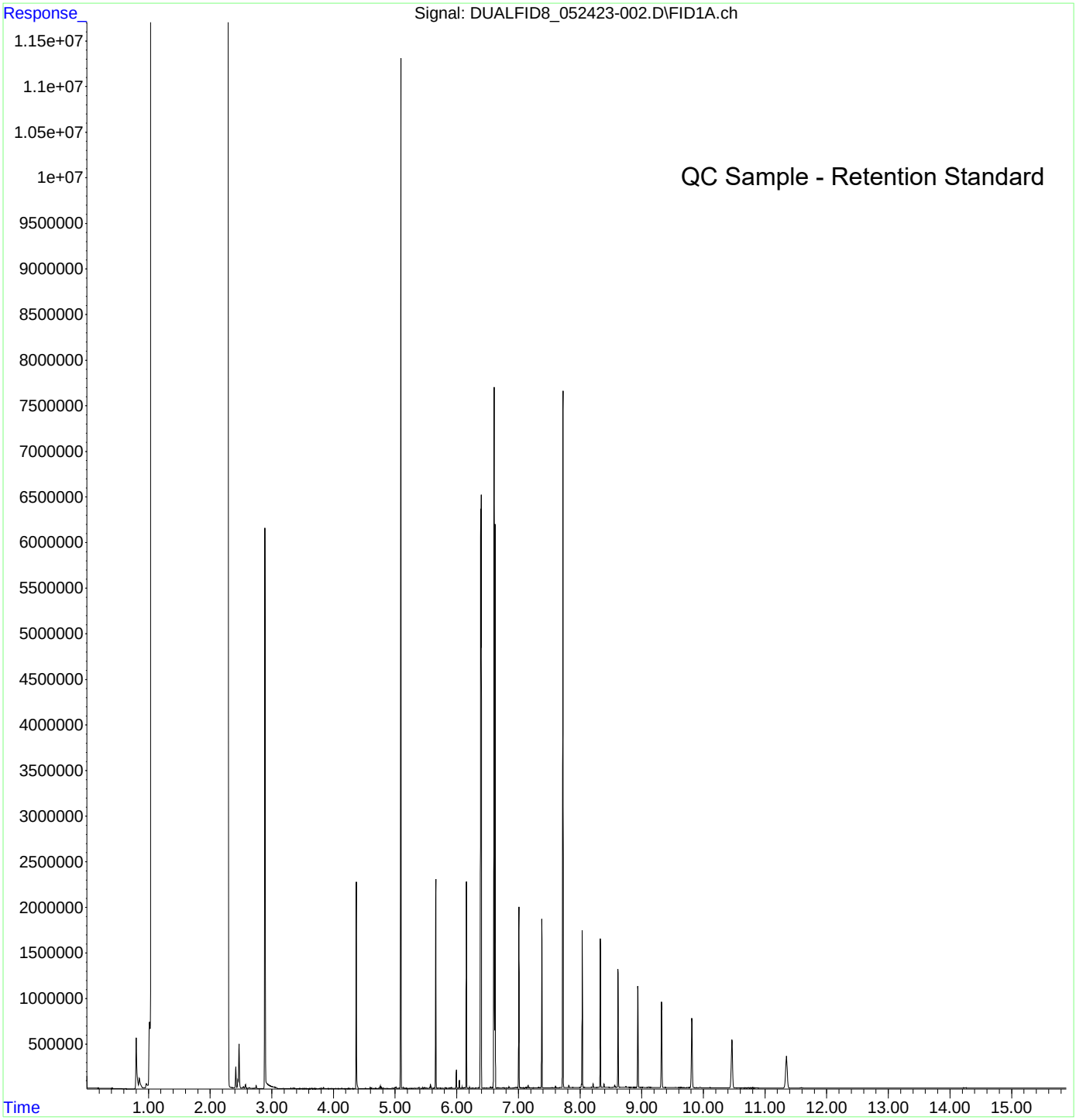
Operator   :
Acquired   : 22 May 2023 05:20 pm using AcqMethod DUALFID8 Acquisition.M
Instrument :   FUELS8
Sample Name: 3E22057-CCV2
Misc Info :   ERR
Vial Number: 2



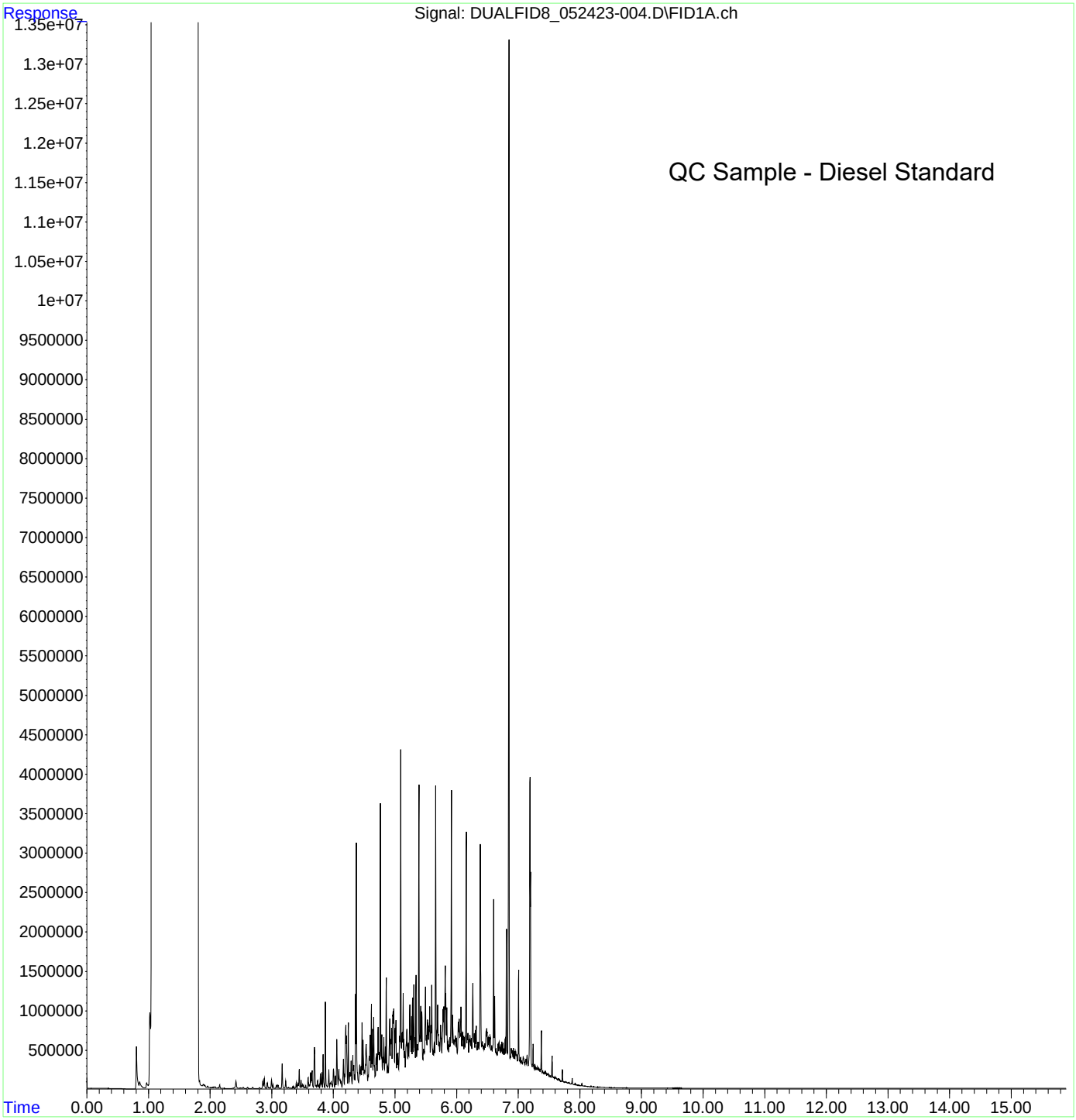
File   :M:\DUALFID8\data\2023-05\3E24034\DUALFID8_052423-010.D
Operator   :
Acquired   : 24 May 2023 08:22 am using AcqMethod DUALFID8 Acquisition.M
Instrument :   FUELS8
Sample Name: 23E0956-BLK1
Misc Info :   ERR
Vial Number: 3



File :M:\DUALFID8\data\2023-05\3E24034\DUALFID8_052423-002.D
Operator :
Acquired : 24 May 2023 06:54 am using AcqMethod DUALFID8 Acquisition.M
Instrument : FUELS8
Sample Name: 3E24034-RES1
Misc Info : ERR
Vial Number: 139



File :M:\DUALFID8\data\2023-05\3E24034\DUALFID8_052423-004.D
Operator :
Acquired : 24 May 2023 07:16 am using AcqMethod DUALFID8 Acquisition.M
Instrument : FUELS8
Sample Name: 3E24034-CCV1
Misc Info : ERR
Vial Number: 1



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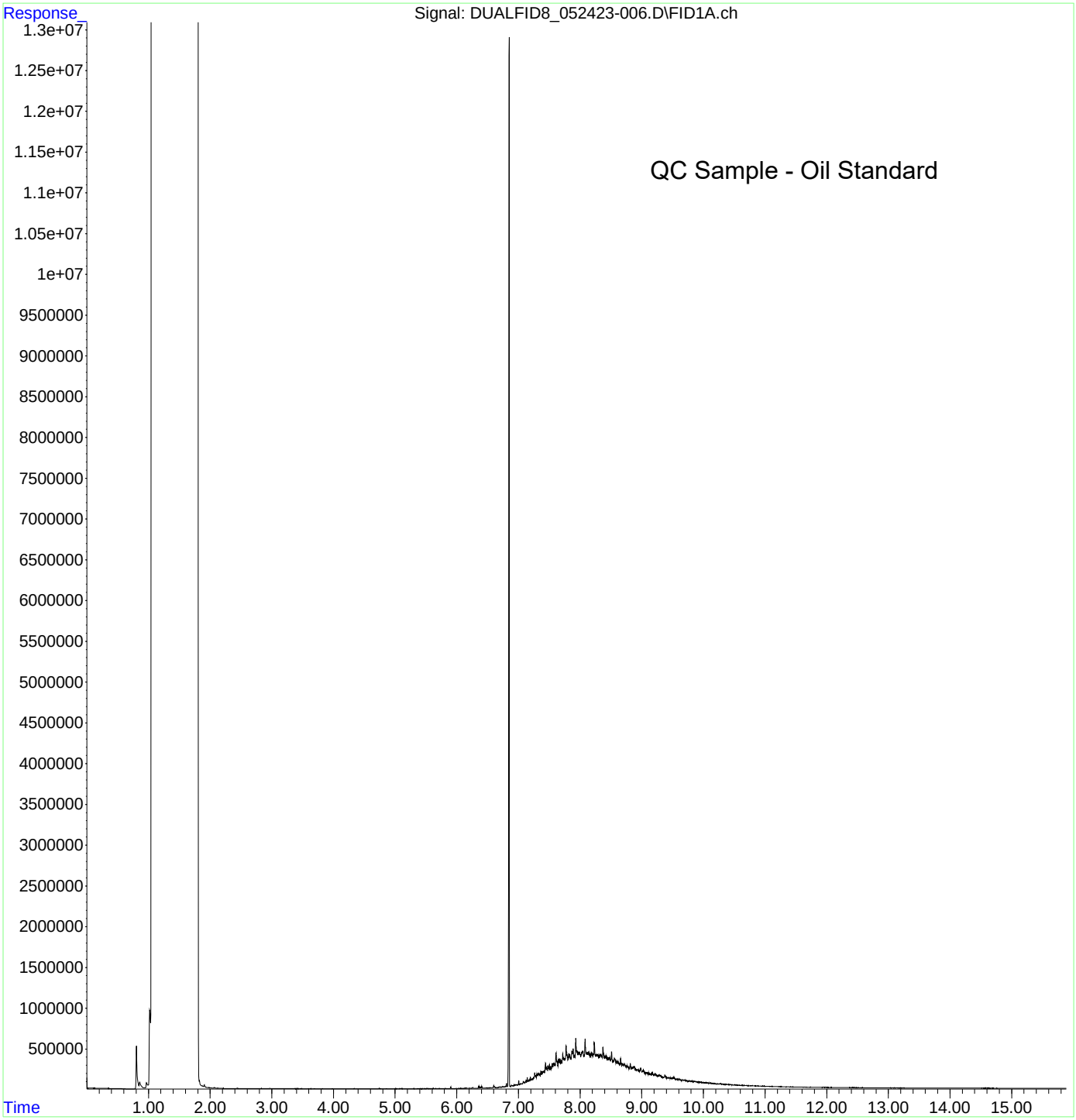
Operator   :
Acquired   : 24 May 2023 07:38 am using AcqMethod DUALFID8 Acquisition.M
Instrument :   FUELS8
Sample Name: 3E24034-CCV2
Misc Info :   ERR
Vial Number: 2



Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Friday, December 22, 2023

Greg Peters
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3H1087 - 397-019 Block 38 West - 397-019 Block 38 West

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3H1087, which was received by the laboratory on 8/15/2023 at 10:34:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information			
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.			
(See Cooler Receipt Form for details)			
Cooler #1	1.7 degC	Cooler #2	4.7 degC
Cooler #3	5.7 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-154-081423	A3H1087-01	Water	08/14/23 15:00	08/15/23 10:34
FMW-156-081423	A3H1087-02	Water	08/14/23 13:30	08/15/23 10:34
FMW-155-081423	A3H1087-03	Water	08/14/23 10:50	08/15/23 10:34
FMW-161-081423	A3H1087-04	Water	08/14/23 14:26	08/15/23 10:34
FMW-160-081423	A3H1087-05	Water	08/14/23 13:08	08/15/23 10:34
FMW-163-081423	A3H1087-06	Water	08/14/23 11:44	08/15/23 10:34

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019 Block 38 West	Report ID:
Seattle, WA 98101	Project Manager: Greg Peters	A3H1087 - 12 22 23 1819

ANALYTICAL CASE NARRATIVE

A3H1087	Apex Laboratories

Amended Report Revision 2:

Reporting to Reporting Limits (RLs)-

This report supersedes all previous reports.

Per client request, this report has been amended to report all NWTPH-Dx data to the RLs.

Michele Poquiz
Forensics Project Manager
12/22/2023

Amended Report Revision 1:

This report supersedes all previous reports.

Analysis of the following samples for NWTPH-Dx with silica gel column cleanup was added after the previous report version had been completed:

- FMW-154-081423 (A3H1087-01)
- FMW-155-081423 (A3H1087-03)
- FMW-160-081423 (A3H1087-05)

Michele Poquiz
Forensics Project Manager
9/7/2023

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-081423 (A3H1087-01)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**514**	---	76.2	ug/L	1	08/21/23 23:44	NWTPH-Dx LL	**F-11**
Oil	ND	---	152	ug/L	1	08/21/23 23:44	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*	*1*	*08/21/23 23:44*	*NWTPH-Dx LL*	
FMW-156-081423 (A3H1087-02)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**256**	---	75.5	ug/L	1	08/22/23 00:07	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	08/22/23 00:07	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 96 %*		*Limits: 50-150 %*	*1*	*08/22/23 00:07*	*NWTPH-Dx LL*	
FMW-155-081423 (A3H1087-03)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**530**	---	76.9	ug/L	1	08/22/23 00:31	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/22/23 00:31	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*08/22/23 00:31*	*NWTPH-Dx LL*	
FMW-161-081423 (A3H1087-04)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**202**	---	76.9	ug/L	1	08/22/23 00:54	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/22/23 00:54	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*		*Limits: 50-150 %*	*1*	*08/22/23 00:54*	*NWTPH-Dx LL*	
FMW-160-081423 (A3H1087-05)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**634**	---	76.9	ug/L	1	08/22/23 01:17	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/22/23 01:17	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*08/22/23 01:17*	*NWTPH-Dx LL*	
FMW-163-081423 (A3H1087-06)				**Matrix: Water**		**Batch: 23H0758**		
Diesel	**259**	---	76.9	ug/L	1	08/22/23 01:41	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/22/23 01:41	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 80 %*		*Limits: 50-150 %*	*1*	*08/22/23 01:41*	*NWTPH-Dx LL*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-081423 (A3H1087-01)				**Matrix: Water**		**Batch: 23I0147**		
Diesel	ND	---	76.2	ug/L	1	09/06/23 22:30	NWTPH-Dx/SGC	
Oil	**195**	---	152	ug/L	1	09/06/23 22:30	NWTPH-Dx/SGC	**F-13**
Surrogate: o-Terphenyl (Surr)		*Recovery: 63 %*	*Limits: 50-150 %*		*1*	*09/06/23 22:30*	*NWTPH-Dx/SGC*	
FMW-155-081423 (A3H1087-03)				**Matrix: Water**		**Batch: 23I0147**		
Diesel	ND	---	76.9	ug/L	1	09/06/23 22:54	NWTPH-Dx/SGC	
Oil	ND	---	154	ug/L	1	09/06/23 22:54	NWTPH-Dx/SGC	F-13
Surrogate: o-Terphenyl (Surr)		*Recovery: 53 %*	*Limits: 50-150 %*		*1*	*09/06/23 22:54*	*NWTPH-Dx/SGC*	
FMW-160-081423 (A3H1087-05)				**Matrix: Water**		**Batch: 23I0147**		
Diesel	ND	---	76.9	ug/L	1	09/06/23 23:17	NWTPH-Dx/SGC	
Oil	ND	---	154	ug/L	1	09/06/23 23:17	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 57 %*	*Limits: 50-150 %*		*1*	*09/06/23 23:17*	*NWTPH-Dx/SGC*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-081423 (A3H1087-01)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 12:41	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 93 %*	*Limits: 50-150 %*	*1*	*08/16/23 12:41*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/16/23 12:41*	*NWTPH-Gx (MS)*	
FMW-156-081423 (A3H1087-02)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 13:03	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 93 %*	*Limits: 50-150 %*	*1*	*08/16/23 13:03*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/16/23 13:03*	*NWTPH-Gx (MS)*	
FMW-155-081423 (A3H1087-03)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 16:04	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*	*Limits: 50-150 %*	*1*	*08/16/23 16:04*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*103 %*	*50-150 %*	*1*	*08/16/23 16:04*	*NWTPH-Gx (MS)*	
FMW-161-081423 (A3H1087-04)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 13:26	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 92 %*	*Limits: 50-150 %*	*1*	*08/16/23 13:26*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*	*1*	*08/16/23 13:26*	*NWTPH-Gx (MS)*	
FMW-160-081423 (A3H1087-05)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 13:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 93 %*	*Limits: 50-150 %*	*1*	*08/16/23 13:48*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/16/23 13:48*	*NWTPH-Gx (MS)*	
FMW-163-081423 (A3H1087-06)				**Matrix: Water**		**Batch: 23H0599**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/16/23 14:11	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*	*1*	*08/16/23 14:11*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*08/16/23 14:11*	*NWTPH-Gx (MS)*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-081423 (A3H1087-01)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	**0.120**	0.100	0.200	ug/L	1	08/16/23 12:41	EPA 8260D	**J**
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 12:41	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 12:41	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 12:41	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*08/16/23 12:41*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/16/23 12:41*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*08/16/23 12:41*	*EPA 8260D*	
FMW-156-081423 (A3H1087-02)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	ND	0.100	0.200	ug/L	1	08/16/23 13:03	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 13:03	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 13:03	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 13:03	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*08/16/23 13:03*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*08/16/23 13:03*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*08/16/23 13:03*	*EPA 8260D*	
FMW-155-081423 (A3H1087-03)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	ND	0.100	0.200	ug/L	1	08/16/23 16:04	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 16:04	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 16:04	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 16:04	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*08/16/23 16:04*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*08/16/23 16:04*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*08/16/23 16:04*	*EPA 8260D*	
FMW-161-081423 (A3H1087-04)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	ND	0.100	0.200	ug/L	1	08/16/23 13:26	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 13:26	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 13:26	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 13:26	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*08/16/23 13:26*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/16/23 13:26*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*08/16/23 13:26*	*EPA 8260D*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-081423 (A3H1087-05)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	**0.250**	0.100	0.200	ug/L	1	08/16/23 13:48	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 13:48	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 13:48	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 13:48	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits:* *80-120 %*	*1*	*08/16/23 13:48*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*08/16/23 13:48*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*08/16/23 13:48*	*EPA 8260D*	
FMW-163-081423 (A3H1087-06)				**Matrix: Water**		**Batch: 23H0599**		
Benzene	**1.22**	0.100	0.200	ug/L	1	08/16/23 14:11	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/16/23 14:11	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/16/23 14:11	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/16/23 14:11	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*99 %*	*Limits:* *80-120 %*	*1*	*08/16/23 14:11*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/16/23 14:11*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*08/16/23 14:11*	*EPA 8260D*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-081423 (A3H1087-01)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	**1.29**	0.0385	0.0769	ug/L	1	08/21/23 13:09	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/21/23 13:09	EPA 8270E SIM	
Naphthalene	**2.14**	0.0385	0.0769	ug/L	1	08/21/23 13:09	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 63 %*	*Limits: 44-120 %*	*1*	*08/21/23 13:09*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*76 %*	*50-134 %*	*1*	*08/21/23 13:09*	*EPA 8270E SIM*	
FMW-156-081423 (A3H1087-02)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 13:35	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 13:35	EPA 8270E SIM	
Naphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 13:35	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 57 %*	*Limits: 44-120 %*	*1*	*08/21/23 13:35*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*82 %*	*50-134 %*	*1*	*08/21/23 13:35*	*EPA 8270E SIM*	
FMW-155-081423 (A3H1087-03)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 14:00	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 14:00	EPA 8270E SIM	
Naphthalene	ND	0.0392	0.0784	ug/L	1	08/21/23 14:00	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 63 %*	*Limits: 44-120 %*	*1*	*08/21/23 14:00*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*55 %*	*50-134 %*	*1*	*08/21/23 14:00*	*EPA 8270E SIM*	
FMW-161-081423 (A3H1087-04)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/21/23 14:26	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/21/23 14:26	EPA 8270E SIM	
Naphthalene	**0.0692**	0.0385	0.0769	ug/L	1	08/21/23 14:26	EPA 8270E SIM	**J**
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 47 %*	*Limits: 44-120 %*	*1*	*08/21/23 14:26*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*67 %*	*50-134 %*	*1*	*08/21/23 14:26*	*EPA 8270E SIM*	
FMW-160-081423 (A3H1087-05)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	ND	0.0421	0.0842	ug/L	1	08/21/23 14:51	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0421	0.0842	ug/L	1	08/21/23 14:51	EPA 8270E SIM	
Naphthalene	ND	0.0421	0.0842	ug/L	1	08/21/23 14:51	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 66 %*	*Limits: 44-120 %*	*1*	*08/21/23 14:51*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*75 %*	*50-134 %*	*1*	*08/21/23 14:51*	*EPA 8270E SIM*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-163-081423 (A3H1087-06)				**Matrix: Water**		**Batch: 23H0735**		
1-Methylnaphthalene	ND	0.0444	0.0889	ug/L	1	08/21/23 15:17	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0444	0.0889	ug/L	1	08/21/23 15:17	EPA 8270E SIM	
Naphthalene	**0.328**	0.0444	0.0889	ug/L	1	08/21/23 15:17	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*60 %*	*Limits: 44-120 %*	*1*	*08/21/23 15:17*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*82 %*	*50-134 %*	*1*	*08/21/23 15:17*	*EPA 8270E SIM*	

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Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0758 - EPA 3510C (Fuels/Acid Ext.)									Water			
Blank (23H0758-BLK1)			Prepared: 08/21/23 10:55		Analyzed: 08/21/23 20:59							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23H0758-BS1)			Prepared: 08/21/23 10:55		Analyzed: 08/21/23 21:23							
NWTPH-Dx LL												
Diesel	394	---	80.0	ug/L	1	500	---	79	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 98 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23H0758-BSD1)			Prepared: 08/21/23 10:55		Analyzed: 08/21/23 21:46							**Q-19**
NWTPH-Dx LL												
Diesel	364	---	80.0	ug/L	1	500	---	73	36-132%	8	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 97 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23I0147 - EPA 3510C (Fuels/Acid Ext.) w/SGC									Water			
Blank (23I0147-BLK1)				Prepared: 08/21/23 10:55	Analyzed: 09/06/23 21:20							
NWTPH-Dx/SGC												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 81 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (23I0147-BS1)				Prepared: 08/21/23 10:55	Analyzed: 09/06/23 21:43							
NWTPH-Dx/SGC												
Diesel	327	---	80.0	ug/L	1	500	---	65	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS Dup (23I0147-BSD1)				Prepared: 08/21/23 10:55	Analyzed: 09/06/23 22:07							**Q-19**
NWTPH-Dx/SGC												
Diesel	306	---	80.0	ug/L	1	500	---	61	36-132%	7	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0599 - EPA 5030C									Water			
Blank (23H0599-BLK1)			Prepared: 08/16/23 09:53		Analyzed: 08/16/23 12:18							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 93 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*101 %*		*50-150 %*			*"*				
LCS (23H0599-BS2)			Prepared: 08/16/23 09:53		Analyzed: 08/16/23 11:55							
NWTPH-Gx (MS)												
Gasoline Range Organics	430	50.0	100	ug/L	1	500	---	86	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*101 %*		*50-150 %*			*"*				
Duplicate (23H0599-DUP1)			Prepared: 08/16/23 09:53		Analyzed: 08/16/23 14:33							
QC Source Sample: FMW-163-081423 (A3H1087-06)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 92 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*			*"*				

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0599 - EPA 5030C							**Water**					
Blank (23H0599-BLK1)			Prepared: 08/16/23 09:53 Analyzed: 08/16/23 12:18									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				
LCS (23H0599-BS1)			Prepared: 08/16/23 09:53 Analyzed: 08/16/23 11:33									
EPA 8260D												
Benzene	20.3	0.100	0.200	ug/L	1	20.0	---	102	80-120%	---	---	
Toluene	19.9	0.500	1.00	ug/L	1	20.0	---	99	80-120%	---	---	
Ethylbenzene	20.0	0.250	0.500	ug/L	1	20.0	---	100	80-120%	---	---	
Xylenes, total	62.0	0.750	1.50	ug/L	1	60.0	---	103	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				
Duplicate (23H0599-DUP1)			Prepared: 08/16/23 09:53 Analyzed: 08/16/23 14:33									
QC Source Sample: FMW-163-081423 (A3H1087-06)												
EPA 8260D												
Benzene	**1.52**	0.100	0.200	ug/L	1	---	1.22	---	---	22	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*80-120 %*			*"*				
Matrix Spike (23H0599-MS1)			Prepared: 08/16/23 09:53 Analyzed: 08/16/23 16:26									
QC Source Sample: FMW-155-081423 (A3H1087-03)												
EPA 8260D												

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0599 - EPA 5030C							**Water**					
Matrix Spike (23H0599-MS1)			Prepared: 08/16/23 09:53 Analyzed: 08/16/23 16:26									
QC Source Sample: FMW-155-081423 (A3H1087-03)												
Benzene	21.2	0.100	0.200	ug/L	1	20.0	ND	106	79-120%	---	---	
Toluene	21.8	0.500	1.00	ug/L	1	20.0	ND	109	80-121%	---	---	
Ethylbenzene	22.4	0.250	0.500	ug/L	1	20.0	ND	112	79-121%	---	---	
Xylenes, total	68.6	0.750	1.50	ug/L	1	60.0	ND	114	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				

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AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0735 - EPA 3510C (Acid Extraction)							**Water**					
Blank (23H0735-BLK1)			Prepared: 08/21/23 06:16		Analyzed: 08/21/23 11:53							
EPA 8270E SIM												
Acenaphthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 59 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*82 %*		*50-134 %*			*"*				
LCS (23H0735-BS1)			Prepared: 08/21/23 06:16		Analyzed: 08/21/23 12:18							
EPA 8270E SIM												
Acenaphthene	6.50	0.0200	0.0400	ug/L	1	8.00	---	81	47-122%	---	---	
Acenaphthylene	6.56	0.0200	0.0400	ug/L	1	8.00	---	82	41-130%	---	---	
Anthracene	6.87	0.0200	0.0400	ug/L	1	8.00	---	86	57-123%	---	---	
Benz(a)anthracene	7.03	0.0200	0.0400	ug/L	1	8.00	---	88	58-125%	---	---	
Benzo(a)pyrene	7.56	0.0200	0.0400	ug/L	1	8.00	---	95	54-128%	---	---	
Benzo(b)fluoranthene	7.34	0.0200	0.0400	ug/L	1	8.00	---	92	53-131%	---	---	
Benzo(k)fluoranthene	7.61	0.0200	0.0400	ug/L	1	8.00	---	95	57-129%	---	---	
Benzo(g,h,i)perylene	6.64	0.0200	0.0400	ug/L	1	8.00	---	83	50-134%	---	---	
Chrysene	7.38	0.0200	0.0400	ug/L	1	8.00	---	92	59-123%	---	---	

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0735 - EPA 3510C (Acid Extraction)								**Water**				
LCS (23H0735-BS1)			Prepared: 08/21/23 06:16		Analyzed: 08/21/23 12:18							
Dibenz(a,h)anthracene	7.52	0.0200	0.0400	ug/L	1	8.00	---	94	51-134%	---	---	
Fluoranthene	7.48	0.0200	0.0400	ug/L	1	8.00	---	93	57-128%	---	---	
Fluorene	6.92	0.0200	0.0400	ug/L	1	8.00	---	86	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	7.40	0.0200	0.0400	ug/L	1	8.00	---	93	52-134%	---	---	
1-Methylnaphthalene	5.01	0.0400	0.0800	ug/L	1	8.00	---	63	41-120%	---	---	
2-Methylnaphthalene	4.97	0.0400	0.0800	ug/L	1	8.00	---	62	40-121%	---	---	
Naphthalene	4.86	0.0400	0.0800	ug/L	1	8.00	---	61	40-121%	---	---	
Phenanthrene	6.80	0.0200	0.0400	ug/L	1	8.00	---	85	59-120%	---	---	
Pyrene	7.45	0.0200	0.0400	ug/L	1	8.00	---	93	57-126%	---	---	
Dibenzofuran	6.55	0.0200	0.0400	ug/L	1	8.00	---	82	53-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*87 %*		*50-134 %*			*"*				
LCS Dup (23H0735-BSD1)			Prepared: 08/21/23 06:16		Analyzed: 08/21/23 12:44							**Q-19**
EPA 8270E SIM												
Acenaphthene	6.77	0.0200	0.0400	ug/L	1	8.00	---	85	47-122%	4	30%	
Acenaphthylene	6.81	0.0200	0.0400	ug/L	1	8.00	---	85	41-130%	4	30%	
Anthracene	6.85	0.0200	0.0400	ug/L	1	8.00	---	86	57-123%	0.2	30%	
Benz(a)anthracene	7.12	0.0200	0.0400	ug/L	1	8.00	---	89	58-125%	1	30%	
Benzo(a)pyrene	7.68	0.0200	0.0400	ug/L	1	8.00	---	96	54-128%	2	30%	
Benzo(b)fluoranthene	7.61	0.0200	0.0400	ug/L	1	8.00	---	95	53-131%	4	30%	
Benzo(k)fluoranthene	7.86	0.0200	0.0400	ug/L	1	8.00	---	98	57-129%	3	30%	
Benzo(g,h,i)perylene	6.76	0.0200	0.0400	ug/L	1	8.00	---	85	50-134%	2	30%	
Chrysene	7.71	0.0200	0.0400	ug/L	1	8.00	---	96	59-123%	4	30%	
Dibenz(a,h)anthracene	7.78	0.0200	0.0400	ug/L	1	8.00	---	97	51-134%	3	30%	
Fluoranthene	7.61	0.0200	0.0400	ug/L	1	8.00	---	95	57-128%	2	30%	
Fluorene	7.10	0.0200	0.0400	ug/L	1	8.00	---	89	52-124%	3	30%	
Indeno(1,2,3-cd)pyrene	7.56	0.0200	0.0400	ug/L	1	8.00	---	95	52-134%	2	30%	
1-Methylnaphthalene	5.45	0.0400	0.0800	ug/L	1	8.00	---	68	41-120%	8	30%	
2-Methylnaphthalene	5.38	0.0400	0.0800	ug/L	1	8.00	---	67	40-121%	8	30%	
Naphthalene	5.25	0.0400	0.0800	ug/L	1	8.00	---	66	40-121%	8	30%	
Phenanthrene	6.81	0.0200	0.0400	ug/L	1	8.00	---	85	59-120%	0.2	30%	
Pyrene	7.64	0.0200	0.0400	ug/L	1	8.00	---	96	57-126%	3	30%	
Dibenzofuran	6.75	0.0200	0.0400	ug/L	1	8.00	---	84	53-120%	3	30%	

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0735 - EPA 3510C (Acid Extraction)								**Water**				
LCS Dup (23H0735-BSD1)				Prepared: 08/21/23 06:16 Analyzed: 08/21/23 12:44								**Q-19**
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 73 %*	*Limits: 44-120 %*	*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*85 %*	*50-134 %*	*"*							

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019 Block 38 West	Report ID:
Seattle, WA 98101	Project Manager: Greg Peters	A3H1087 - 12 22 23 1819

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0758							
A3H1087-01	Water	NWTPH-Dx LL	08/14/23 15:00	08/21/23 10:55	1050mL/2mL	1000mL/2mL	0.95
A3H1087-02	Water	NWTPH-Dx LL	08/14/23 13:30	08/21/23 10:55	1060mL/2mL	1000mL/2mL	0.94
A3H1087-03	Water	NWTPH-Dx LL	08/14/23 10:50	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96
A3H1087-04	Water	NWTPH-Dx LL	08/14/23 14:26	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96
A3H1087-05	Water	NWTPH-Dx LL	08/14/23 13:08	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96
A3H1087-06	Water	NWTPH-Dx LL	08/14/23 11:44	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.) w/SGC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23I0147							
A3H1087-01	Water	NWTPH-Dx/SGC	08/14/23 15:00	08/21/23 10:55	1050mL/2mL	1000mL/2mL	0.95
A3H1087-03	Water	NWTPH-Dx/SGC	08/14/23 10:50	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96
A3H1087-05	Water	NWTPH-Dx/SGC	08/14/23 13:08	08/21/23 10:55	1040mL/2mL	1000mL/2mL	0.96

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0599							
A3H1087-01	Water	NWTPH-Gx (MS)	08/14/23 15:00	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-02	Water	NWTPH-Gx (MS)	08/14/23 13:30	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-03	Water	NWTPH-Gx (MS)	08/14/23 10:50	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-04	Water	NWTPH-Gx (MS)	08/14/23 14:26	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-05	Water	NWTPH-Gx (MS)	08/14/23 13:08	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-06	Water	NWTPH-Gx (MS)	08/14/23 11:44	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0599							
A3H1087-01	Water	EPA 8260D	08/14/23 15:00	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-02	Water	EPA 8260D	08/14/23 13:30	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-03	Water	EPA 8260D	08/14/23 10:50	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00

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Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019 Block 38 West**
Project Manager: **Greg Peters**

Report ID:
A3H1087 - 12 22 23 1819

SAMPLE PREPARATION INFORMATION

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3H1087-04	Water	EPA 8260D	08/14/23 14:26	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-05	Water	EPA 8260D	08/14/23 13:08	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00
A3H1087-06	Water	EPA 8260D	08/14/23 11:44	08/16/23 09:53	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0735							
A3H1087-01	Water	EPA 8270E SIM	08/14/23 15:00	08/21/23 06:16	1040mL/2mL	1000mL/2mL	0.96
A3H1087-02	Water	EPA 8270E SIM	08/14/23 13:30	08/21/23 06:16	1020mL/2mL	1000mL/2mL	0.98
A3H1087-03	Water	EPA 8270E SIM	08/14/23 10:50	08/21/23 06:16	1020mL/2mL	1000mL/2mL	0.98
A3H1087-04	Water	EPA 8270E SIM	08/14/23 14:26	08/21/23 06:16	1040mL/2mL	1000mL/2mL	0.96
A3H1087-05	Water	EPA 8270E SIM	08/14/23 13:08	08/21/23 06:16	950mL/2mL	1000mL/2mL	1.05
A3H1087-06	Water	EPA 8270E SIM	08/14/23 11:44	08/21/23 06:16	900mL/2mL	1000mL/2mL	1.11

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-13	The chromatographic pattern does not resemble the fuel standard used for quantitation
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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ANALYTICAL REPORT

AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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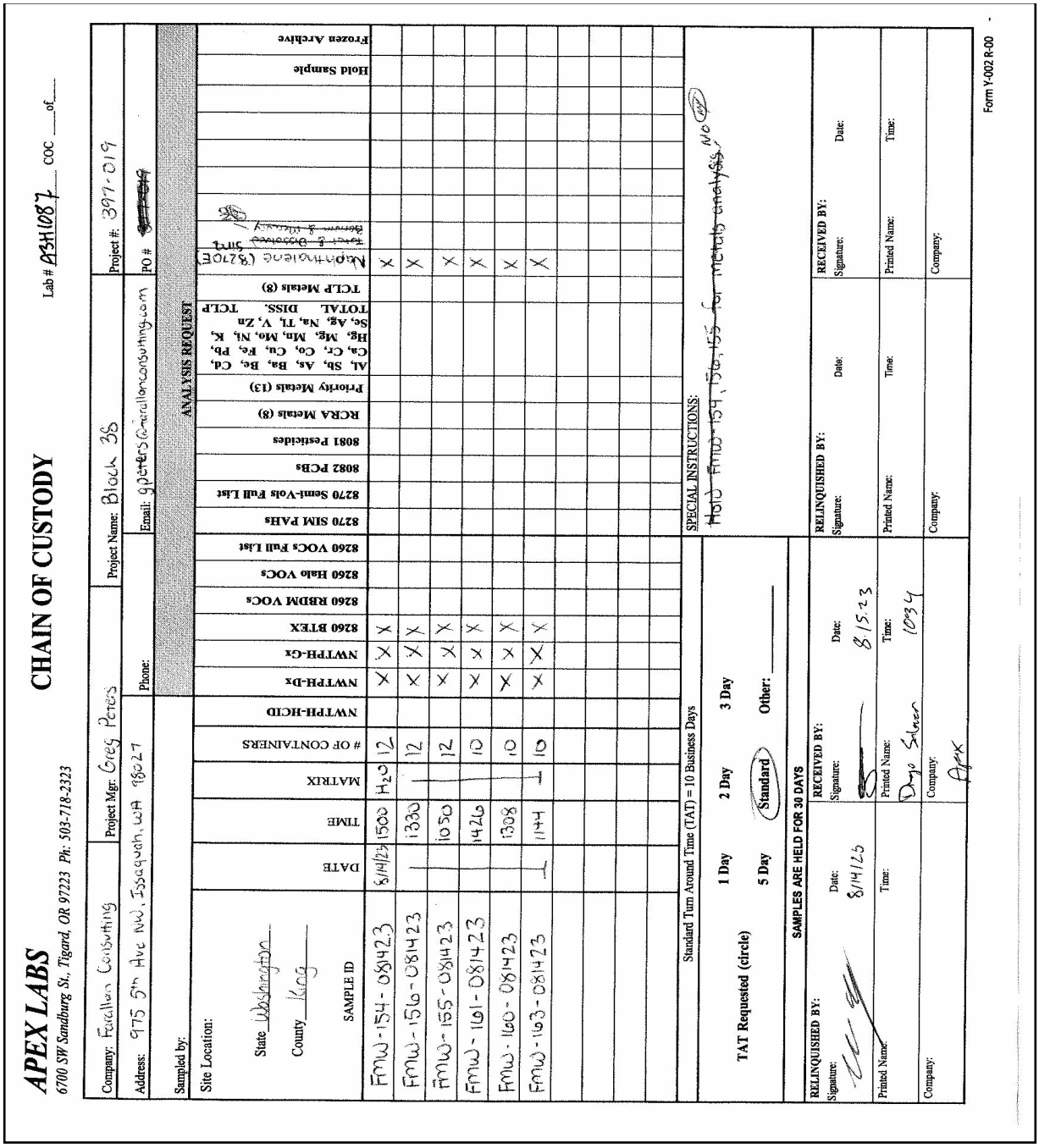

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3H1087 COC ___ of ___

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: | Email: gpeters@farallonconsulting.com | PO #:
Sampled by:
Site Location: State Washington County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalene (8270E) Total & Dissolved Smpl	Hold Sample	Frozen Archive
FMW-154-081423	8/14/23	1500	H_2O	12		X	X	X											X			
FMW-156-081423		1330		12		X	X	X											X			
FMW-155-081423		1050		12		X	X	X											X			
FMW-161-081423		1426		10		X	X	X											X			
FMW-160-081423		1308		10		X	X	X											X			
FMW-163-081423		1444		10		X	X	X											X			

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day **Standard** Other: ___

SPECIAL INSTRUCTIONS:
Hold FMW-154, 156, 155 for metals analysis, WO

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 8/14/23	Date: 8/15/23	Date:	Date:
Time:	Time: 1034	Time:	Time:
Printed Name:	Printed Name: Dyo Salven	Printed Name:	Printed Name:
Company:	Company: Apex	Company:	Company:

Form Y-002 R-00

Apex Laboratories

Michele Poquiz

Michele Poquiz For Kurt Johnson, Senior Chemist

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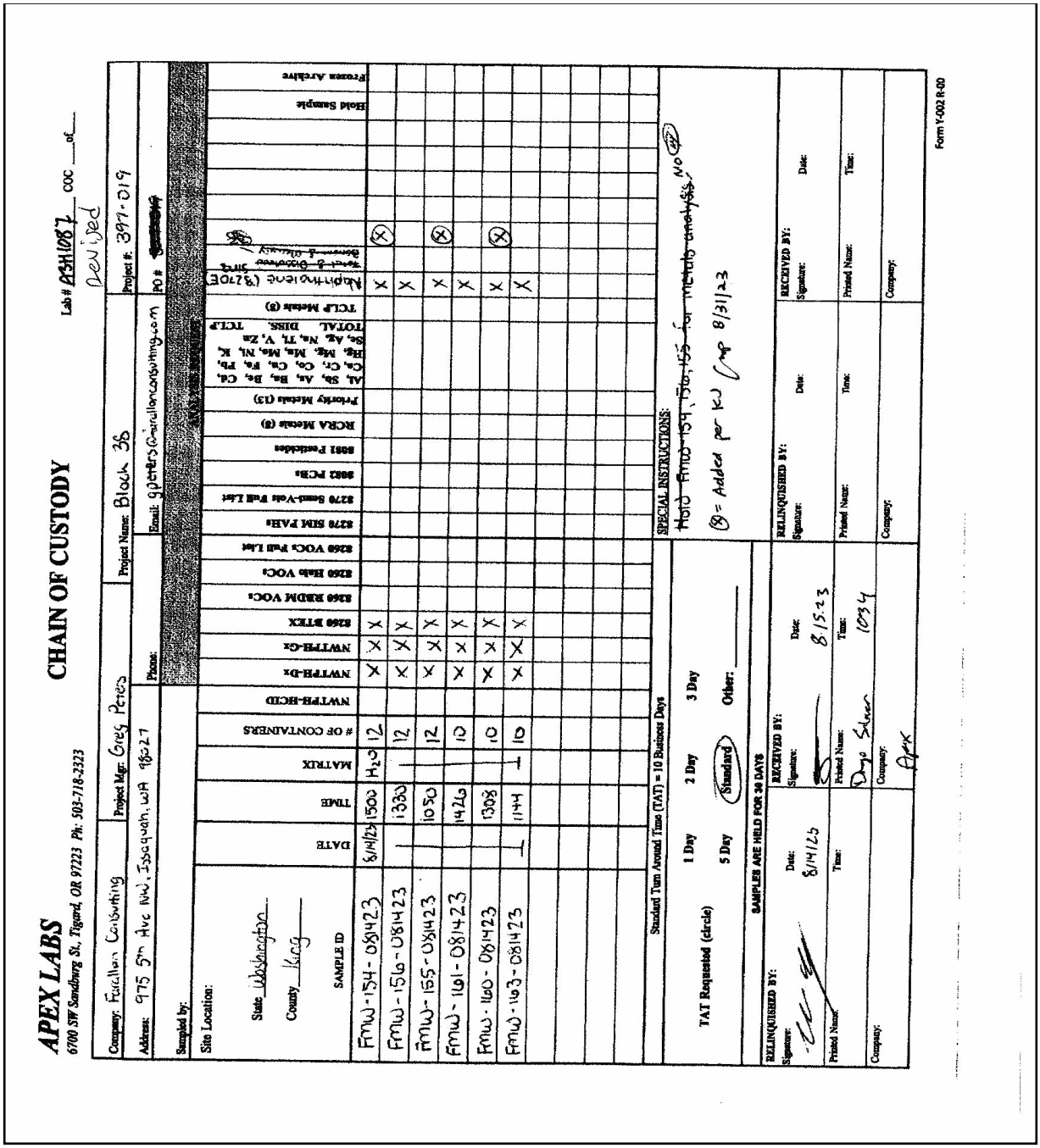
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**



Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019 Block 38 West**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1087 - 12 22 23 1819**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3H1087

Project/Project #: Block 38 / 397-019

Delivery Info:

Date/time received: 8-15-23 @ 1034 By: DSS

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

Cooler Inspection Date/time inspected: 8-15-23 @ 1035 By: DJS

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.7	4.7	5.7				
Custody seals? (Y/N)	N →						
Received on ice? (Y/N)	Y →						
Temp. blanks? (Y/N)	Y →						
Ice type: (Gel/Real/Other)	Real →						
Condition (In/Out):	In →						

Cooler out of temp? (Y/(N)) Possible reason why: ____

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 8-15-23 @ 1540 By: DJS

DSS 8.15.23

All samples intact? Yes ~~X~~ No X Comments: 2/6 Vials for FMW-161-081423 received broken.

Bottle labels/COCs agree? Yes ___ No X Comments: No ID, Date, or Time on 1/2 HCL ambers FMW-161-081423 identified by bottles packaged with FMW-155 081423 cont ID reads FMW-081423

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes X No ___ NA ___

Comments FMW-160-081423 4/6 = HS.

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes X No___NA___

Comments: ____

Additional information: 7824 8566 0207

Labeled by: DJS Witness: [signature] Cooler Inspected by: DJS

Form Y-003 R-00

Apex Laboratories

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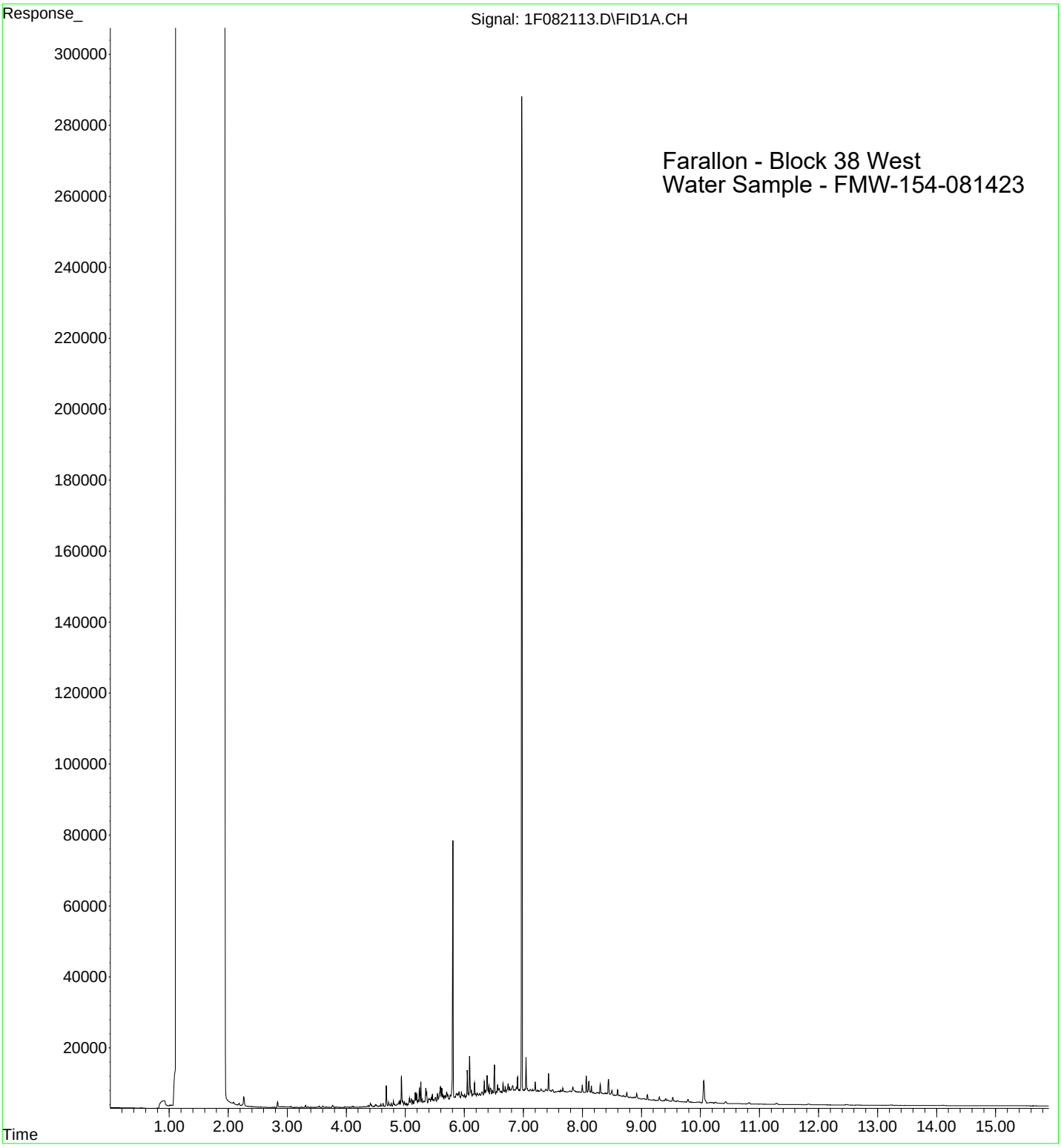
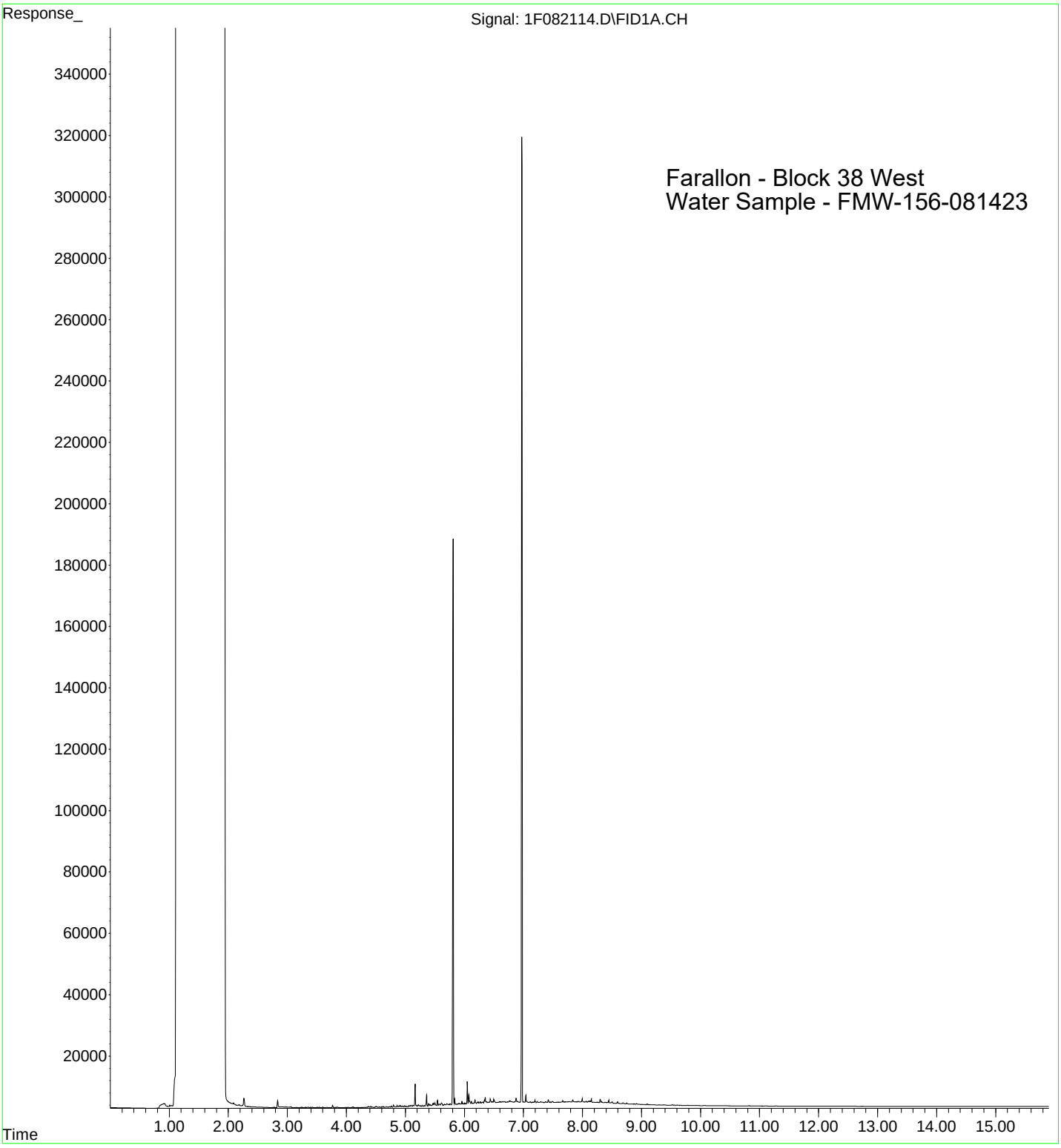
Michele Poquiz For Kurt Johnson, Senior Chemist

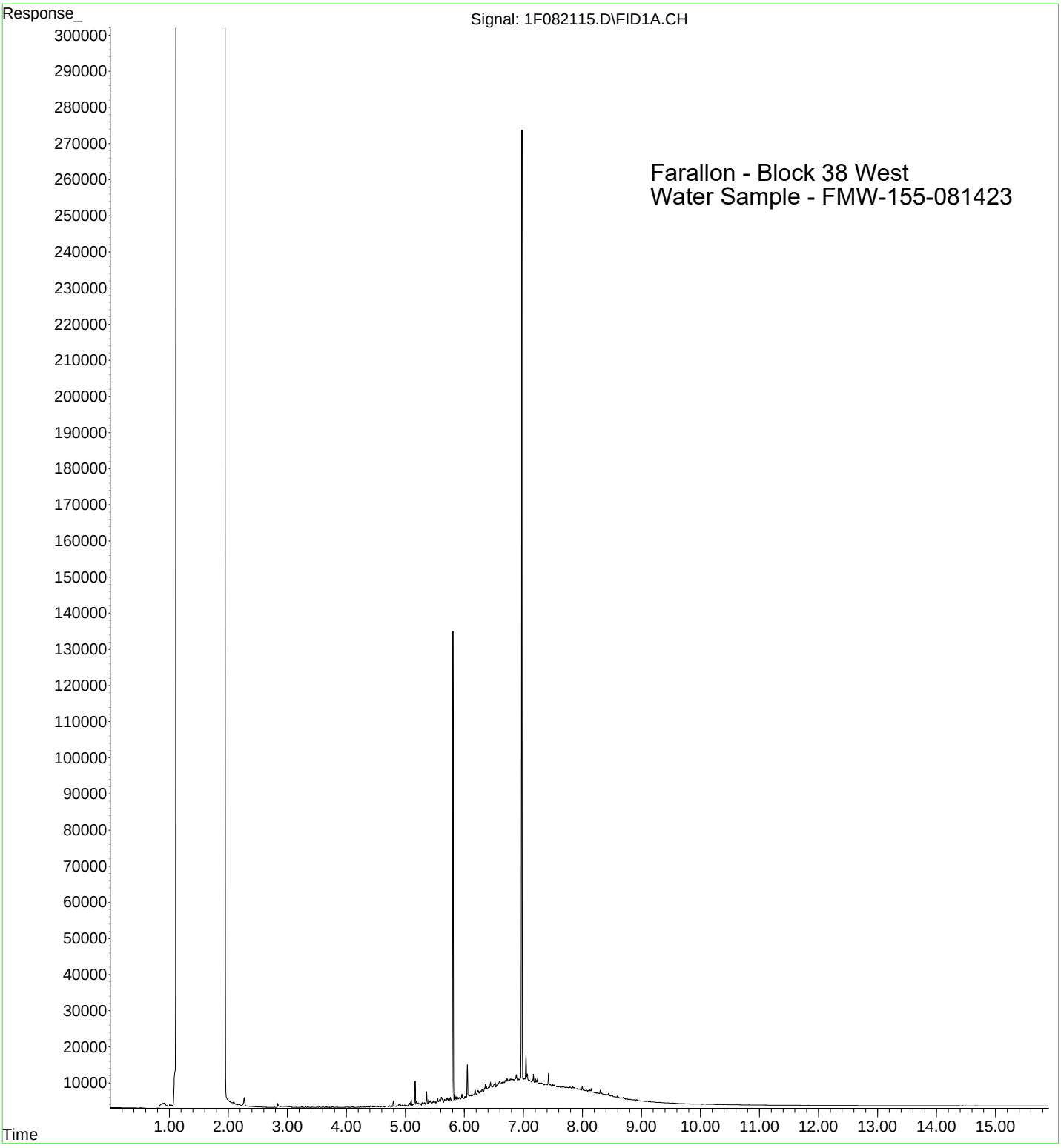
File   :C:\gcms\1\data\3H21052\1F082113.D
Operator   : BLL
Acquired   : 21 Aug 2023 23:44   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-01
Misc Info :
Vial Number: 10



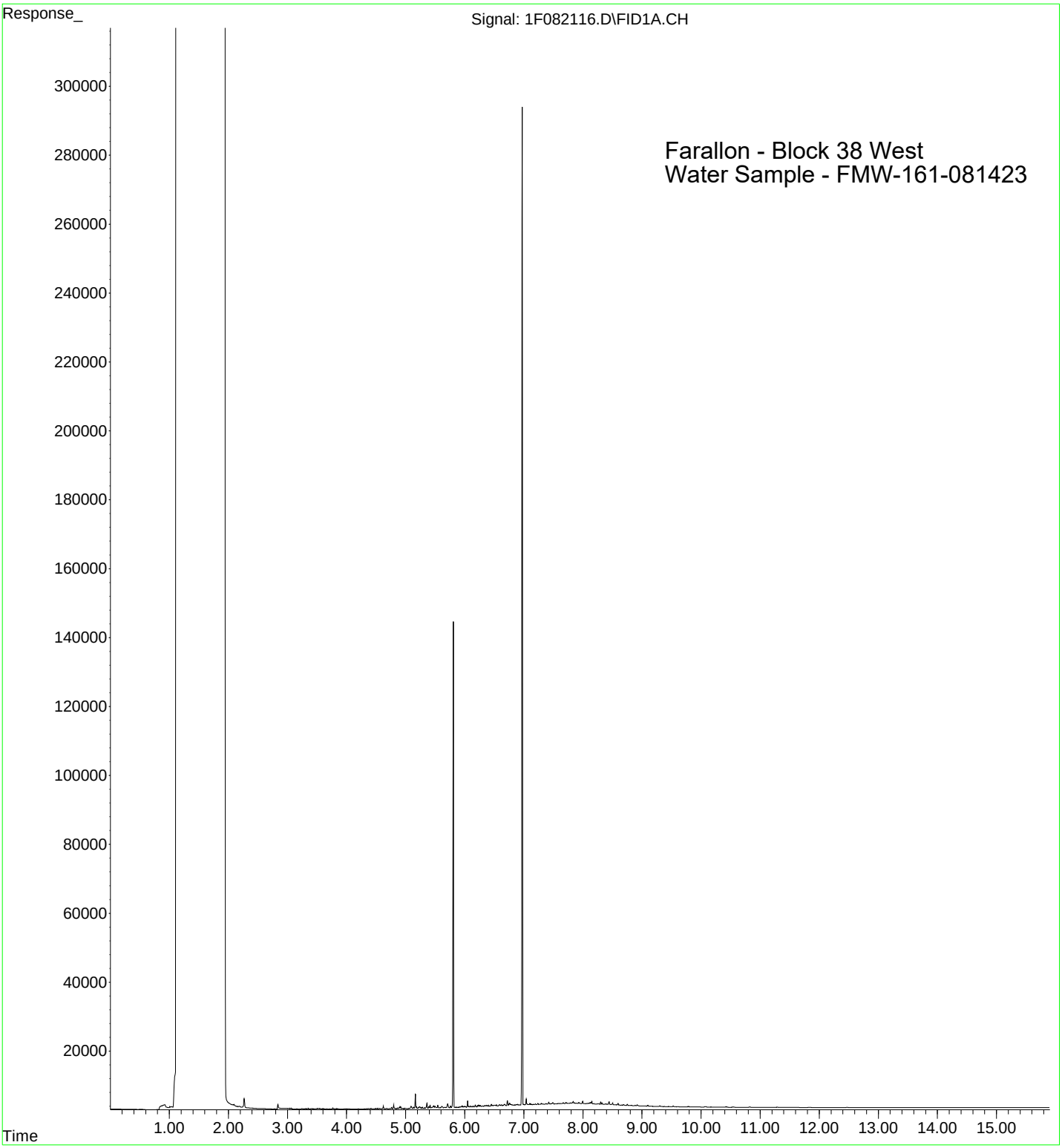
File   :C:\gcms\1\data\3H21052\1F082114.D
Operator   : BLL
Acquired   : 22 Aug 2023 00:07   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-02
Misc Info :
Vial Number: 11



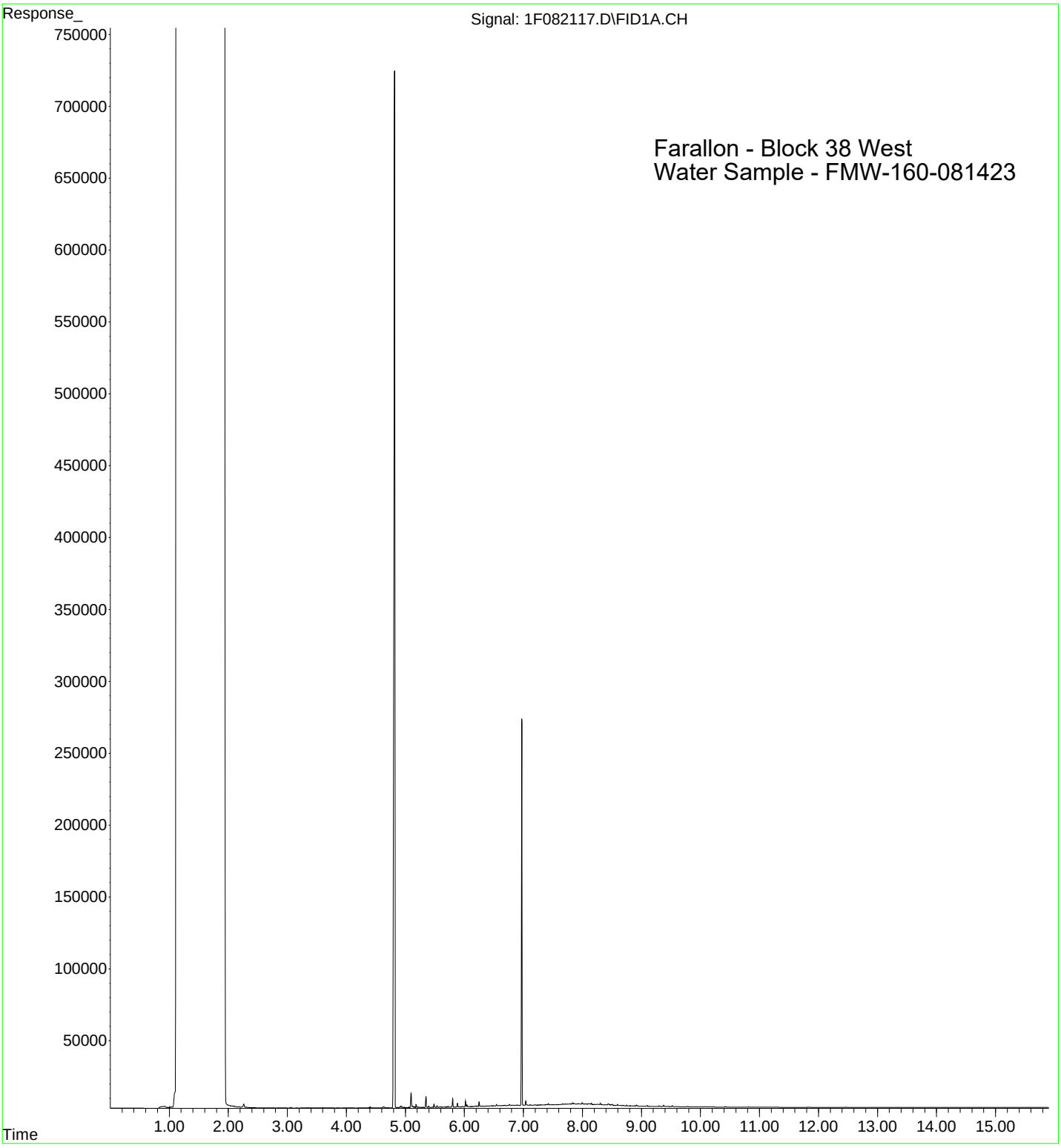
File :C:\gcms\1\data\3H21052\1F082115.D
Operator : BLL
Acquired : 22 Aug 2023 00:31 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A3H1087-03
Misc Info :
Vial Number: 12



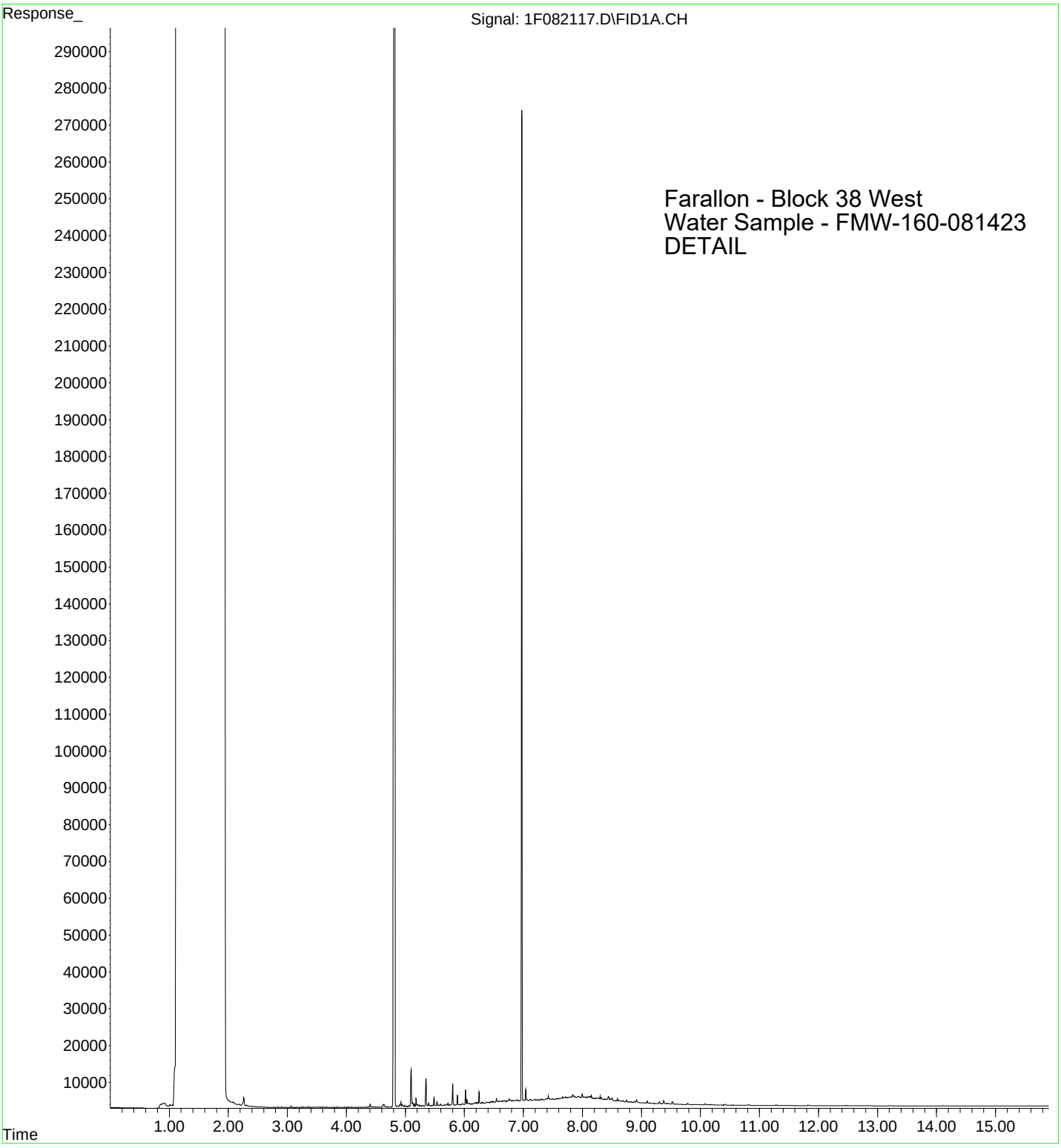
File   :C:\gcms\1\data\3H21052\1F082116.D
Operator   : BLL
Acquired   : 22 Aug 2023 00:54   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-04
Misc Info :
Vial Number: 13



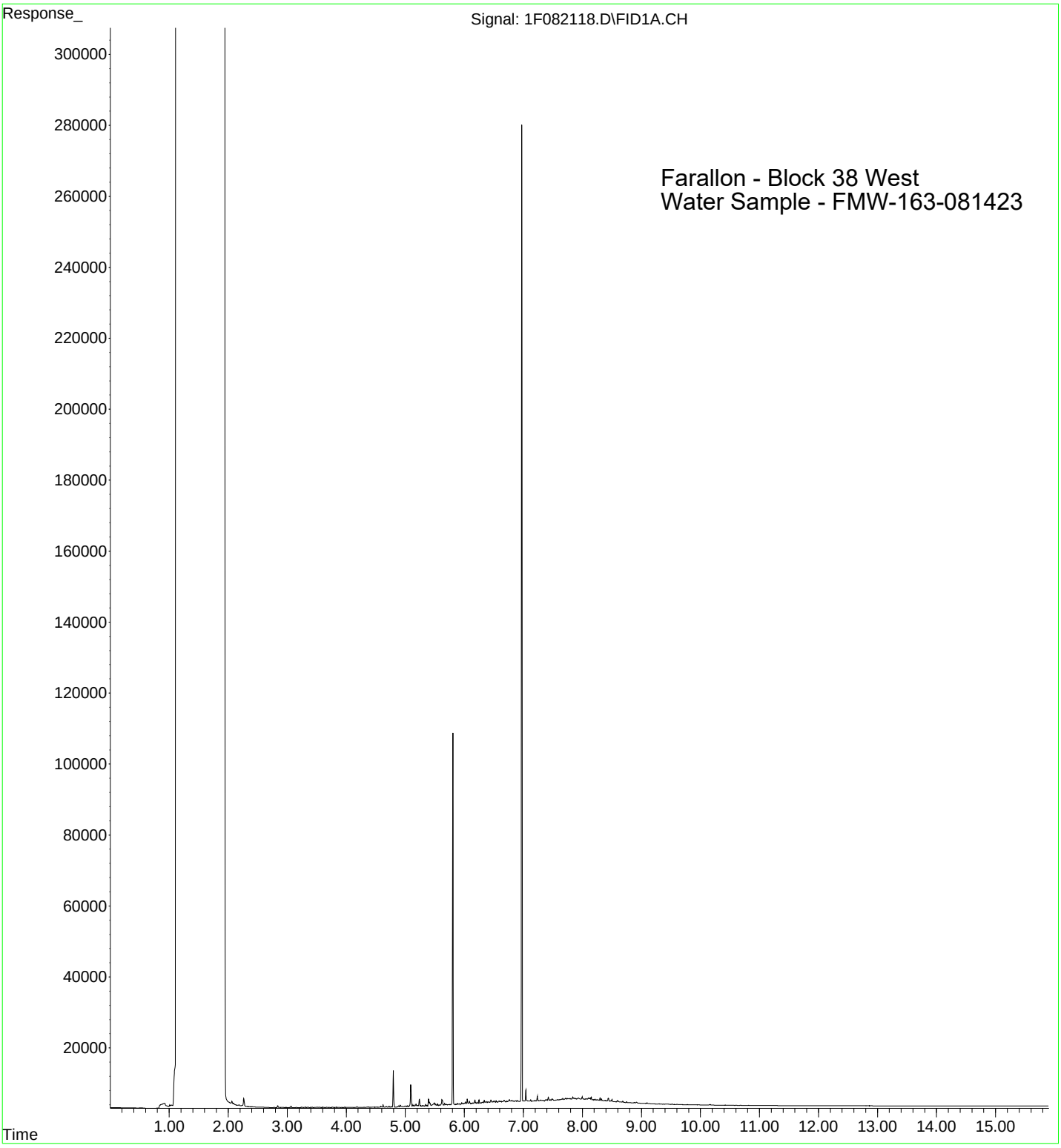
File   :C:\gcms\1\data\3H21052\1F082117.D
Operator   : BLL
Acquired   : 22 Aug 2023   1:17   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-05
Misc Info :
Vial Number: 14



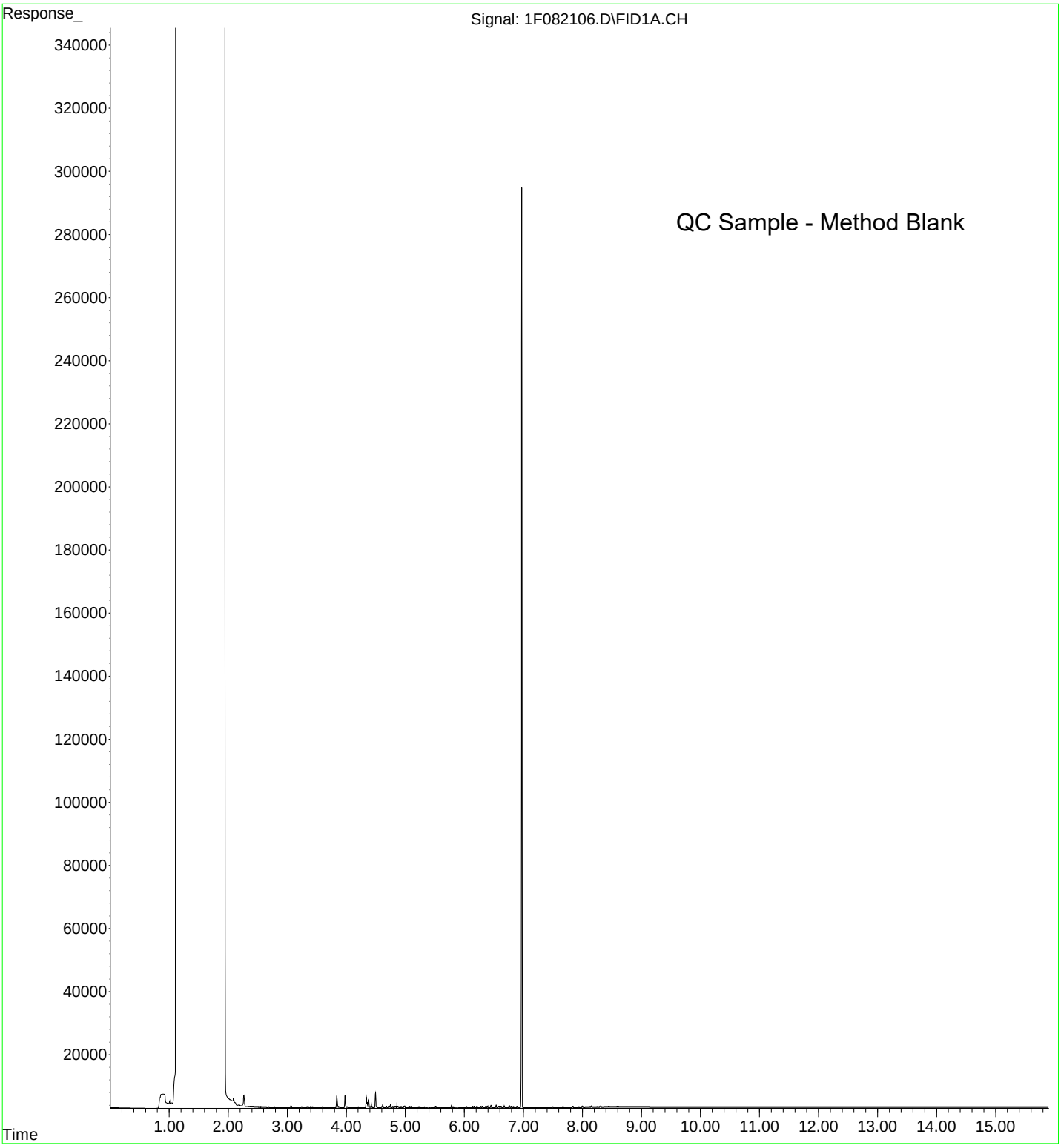
File   :C:\gcms\1\data\3H21052\1F082117.D
Operator   : BLL
Acquired   : 22 Aug 2023   1:17   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-05
Misc Info :
Vial Number: 14



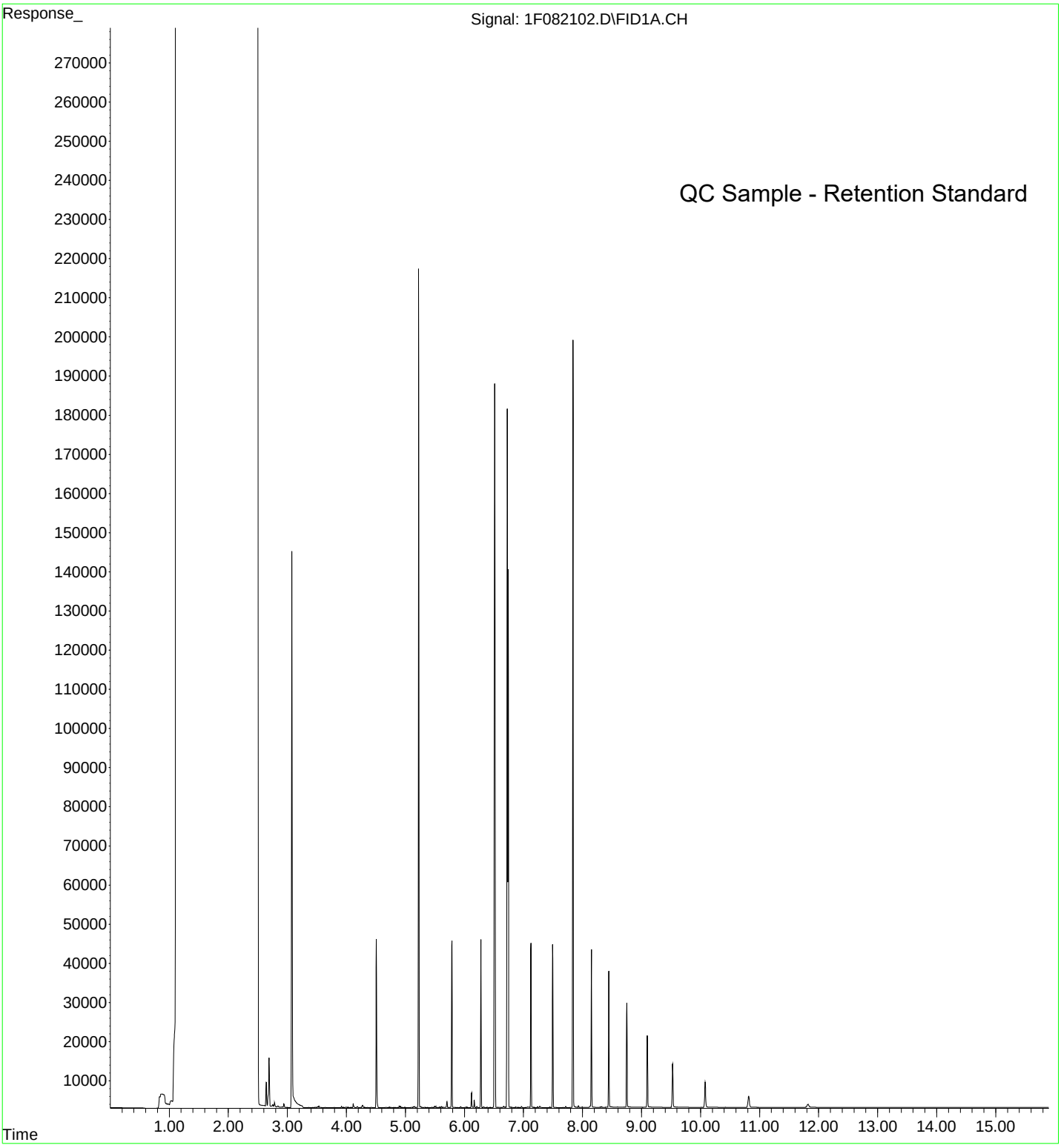
File :C:\gcms\1\data\3H21052\1F082118.D
Operator : BLL
Acquired : 22 Aug 2023 1:41 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A3H1087-06
Misc Info :
Vial Number: 15



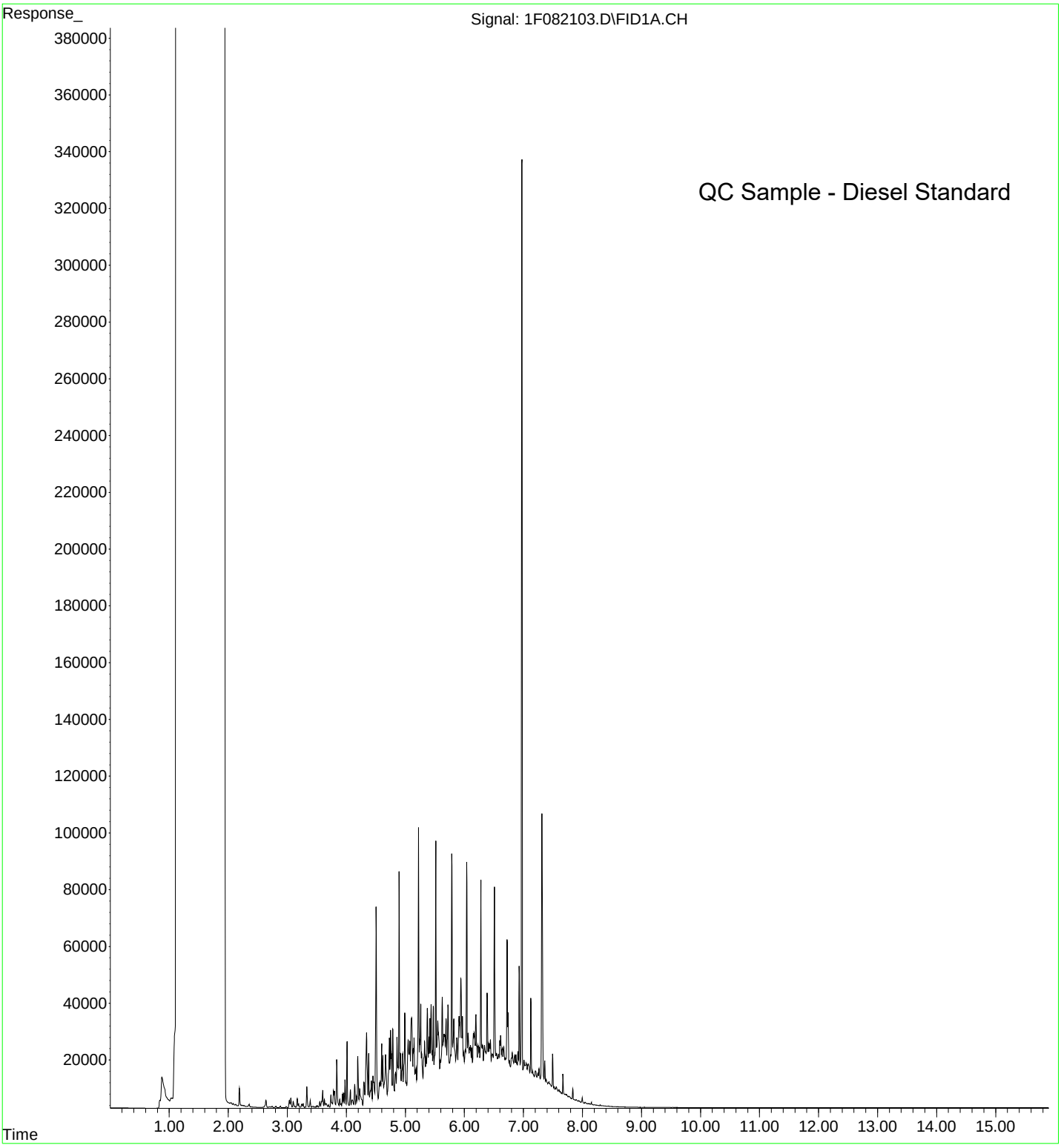
File :C:\gcms\1\data\3H21052\1F082106.D
Operator : BLL
Acquired : 21 Aug 2023 20:59 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 23H0758-BLK1
Misc Info :
Vial Number: 3



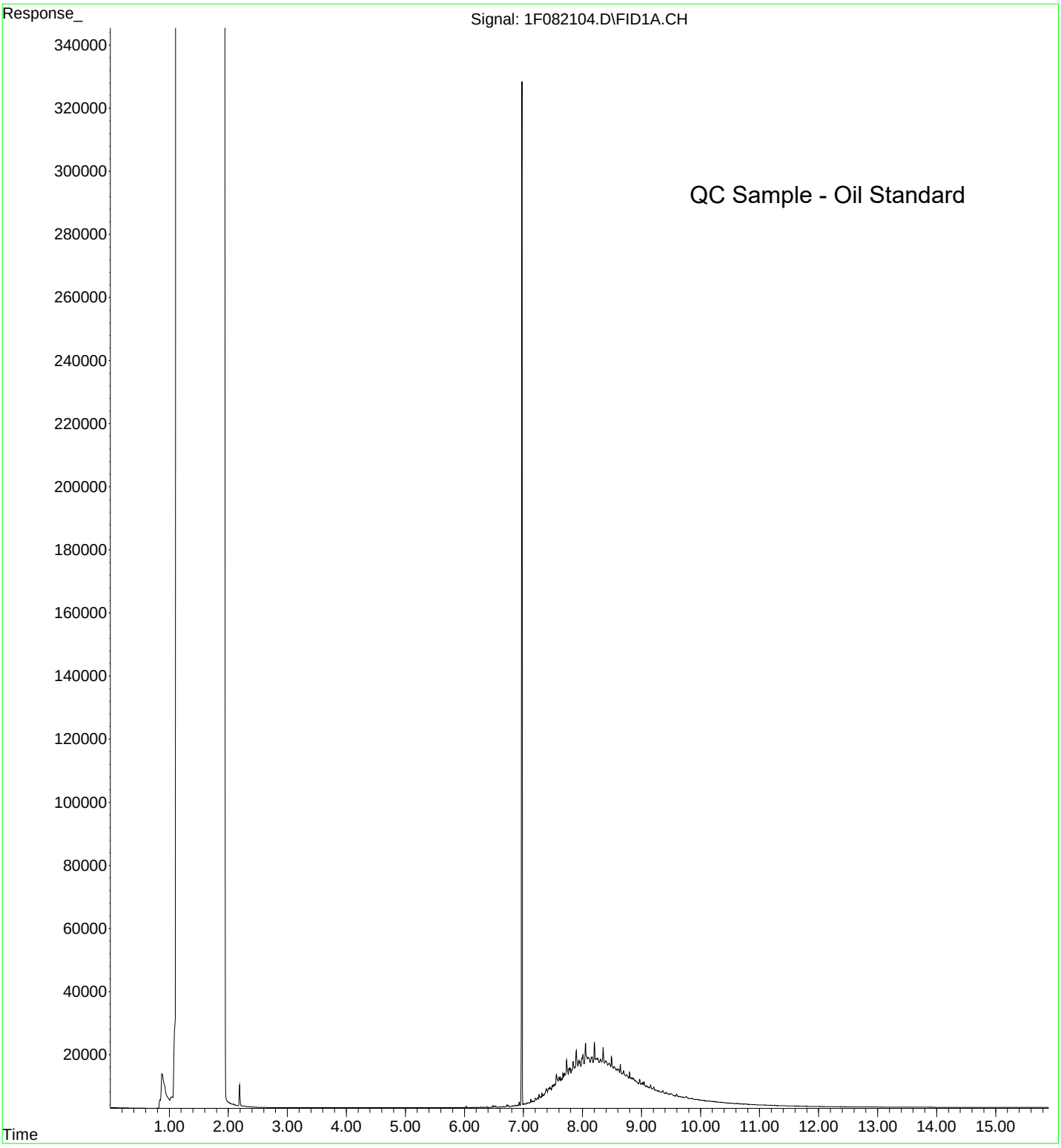
File   :C:\gcms\1\data\3H21052\1F082102.D
Operator   : BLL
Acquired   : 21 Aug 2023 16:17   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3H21052-RES1
Misc Info :
Vial Number: 94



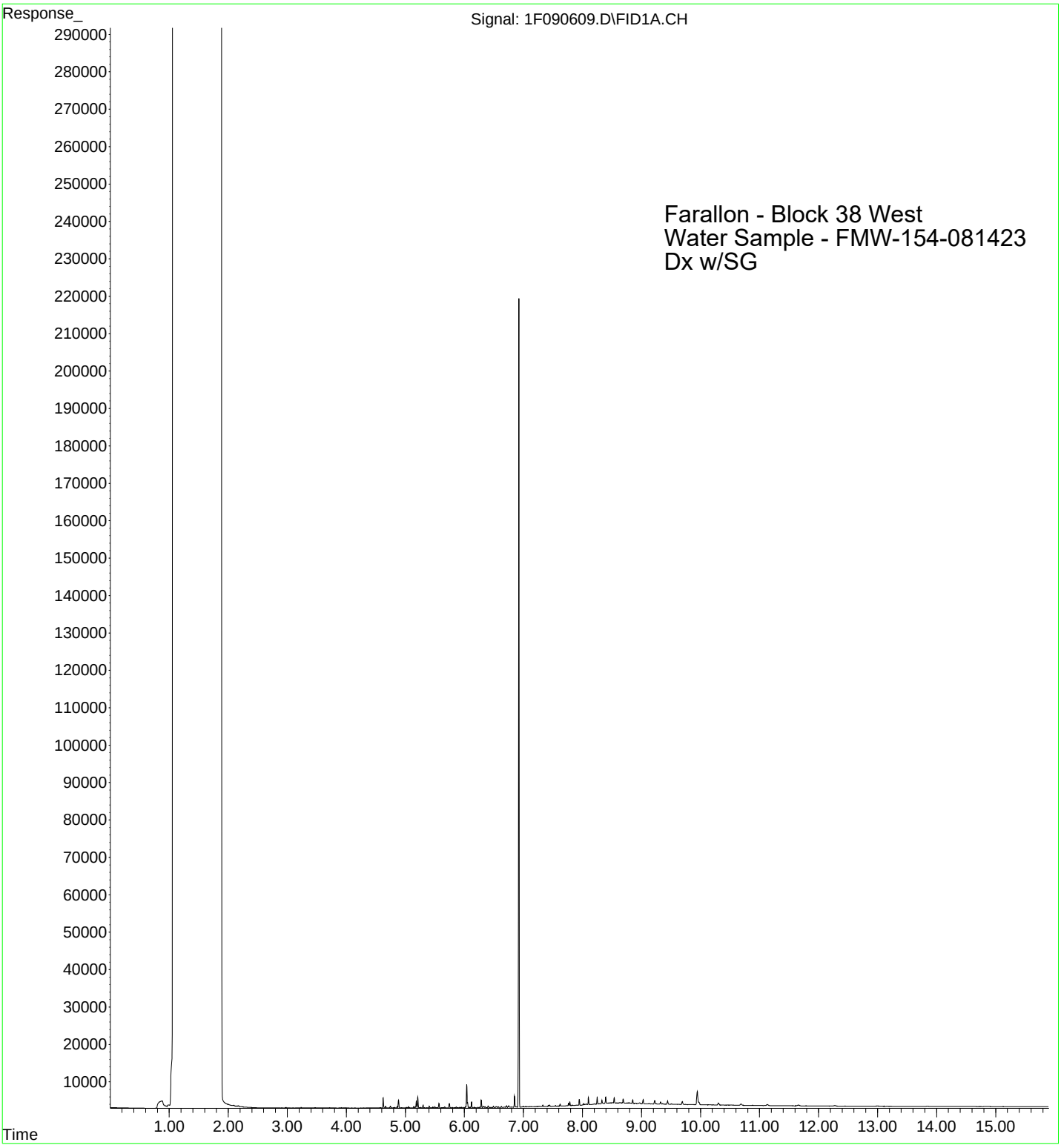
File :C:\gcms\1\data\3H21052\1F082103.D
Operator : BLL
Acquired : 21 Aug 2023 16:41 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 3H21052-CCV1
Misc Info :
Vial Number: 1



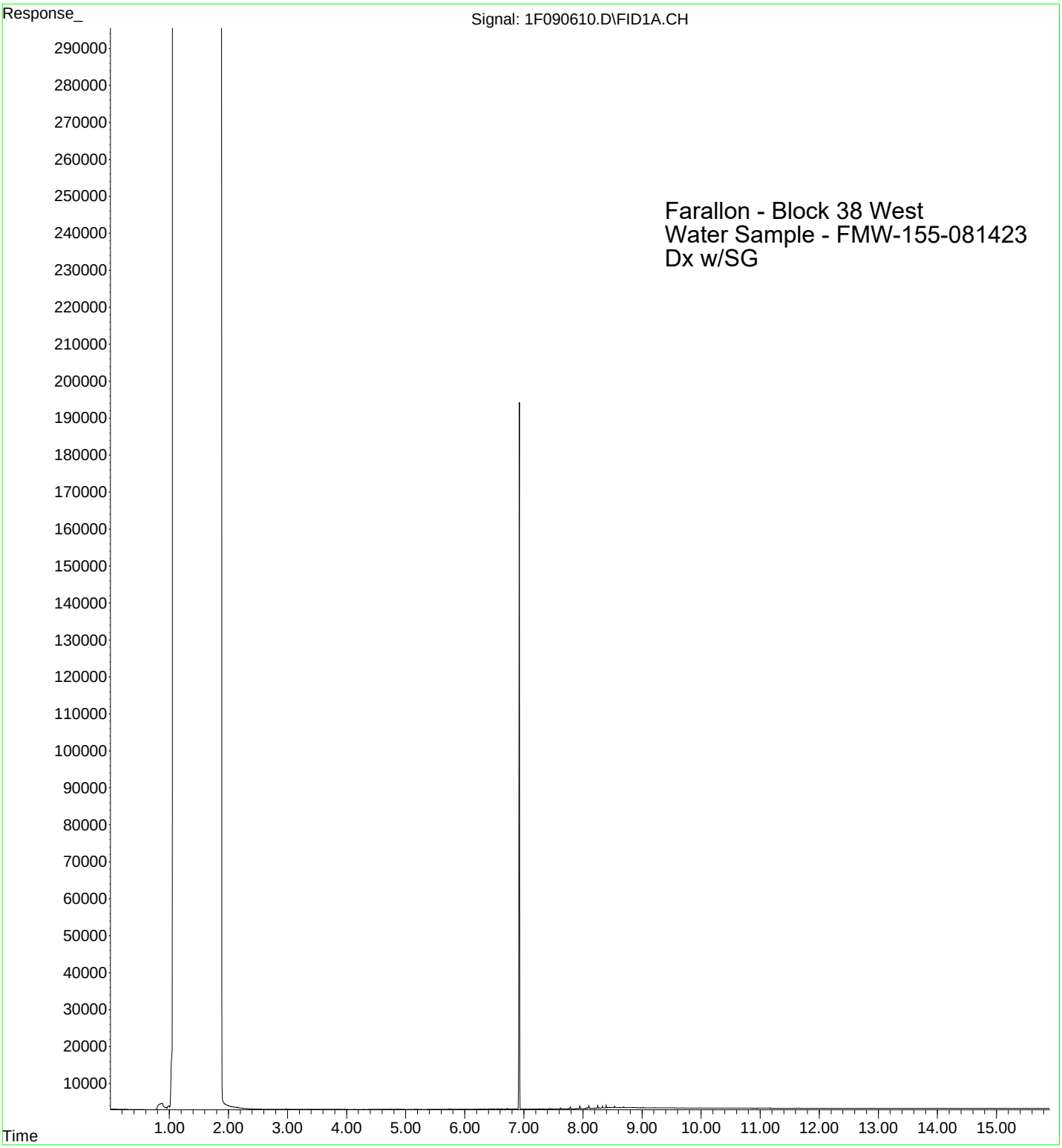
File   :C:\gcms\1\data\3H21052\1F082104.D
Operator   : BLL
Acquired   : 21 Aug 2023 17:05   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3H21052-CCV2
Misc Info :
Vial Number: 2



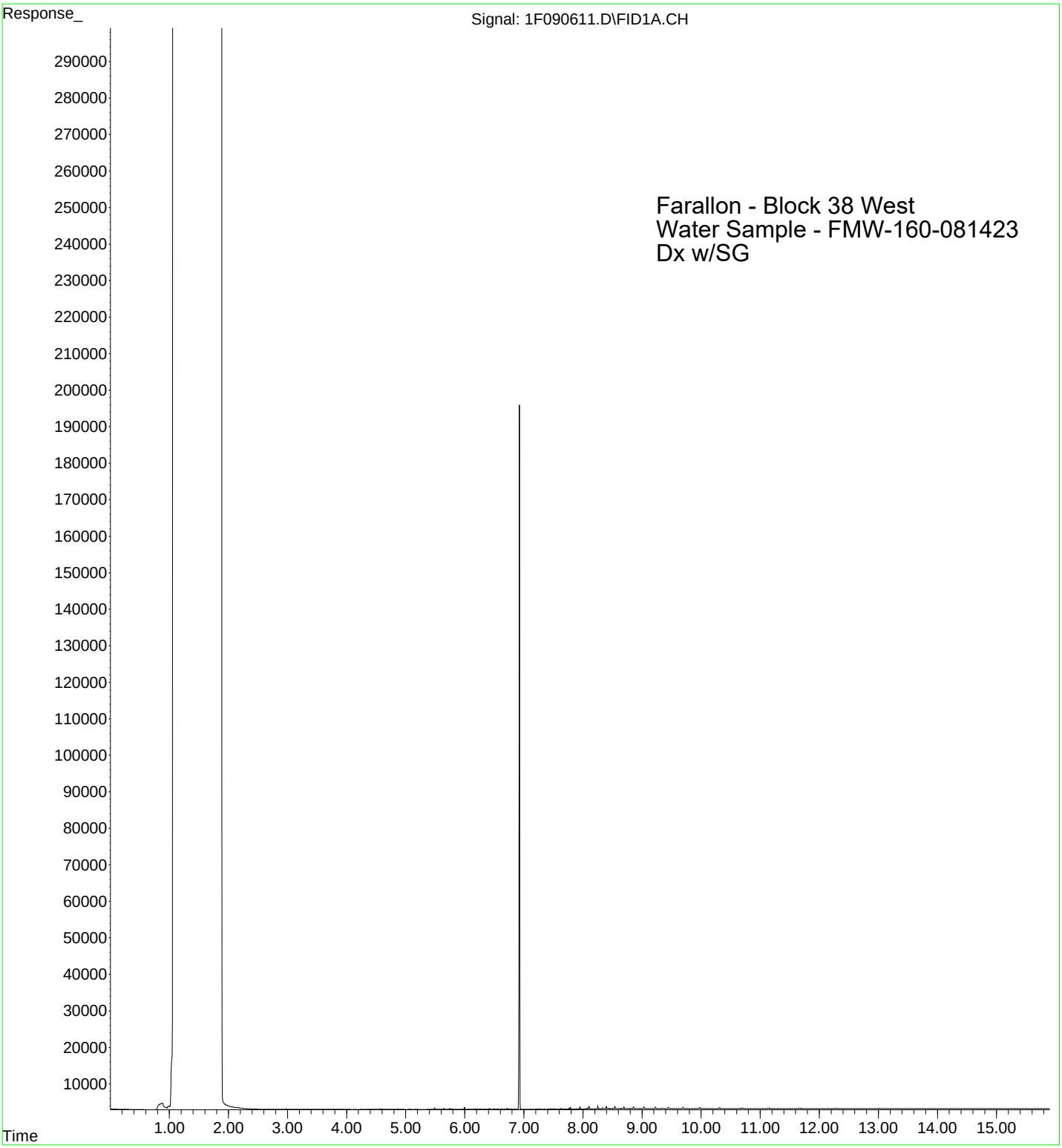
File :C:\gcms\1\data\3I06064\1F090609.D
Operator : BLL
Acquired : 06 Sep 2023 22:30 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A3H1087-01
Misc Info :
Vial Number: 6



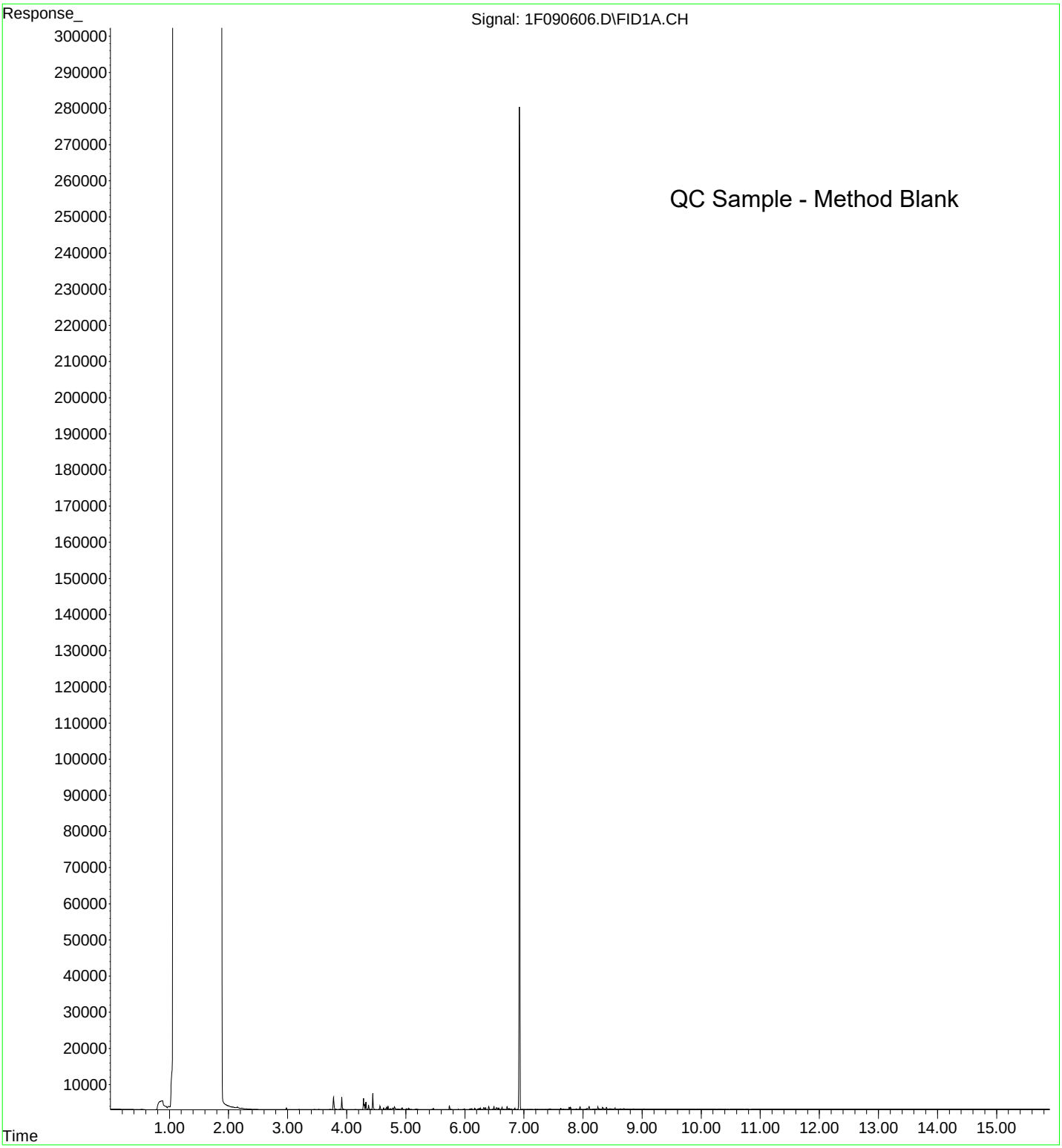
File   :C:\gcms\1\data\3I06064\1F090610.D
Operator   : BLL
Acquired   : 06 Sep 2023 22:54   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-03
Misc Info :
Vial Number: 7



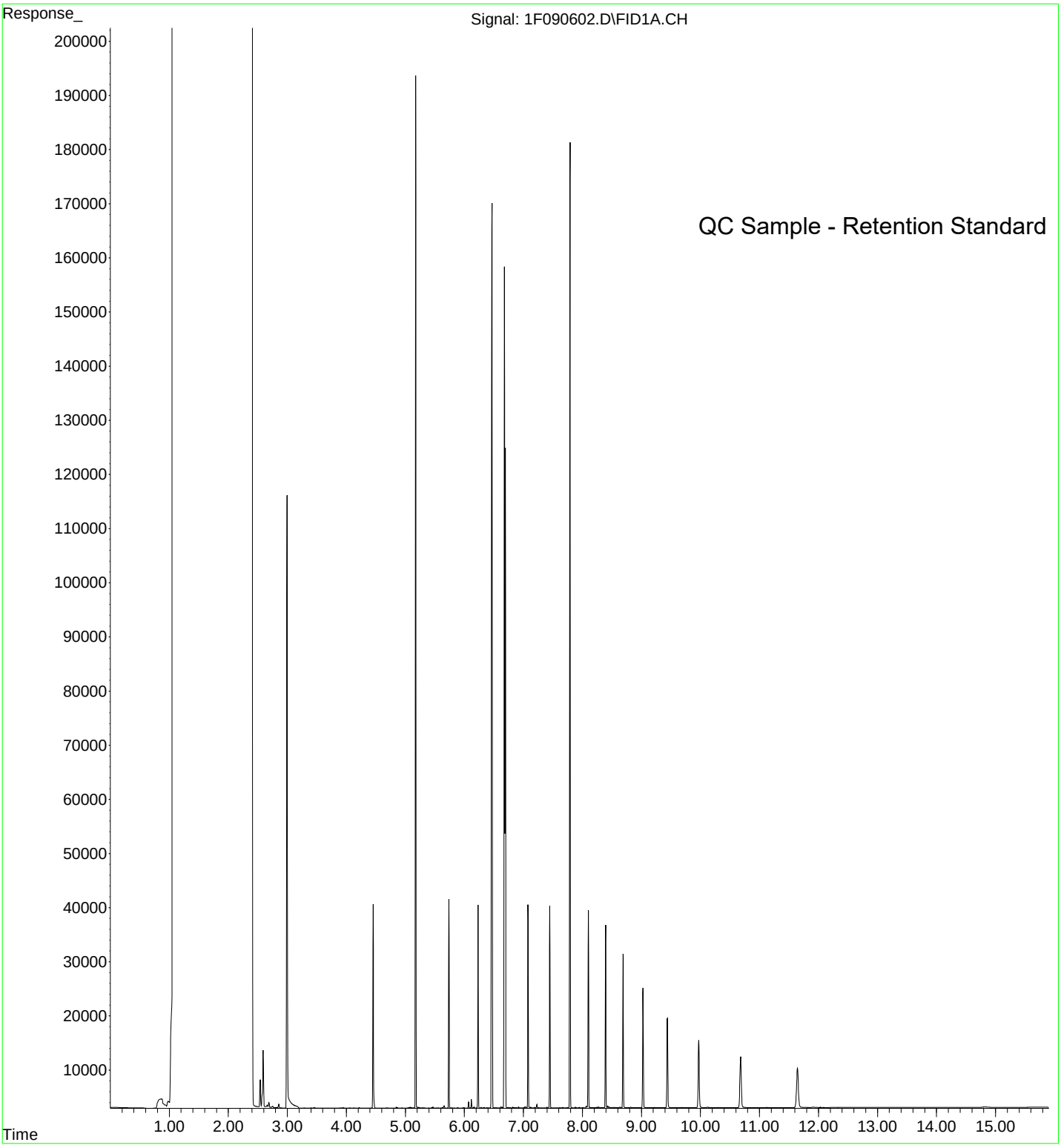
File   :C:\gcms\1\data\3I06064\1F090611.D
Operator   : BLL
Acquired   : 06 Sep 2023 23:17   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3H1087-05
Misc Info :
Vial Number: 8



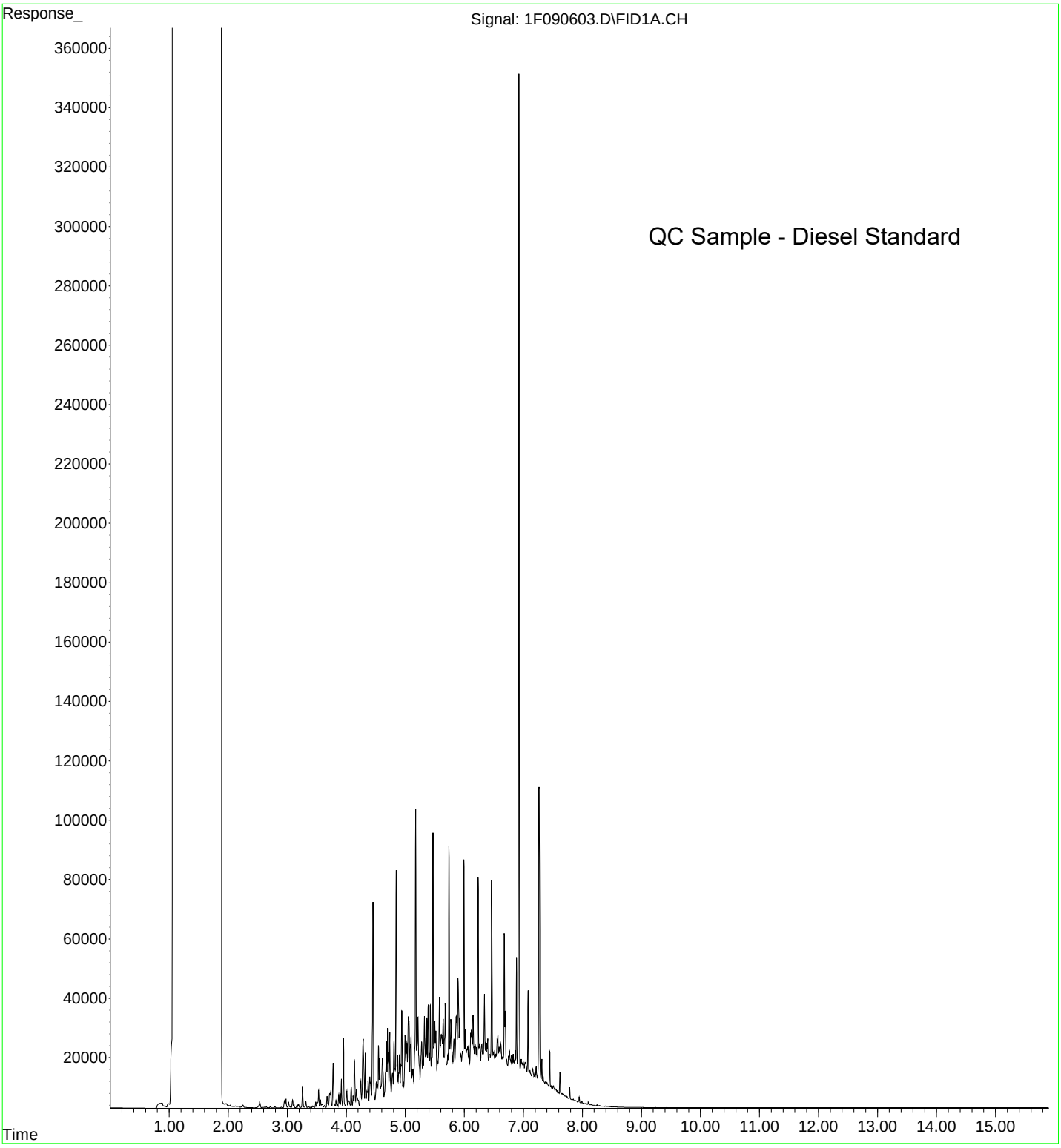
File   :C:\gcms\1\data\3I06064\1F090606.D
Operator   : BLL
Acquired   : 06 Sep 2023 21:20   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 23I0147-BLK1
Misc Info :
Vial Number: 3



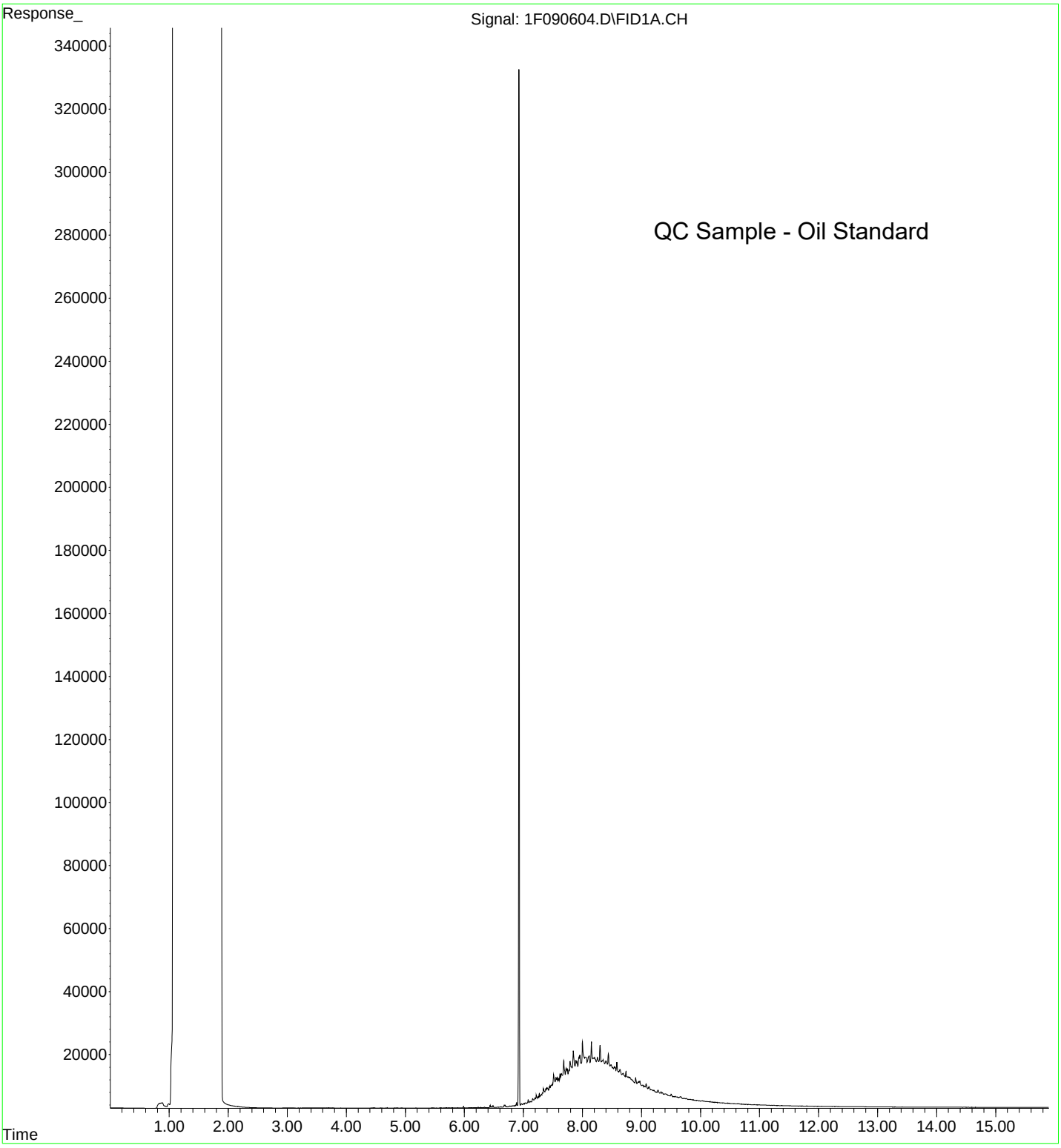
File   :C:\gcms\1\data\3I06064\1F090602.D
Operator   : BLL
Acquired   : 06 Sep 2023 15:23   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3I06064-RES1
Misc Info :
Vial Number: 94



File   :C:\gcms\1\data\3I06064\1F090603.D
Operator   : BLL
Acquired   : 06 Sep 2023 15:46   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3I06064-CCV1
Misc Info :
Vial Number: 1



File   :C:\gcms\1\data\3I06064\1F090604.D
Operator   : BLL
Acquired   : 06 Sep 2023 16:10   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3I06064-CCV2
Misc Info :
Vial Number: 2



Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Friday, December 22, 2023

Greg Peters
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3H1155 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3H1155, which was received by the laboratory on 8/17/2023 at 10:24:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.					
(See Cooler Receipt Form for details)					
Cooler #1	2.9	degC	Cooler #2	3.9	degC
Cooler #3	0.4	degC	Cooler #4	1.2	degC
Cooler #5	3.6	degC	Cooler #6	2.8	degC
Cooler #7	0.9	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

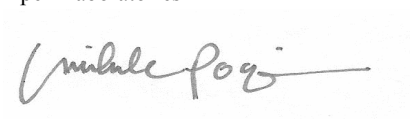
Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OW-1-081523	A3H1155-01	Water	08/15/23 11:41	08/17/23 10:24
FMW-164-081523	A3H1155-02	Water	08/15/23 10:18	08/17/23 10:24
OW-2-081523	A3H1155-03	Water	08/15/23 08:23	08/17/23 10:24
FMW-150-081523	A3H1155-04	Water	08/15/23 15:45	08/17/23 10:24
FMW-153-081523	A3H1155-05	Water	08/15/23 14:45	08/17/23 10:24
FMW-157-081523	A3H1155-06	Water	08/15/23 13:09	08/17/23 10:24
FMW-159-081523	A3H1155-07	Water	08/15/23 10:30	08/17/23 10:24
OW-3-081523	A3H1155-08	Water	08/15/23 12:10	08/17/23 10:24
FMW-162-081523	A3H1155-09	Water	08/15/23 13:10	08/17/23 10:24
FMW-151-081523	A3H1155-10	Water	08/15/23 14:50	08/17/23 10:24
FMW-152-081523	A3H1155-11	Water	08/15/23 16:00	08/17/23 10:24
FMW-158-081523	A3H1155-12	Water	08/15/23 09:10	08/17/23 10:24

Apex Laboratories



Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Greg Peters	A3H1155 - 12 22 23 1825

ANALYTICAL CASE NARRATIVE

A3H1155	Apex Laboratories

Amended Report Revision 2:

Reporting to Reporting Limits (RLs)-

This report supersedes all previous reports.

Per client request, this report has been amended to report all NWTPH-Dx data to the RLs.

Michele Poquiz
Forensics Project Manager
12/22/2023

Amended Report Revision 1:

Sample Identification Change-

This report supersedes all previous reports.

The following sample ID has been edited from the original chain of custody:

- Sample FMW-154-081523 is now reported as FMW-153-081523 (Apex ID: A3H1155-05).

Michele Poquiz
Forensics Project Manager
8/31/23

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-1-081523 (A3H1155-01)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**385**	---	76.9	ug/L	1	08/23/23 21:52	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/23/23 21:52	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 94 %*	*Limits: 50-150 %*		*1*	*08/23/23 21:52*	*NWTPH-Dx LL*	
FMW-164-081523 (A3H1155-02)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	ND	---	76.9	ug/L	1	08/23/23 22:12	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	08/23/23 22:12	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 84 %*	*Limits: 50-150 %*		*1*	*08/23/23 22:12*	*NWTPH-Dx LL*	
OW-2-081523 (A3H1155-03)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	ND	---	78.4	ug/L	1	08/23/23 22:33	NWTPH-Dx LL	
Oil	ND	---	157	ug/L	1	08/23/23 22:33	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*	*Limits: 50-150 %*		*1*	*08/23/23 22:33*	*NWTPH-Dx LL*	
FMW-150-081523 (A3H1155-04)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	ND	---	76.9	ug/L	1	08/23/23 22:54	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	08/23/23 22:54	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*1*	*08/23/23 22:54*	*NWTPH-Dx LL*	
FMW-153-081523 (A3H1155-05)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	ND	---	76.2	ug/L	1	08/23/23 23:15	NWTPH-Dx LL	
Oil	ND	---	152	ug/L	1	08/23/23 23:15	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*1*	*08/23/23 23:15*	*NWTPH-Dx LL*	
FMW-157-081523 (A3H1155-06)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**173**	---	77.7	ug/L	1	08/24/23 00:58	NWTPH-Dx LL	**F-11**
Oil	ND	---	155	ug/L	1	08/24/23 00:58	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 92 %*	*Limits: 50-150 %*		*1*	*08/24/23 00:58*	*NWTPH-Dx LL*	
FMW-159-081523 (A3H1155-07)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**109**	---	76.9	ug/L	1	08/24/23 01:18	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/24/23 01:18	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 92 %*	*Limits: 50-150 %*		*1*	*08/24/23 01:18*	*NWTPH-Dx LL*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-3-081523 (A3H1155-08)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	ND	---	76.9	ug/L	1	08/24/23 01:39	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	08/24/23 01:39	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*	*1*	*08/24/23 01:39*	*NWTPH-Dx LL*	
FMW-162-081523 (A3H1155-09)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**103**	---	76.9	ug/L	1	08/24/23 01:59	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/24/23 01:59	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*	*1*	*08/24/23 01:59*	*NWTPH-Dx LL*	
FMW-151-081523 (A3H1155-10)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**222**	---	75.5	ug/L	1	08/24/23 02:20	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	08/24/23 02:20	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*08/24/23 02:20*	*NWTPH-Dx LL*	
FMW-152-081523 (A3H1155-11)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**216**	---	76.9	ug/L	1	08/24/23 02:41	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	08/24/23 02:41	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 95 %*		*Limits: 50-150 %*	*1*	*08/24/23 02:41*	*NWTPH-Dx LL*	
FMW-158-081523 (A3H1155-12)				**Matrix: Water**		**Batch: 23H0834**		
Diesel	**256**	---	75.5	ug/L	1	08/24/23 03:01	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	08/24/23 03:01	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*08/24/23 03:01*	*NWTPH-Dx LL*	

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-081523 (A3H1155-12)				**Matrix: Water**		**Batch: 23H0703**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	08/18/23 20:06	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*	*1*	*08/18/23 20:06*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*110 %*	*50-150 %*	*1*	*08/18/23 20:06*	*NWTPH-Gx (MS)*	

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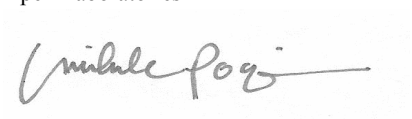

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-081523 (A3H1155-12)				**Matrix: Water**		**Batch: 23H0703**		
Benzene	ND	0.100	0.200	ug/L	1	08/18/23 20:06	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	08/18/23 20:06	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	08/18/23 20:06	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	08/18/23 20:06	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*08/18/23 20:06*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*08/18/23 20:06*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*08/18/23 20:06*	*EPA 8260D*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-1-081523 (A3H1155-01)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	08/22/23 19:47	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	08/22/23 19:47	EPA 8270E SIM	
Naphthalene	ND	0.0404	0.0808	ug/L	1	08/22/23 19:47	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*66 %*	*Limits: 44-120 %*	*1*	*08/22/23 19:47*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*83 %*	*50-134 %*	*1*	*08/22/23 19:47*	*EPA 8270E SIM*	
FMW-164-081523 (A3H1155-02)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 20:12	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 20:12	EPA 8270E SIM	
Naphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 20:12	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*52 %*	*Limits: 44-120 %*	*1*	*08/22/23 20:12*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*89 %*	*50-134 %*	*1*	*08/22/23 20:12*	*EPA 8270E SIM*	
OW-2-081523 (A3H1155-03)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	08/22/23 20:37	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0377	0.0755	ug/L	1	08/22/23 20:37	EPA 8270E SIM	
Naphthalene	ND	0.0377	0.0755	ug/L	1	08/22/23 20:37	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*59 %*	*Limits: 44-120 %*	*1*	*08/22/23 20:37*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*78 %*	*50-134 %*	*1*	*08/22/23 20:37*	*EPA 8270E SIM*	
FMW-150-081523 (A3H1155-04)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 02:00	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 02:00	EPA 8270E SIM	
Naphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 02:00	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*54 %*	*Limits: 44-120 %*	*1*	*08/24/23 02:00*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*74 %*	*50-134 %*	*1*	*08/24/23 02:00*	*EPA 8270E SIM*	
FMW-153-081523 (A3H1155-05)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0388	0.0777	ug/L	1	08/24/23 02:25	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0388	0.0777	ug/L	1	08/24/23 02:25	EPA 8270E SIM	
Naphthalene	ND	0.0388	0.0777	ug/L	1	08/24/23 02:25	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*68 %*	*Limits: 44-120 %*	*1*	*08/24/23 02:25*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*64 %*	*50-134 %*	*1*	*08/24/23 02:25*	*EPA 8270E SIM*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-157-081523 (A3H1155-06)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0408	0.0816	ug/L	1	08/24/23 02:50	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0408	0.0816	ug/L	1	08/24/23 02:50	EPA 8270E SIM	
Naphthalene	ND	0.0408	0.0816	ug/L	1	08/24/23 02:50	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*73 %*	*Limits: 44-120 %*	*1*	*08/24/23 02:50*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*72 %*	*50-134 %*	*1*	*08/24/23 02:50*	*EPA 8270E SIM*	
FMW-159-081523 (A3H1155-07)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 03:16	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 03:16	EPA 8270E SIM	
Naphthalene	ND	0.0385	0.0769	ug/L	1	08/24/23 03:16	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*54 %*	*Limits: 44-120 %*	*1*	*08/24/23 03:16*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*62 %*	*50-134 %*	*1*	*08/24/23 03:16*	*EPA 8270E SIM*	
OW-3-081523 (A3H1155-08)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	08/24/23 03:41	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0404	0.0808	ug/L	1	08/24/23 03:41	EPA 8270E SIM	
Naphthalene	ND	0.0404	0.0808	ug/L	1	08/24/23 03:41	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*08/24/23 03:41*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*73 %*	*50-134 %*	*1*	*08/24/23 03:41*	*EPA 8270E SIM*	
FMW-162-081523 (A3H1155-09)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:00	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:00	EPA 8270E SIM	
Naphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:00	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*59 %*	*Limits: 44-120 %*	*1*	*08/22/23 13:00*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*82 %*	*50-134 %*	*1*	*08/22/23 13:00*	*EPA 8270E SIM*	
FMW-151-081523 (A3H1155-10)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:26	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:26	EPA 8270E SIM	
Naphthalene	ND	0.0385	0.0769	ug/L	1	08/22/23 13:26	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*56 %*	*Limits: 44-120 %*	*1*	*08/22/23 13:26*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*85 %*	*50-134 %*	*1*	*08/22/23 13:26*	*EPA 8270E SIM*	

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AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-152-081523 (A3H1155-11)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 13:51	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 13:51	EPA 8270E SIM	
Naphthalene	ND	0.0400	0.0800	ug/L	1	08/22/23 13:51	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*84 %*	*Limits: 44-120 %*	*1*	*08/22/23 13:51*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*92 %*	*50-134 %*	*1*	*08/22/23 13:51*	*EPA 8270E SIM*	
FMW-158-081523 (A3H1155-12)				**Matrix: Water**		**Batch: 23H0786**		
1-Methylnaphthalene	**0.0902**	0.0408	0.0816	ug/L	1	08/22/23 14:17	EPA 8270E SIM	
2-Methylnaphthalene	ND	0.0408	0.0816	ug/L	1	08/22/23 14:17	EPA 8270E SIM	
Naphthalene	**0.108**	0.0408	0.0816	ug/L	1	08/22/23 14:17	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*80 %*	*Limits: 44-120 %*	*1*	*08/22/23 14:17*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*87 %*	*50-134 %*	*1*	*08/22/23 14:17*	*EPA 8270E SIM*	

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Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0834 - EPA 3510C (Fuels/Acid Ext.)									Water			
Blank (23H0834-BLK1)			Prepared: 08/23/23 06:00		Analyzed: 08/23/23 20:29							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 90 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (23H0834-BS1)			Prepared: 08/23/23 06:00		Analyzed: 08/23/23 20:50							
NWTPH-Dx LL												
Diesel	419	---	80.0	ug/L	1	500	---	84	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 98 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS Dup (23H0834-BSD1)			Prepared: 08/23/23 06:00		Analyzed: 08/23/23 21:10							**Q-19**
NWTPH-Dx LL												
Diesel	414	---	80.0	ug/L	1	500	---	83	36-132%	1	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 98 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0703 - EPA 5030C									Water			
Blank (23H0703-BLK1)			Prepared: 08/18/23 11:00		Analyzed: 08/18/23 14:40							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*108 %*		*50-150 %*				*"*			
LCS (23H0703-BS2)			Prepared: 08/18/23 11:00		Analyzed: 08/18/23 14:13							
NWTPH-Gx (MS)												
Gasoline Range Organics	524	50.0	100	ug/L	1	500	---	105	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*106 %*		*50-150 %*				*"*			
Duplicate (23H0703-DUP1)			Prepared: 08/18/23 11:00		Analyzed: 08/18/23 21:54							
QC Source Sample: Non-SDG (A3H1184-01)												
Gasoline Range Organics	**52300**	5000	10000	ug/L	100	---	52600	---	---	0.4	30%	F-12
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*112 %*		*50-150 %*				*"*			

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0703 - EPA 5030C												**Water**
Blank (23H0703-BLK1)				Prepared: 08/18/23 11:00 Analyzed: 08/18/23 14:40								
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*			*"*				
LCS (23H0703-BS1)				Prepared: 08/18/23 11:00 Analyzed: 08/18/23 13:46								
EPA 8260D												
Benzene	19.8	0.100	0.200	ug/L	1	20.0	---	99	80-120%	---	---	
Toluene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Ethylbenzene	19.1	0.250	0.500	ug/L	1	20.0	---	95	80-120%	---	---	
Xylenes, total	57.3	0.750	1.50	ug/L	1	60.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*			*"*				
Duplicate (23H0703-DUP1)				Prepared: 08/18/23 11:00 Analyzed: 08/18/23 21:54								
QC Source Sample: Non-SDG (A3H1184-01)												
Benzene	ND	10.0	20.0	ug/L	100	---	ND	---	---	---	30%	
Toluene	ND	50.0	100	ug/L	100	---	ND	---	---	---	30%	
Ethylbenzene	ND	25.0	50.0	ug/L	100	---	ND	---	---	---	30%	
Xylenes, total	ND	75.0	150	ug/L	100	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (23H0703-MS1)				Prepared: 08/18/23 11:00 Analyzed: 08/18/23 20:33								
QC Source Sample: FMW-158-081523 (A3H1155-12)												
EPA 8260D												
Benzene	21.0	0.100	0.200	ug/L	1	20.0	ND	105	79-120%	---	---	

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0703 - EPA 5030C							**Water**					
Matrix Spike (23H0703-MS1)			Prepared: 08/18/23 11:00 Analyzed: 08/18/23 20:33									
QC Source Sample: FMW-158-081523 (A3H1155-12)												
Toluene	19.5	0.500	1.00	ug/L	1	20.0	ND	98	80-121%	---	---	
Ethylbenzene	19.2	0.250	0.500	ug/L	1	20.0	ND	96	79-121%	---	---	
Xylenes, total	58.3	0.750	1.50	ug/L	1	60.0	ND	97	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*				*"*			

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Tigard, OR 97223
503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0786 - EPA 3510C (Acid Extraction)								**Water**				
Blank (23H0786-BLK1)			Prepared: 08/22/23 06:25		Analyzed: 08/22/23 11:44							
EPA 8270E SIM												
Acenaphthene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 72 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*92 %*		*50-134 %*			*"*				
LCS (23H0786-BS1)			Prepared: 08/22/23 06:25		Analyzed: 08/22/23 12:10							
EPA 8270E SIM												
Acenaphthene	3.42	0.0100	0.0200	ug/L	1	4.00	---	86	47-122%	---	---	
Acenaphthylene	3.51	0.0100	0.0200	ug/L	1	4.00	---	88	41-130%	---	---	
Anthracene	3.78	0.0100	0.0200	ug/L	1	4.00	---	95	57-123%	---	---	
Benz(a)anthracene	3.84	0.0100	0.0200	ug/L	1	4.00	---	96	58-125%	---	---	
Benzo(a)pyrene	4.22	0.0100	0.0200	ug/L	1	4.00	---	105	54-128%	---	---	
Benzo(b)fluoranthene	4.24	0.0100	0.0200	ug/L	1	4.00	---	106	53-131%	---	---	
Benzo(k)fluoranthene	4.43	0.0100	0.0200	ug/L	1	4.00	---	111	57-129%	---	---	
Benzo(g,h,i)perylene	3.34	0.0100	0.0200	ug/L	1	4.00	---	84	50-134%	---	---	
Chrysene	4.11	0.0100	0.0200	ug/L	1	4.00	---	103	59-123%	---	---	

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0786 - EPA 3510C (Acid Extraction)								**Water**				
LCS (23H0786-BS1)			Prepared: 08/22/23 06:25		Analyzed: 08/22/23 12:10							
Dibenz(a,h)anthracene	4.11	0.0100	0.0200	ug/L	1	4.00	---	103	51-134%	---	---	
Fluoranthene	4.19	0.0100	0.0200	ug/L	1	4.00	---	105	57-128%	---	---	
Fluorene	3.70	0.0100	0.0200	ug/L	1	4.00	---	93	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.85	0.0100	0.0200	ug/L	1	4.00	---	96	52-134%	---	---	
1-Methylnaphthalene	2.78	0.0200	0.0400	ug/L	1	4.00	---	69	41-120%	---	---	
2-Methylnaphthalene	2.74	0.0200	0.0400	ug/L	1	4.00	---	69	40-121%	---	---	
Naphthalene	2.76	0.0200	0.0400	ug/L	1	4.00	---	69	40-121%	---	---	
Phenanthrene	3.73	0.0100	0.0200	ug/L	1	4.00	---	93	59-120%	---	---	
Pyrene	4.16	0.0100	0.0200	ug/L	1	4.00	---	104	57-126%	---	---	
Dibenzofuran	3.43	0.0100	0.0200	ug/L	1	4.00	---	86	53-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 79 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*91 %*		*50-134 %*			*"*				
LCS Dup (23H0786-BSD1)			Prepared: 08/22/23 06:25		Analyzed: 08/22/23 12:35							**Q-19**
EPA 8270E SIM												
Acenaphthene	3.45	0.0100	0.0200	ug/L	1	4.00	---	86	47-122%	0.8	30%	
Acenaphthylene	3.50	0.0100	0.0200	ug/L	1	4.00	---	88	41-130%	0.3	30%	
Anthracene	3.65	0.0100	0.0200	ug/L	1	4.00	---	91	57-123%	4	30%	
Benz(a)anthracene	3.74	0.0100	0.0200	ug/L	1	4.00	---	94	58-125%	3	30%	
Benzo(a)pyrene	4.13	0.0100	0.0200	ug/L	1	4.00	---	103	54-128%	2	30%	
Benzo(b)fluoranthene	4.20	0.0100	0.0200	ug/L	1	4.00	---	105	53-131%	0.9	30%	
Benzo(k)fluoranthene	4.29	0.0100	0.0200	ug/L	1	4.00	---	107	57-129%	3	30%	
Benzo(g,h,i)perylene	3.34	0.0100	0.0200	ug/L	1	4.00	---	83	50-134%	0.07	30%	
Chrysene	4.00	0.0100	0.0200	ug/L	1	4.00	---	100	59-123%	3	30%	
Dibenz(a,h)anthracene	4.05	0.0100	0.0200	ug/L	1	4.00	---	101	51-134%	2	30%	
Fluoranthene	4.06	0.0100	0.0200	ug/L	1	4.00	---	101	57-128%	3	30%	
Fluorene	3.61	0.0100	0.0200	ug/L	1	4.00	---	90	52-124%	2	30%	
Indeno(1,2,3-cd)pyrene	3.92	0.0100	0.0200	ug/L	1	4.00	---	98	52-134%	2	30%	
1-Methylnaphthalene	2.87	0.0200	0.0400	ug/L	1	4.00	---	72	41-120%	3	30%	
2-Methylnaphthalene	2.81	0.0200	0.0400	ug/L	1	4.00	---	70	40-121%	3	30%	
Naphthalene	2.85	0.0200	0.0400	ug/L	1	4.00	---	71	40-121%	3	30%	
Phenanthrene	3.62	0.0100	0.0200	ug/L	1	4.00	---	91	59-120%	3	30%	
Pyrene	4.05	0.0100	0.0200	ug/L	1	4.00	---	101	57-126%	3	30%	
Dibenzofuran	3.47	0.0100	0.0200	ug/L	1	4.00	---	87	53-120%	1	30%	

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23H0786 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (23H0786-BSD1)			Prepared: 08/22/23 06:25 Analyzed: 08/22/23 12:35									**Q-19**
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 75 %*	*Limits: 44-120 %*	*Dilution: 1x*							
p-Terphenyl-d14 (Surr)			*94 %*	*50-134 %*	*"*							

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0834							
A3H1155-01	Water	NWTPH-Dx LL	08/15/23 11:41	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-02	Water	NWTPH-Dx LL	08/15/23 10:18	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-03	Water	NWTPH-Dx LL	08/15/23 08:23	08/23/23 06:00	1020mL/2mL	1000mL/2mL	0.98
A3H1155-04	Water	NWTPH-Dx LL	08/15/23 15:45	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-05	Water	NWTPH-Dx LL	08/15/23 14:45	08/23/23 06:00	1050mL/2mL	1000mL/2mL	0.95
A3H1155-06	Water	NWTPH-Dx LL	08/15/23 13:09	08/23/23 06:00	1030mL/2mL	1000mL/2mL	0.97
A3H1155-07	Water	NWTPH-Dx LL	08/15/23 10:30	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-08	Water	NWTPH-Dx LL	08/15/23 12:10	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-09	Water	NWTPH-Dx LL	08/15/23 13:10	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-10	Water	NWTPH-Dx LL	08/15/23 14:50	08/23/23 06:00	1060mL/2mL	1000mL/2mL	0.94
A3H1155-11	Water	NWTPH-Dx LL	08/15/23 16:00	08/23/23 06:00	1040mL/2mL	1000mL/2mL	0.96
A3H1155-12	Water	NWTPH-Dx LL	08/15/23 09:10	08/23/23 06:00	1060mL/2mL	1000mL/2mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0703							
A3H1155-12	Water	NWTPH-Gx (MS)	08/15/23 09:10	08/18/23 11:00	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0703							
A3H1155-12	Water	EPA 8260D	08/15/23 09:10	08/18/23 11:00	5mL/5mL	5mL/5mL	1.00

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23H0786							
A3H1155-01	Water	EPA 8270E SIM	08/15/23 11:41	08/22/23 11:32	990mL/2mL	1000mL/2mL	1.01
A3H1155-02	Water	EPA 8270E SIM	08/15/23 10:18	08/22/23 11:32	1000mL/2mL	1000mL/2mL	1.00
A3H1155-03	Water	EPA 8270E SIM	08/15/23 08:23	08/22/23 11:32	1060mL/2mL	1000mL/2mL	0.94
A3H1155-04	Water	EPA 8270E SIM	08/15/23 15:45	08/22/23 11:32	1040mL/2mL	1000mL/2mL	0.96

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

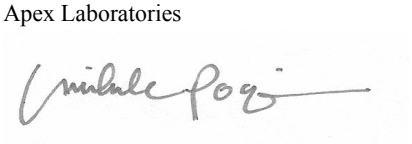
SAMPLE PREPARATION INFORMATION

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E (SIM)

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3H1155-05	Water	EPA 8270E SIM	08/15/23 14:45	08/22/23 11:32	1030mL/2mL	1000mL/2mL	0.97
A3H1155-06	Water	EPA 8270E SIM	08/15/23 13:09	08/22/23 11:32	980mL/2mL	1000mL/2mL	1.02
A3H1155-07	Water	EPA 8270E SIM	08/15/23 10:30	08/22/23 11:32	1040mL/2mL	1000mL/2mL	0.96
A3H1155-08	Water	EPA 8270E SIM	08/15/23 12:10	08/22/23 11:32	990mL/2mL	1000mL/2mL	1.01
A3H1155-09	Water	EPA 8270E SIM	08/15/23 13:10	08/22/23 06:33	1040mL/2mL	1000mL/2mL	0.96
A3H1155-10	Water	EPA 8270E SIM	08/15/23 14:50	08/22/23 06:33	1040mL/2mL	1000mL/2mL	0.96
A3H1155-11	Water	EPA 8270E SIM	08/15/23 16:00	08/22/23 06:25	1000mL/2mL	1000mL/2mL	1.00
A3H1155-12	Water	EPA 8270E SIM	08/15/23 09:10	08/22/23 06:25	980mL/2mL	1000mL/2mL	1.02

Apex Laboratories



Michele Poquiz For Kurt Johnson, Senior Chemist

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AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-12	The result for this hydrocarbon range is primarily due to the presence of individual analyte peaks in the quantitation range. No fuel pattern detected.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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ANALYTICAL REPORT

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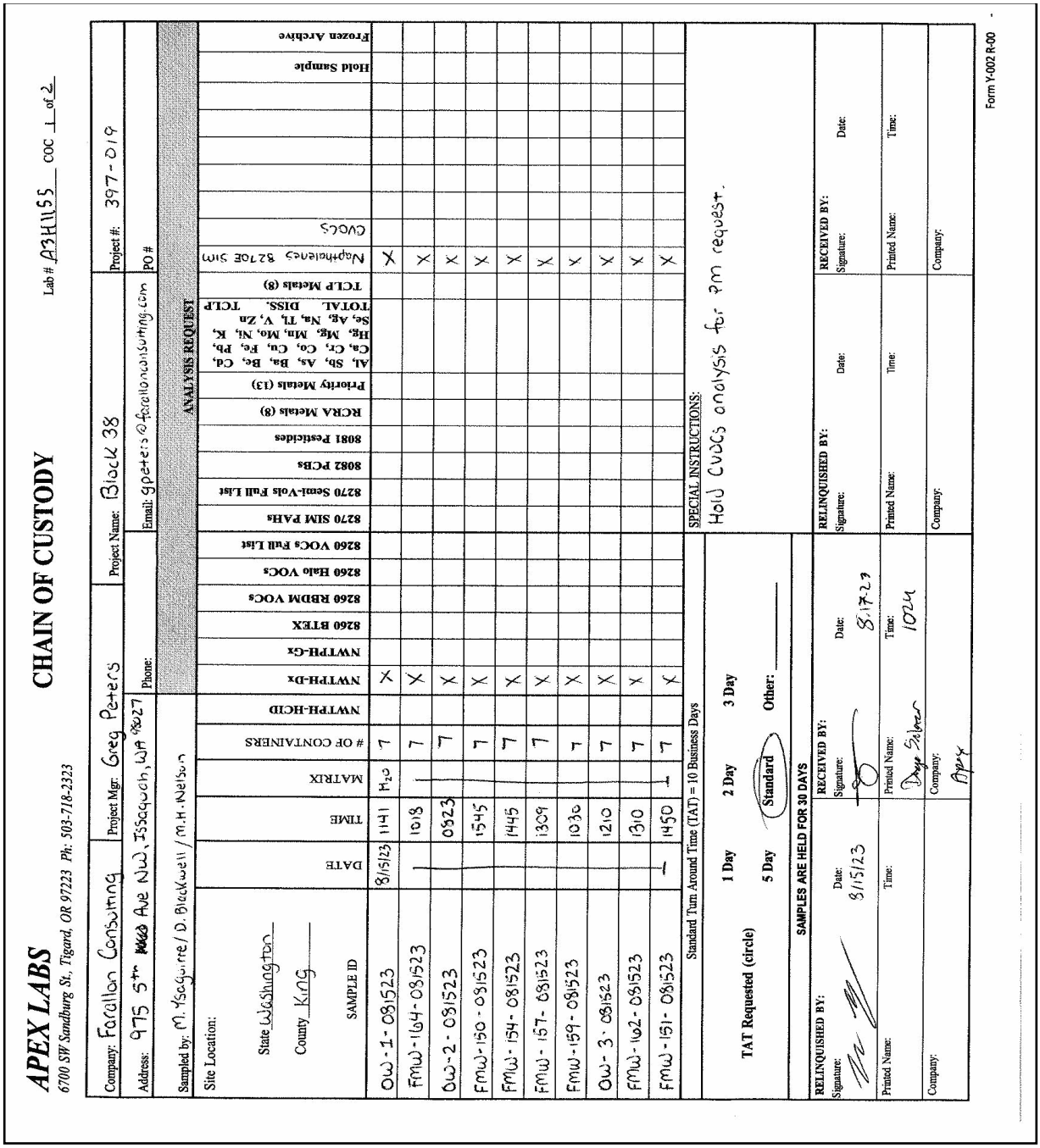
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3H1155 - 12 22 23 1825



CHAIN OF CUSTODY

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Lab # A3H1155 COC 1 of 2

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: | Email: gpeters@farallonconsulting.com | PO #
Sampled by: M. Yaguare / D. Blackwell / M.H. Nelson
Site Location: State Washington County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes 8270E SIM	cVOCs	Hold Sample	Frozen Archive
OW-1-081523	8/15/23	1141	H2O	7		X														X			
FMW-164-081523		1018		7		X														X			
OW-2-081523		0923		7		X														X			
FMW-160-081523		1545		7		X														X			
FMW-154-081523		1445		7		X														X			
FMW-157-081523		1309		7		X														X			
FMW-159-081523		1036		7		X														X			
OW-3-081523		1210		7		X														X			
FMW-162-081523		1310		7		X														X			
FMW-151-081523		1450		7		X														X			

SPECIAL INSTRUCTIONS: Hold cVOCs analysis for 2nd request.

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 8/15/23	Date: 8.17.23	Date:	Date:
Time:	Time: 1024	Time:	Time:
Printed Name:	Printed Name: Jaye Silver	Printed Name:	Printed Name:
Company:	Company: Apex	Company:	Company:

Form Y-002 R-00

Apex Laboratories

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ANALYTICAL REPORT

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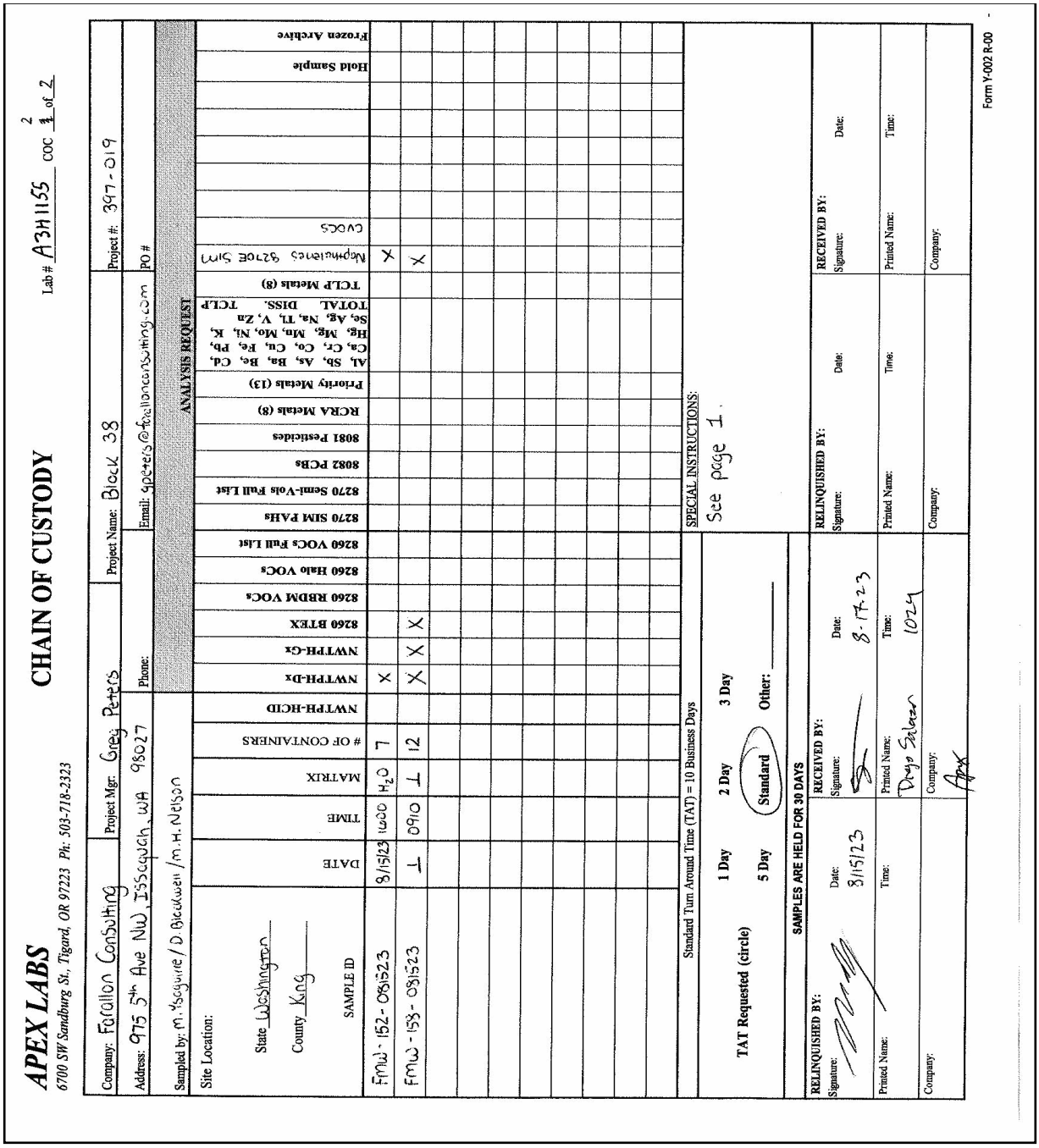
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**



APEX LABS
6700 SW Sandburg St, Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3H1155 COC 1 of 2

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: | Email: gpeters@farallonconsulting.com | PO #
Sampled by: M. Yaguine / D. Bieduwen / M.H. Nelson

Site Location: State Washington, County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes 8270E SIM	cVOCs					Hold Sample	Frozen Archive
FMW-152-081623	8/15/23	1600	H_2O	7		X														X							
FMW-153-081623	8/15/23	0910		12		X	X	X												X							

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: ____

SPECIAL INSTRUCTIONS: See page 1.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	8/15/23		Signature:	8.17.23	
Printed Name:			Printed Name:	Doug Salazar	1024
Company:			Company:	Apex	

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

Form Y-002 R-00

Apex Laboratories

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3H1155 - 12 22 23 1825**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3H1155

Project/Project #: Block 38 / 397-019 DJS 8-17-23

Delivery Info:

Date/time received: 8-17-23 @ 1024 By: DJS

Delivered by: Apex__Client__ESS___FedEx✓UPS__Radio___Morgan ___SDS___Evergreen___Other ___

Cooler Inspection Date/time inspected: 8-17-23 @ 1025 By: DJS

Chain of Custody included? Yes ✓ No _____

Signed/dated by client? Yes ✓ No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.9	3.9	0.4	1.2	3.6	2.8	0.9
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why: _____

Green dots applied to out of temperature samples? Yes No

Out of temperature samples form initiated? Yes No

Sample Inspection: Date/time inspected: 8/17/23 @ 11:38 By: AAW

All samples intact? Yes ✓ No ___ Comments: _____

Bottle labels/COCs agree? Yes ___ No ✓ Comments: FMW-154-081523 cont. ID reads FMW-153-08523 matched by time.

COC/container discrepancies form initiated? Yes ___ No ✓

Containers/volumes received appropriate for analysis? Yes ✓ No ___ Comments: _____

Do VOA vials have visible headspace? Yes ✓ No ___ NA ___

Comments 3/3 HS CW-1, 1/3 HS FMW-157, 3/3 HS FMW-159, 2/3 HS OW-3, 2/3 HS FMW-151

Water samples: pH checked: Yes ✓ No ___ NA ___ pH appropriate? Yes ✓ No ___ NA ___

Comments: _____

Additional information: 7025 9236 3408

Labeled by: DJS Witness: AAW Cooler Inspected by: AAW

Form Y-003 R-00

Apex Laboratories

Michele Poquiz

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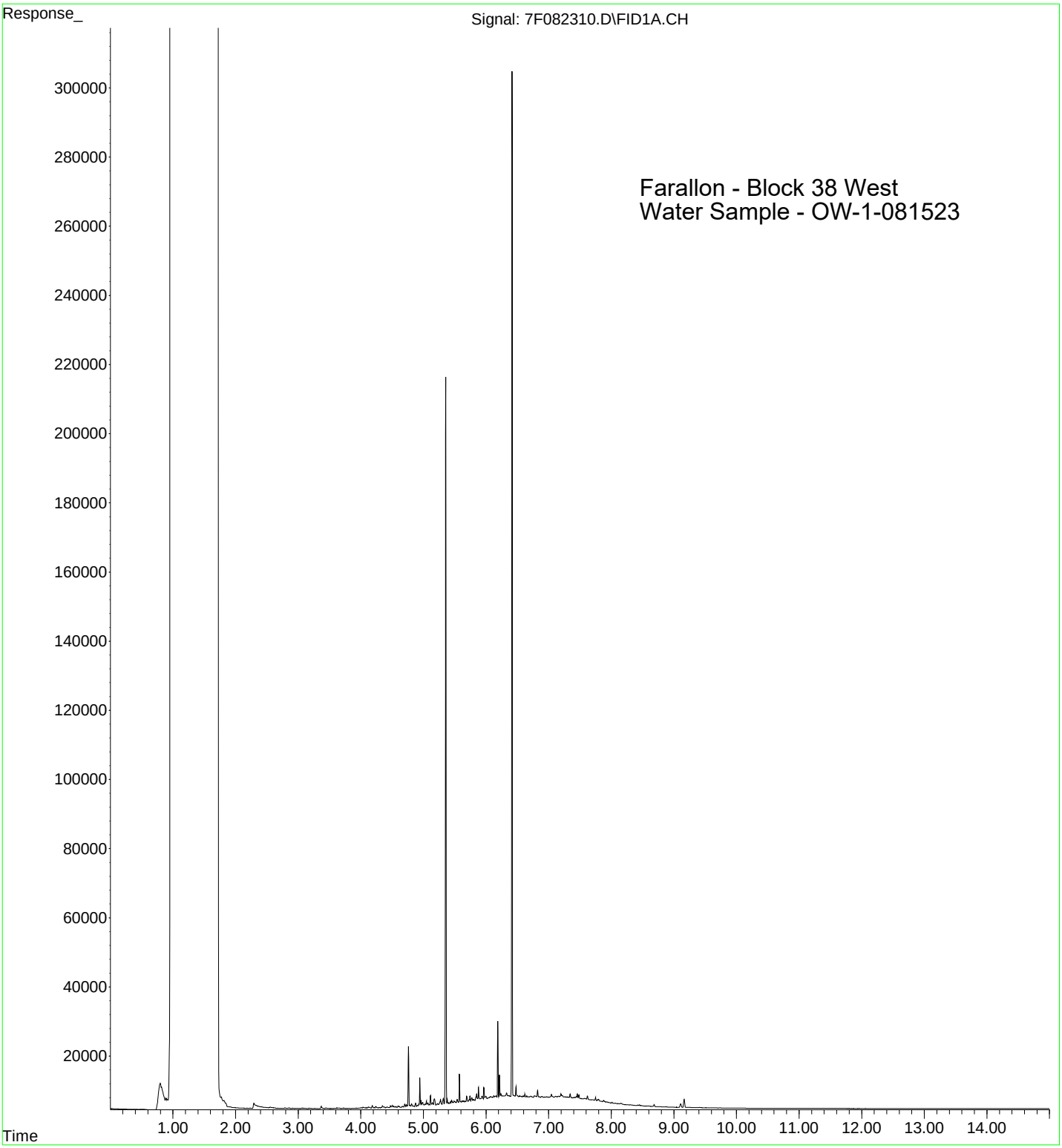
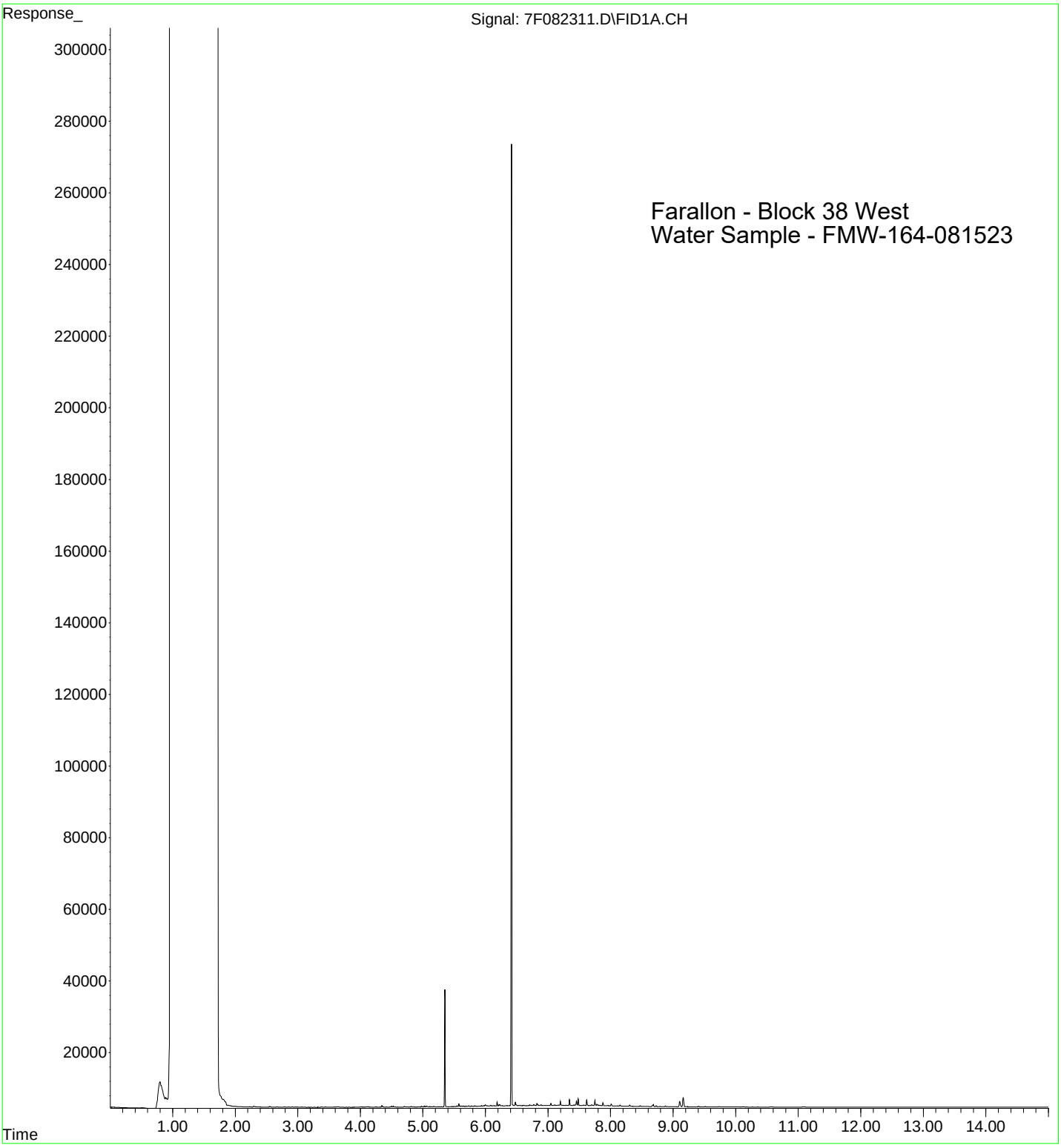
Michele Poquiz For Kurt Johnson, Senior Chemist

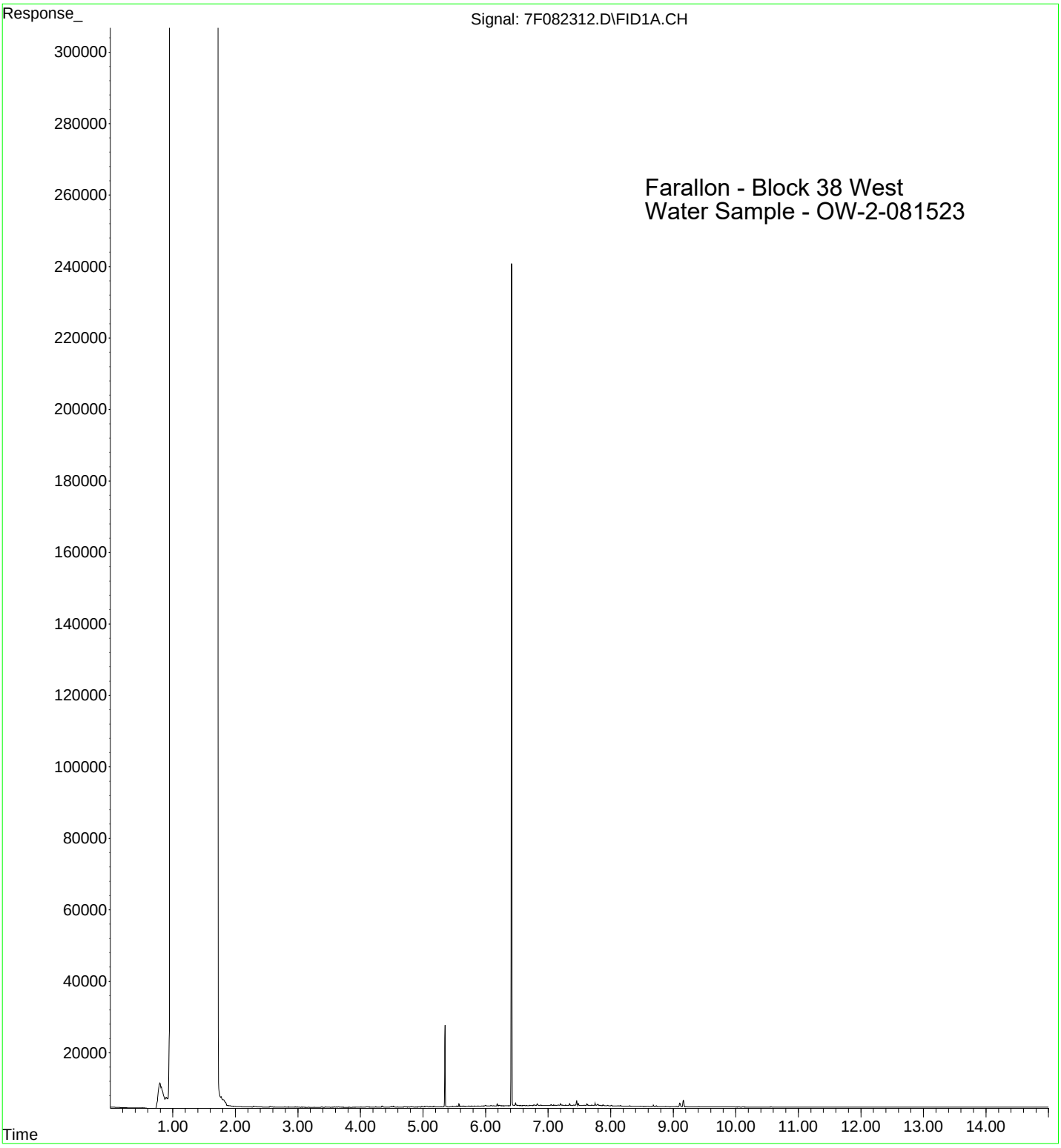
File   :C:\gcms\1\data\3H23057\7F082310.D
Operator   : BLL
Acquired   : 23 Aug 2023 21:52   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: A3H1155-01
Misc Info :
Vial Number: 7



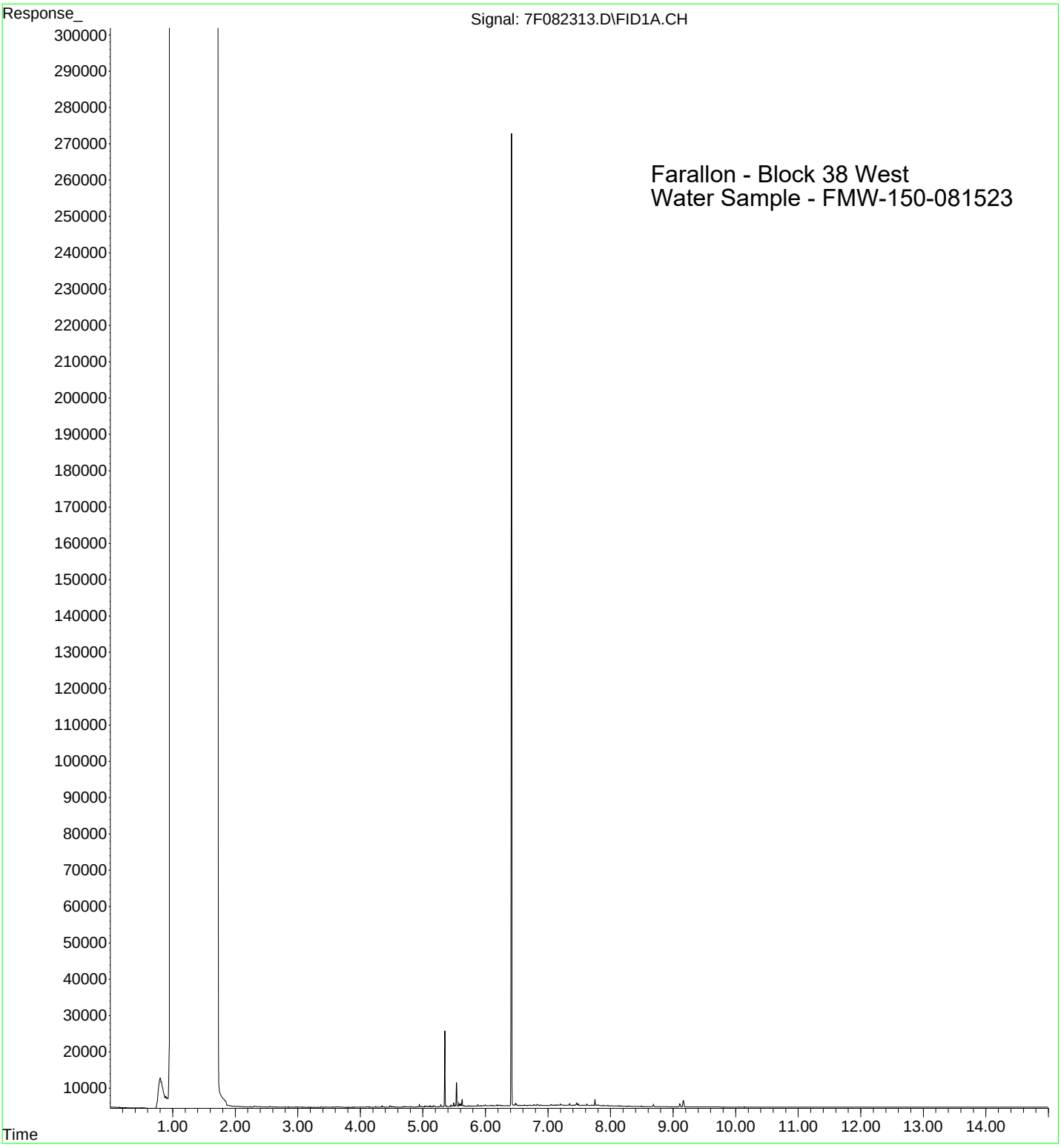
File :C:\gcms\1\data\3H23057\7F082311.D
Operator : BLL
Acquired : 23 Aug 2023 22:12 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-02
Misc Info :
Vial Number: 8



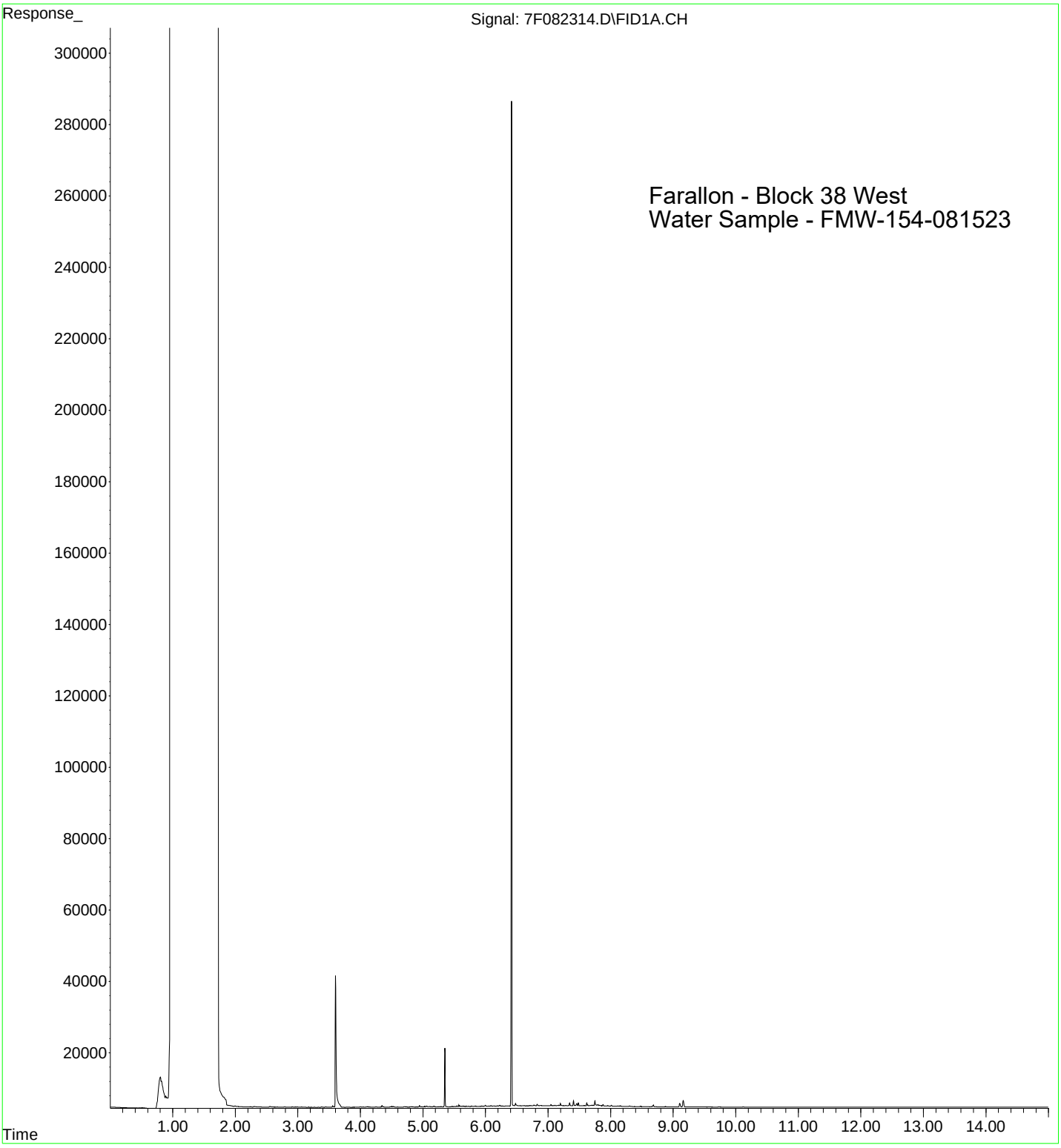
File   :C:\gcms\1\data\3H23057\7F082312.D
Operator   : BLL
Acquired   : 23 Aug 2023 22:33   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: A3H1155-03
Misc Info :
Vial Number: 9



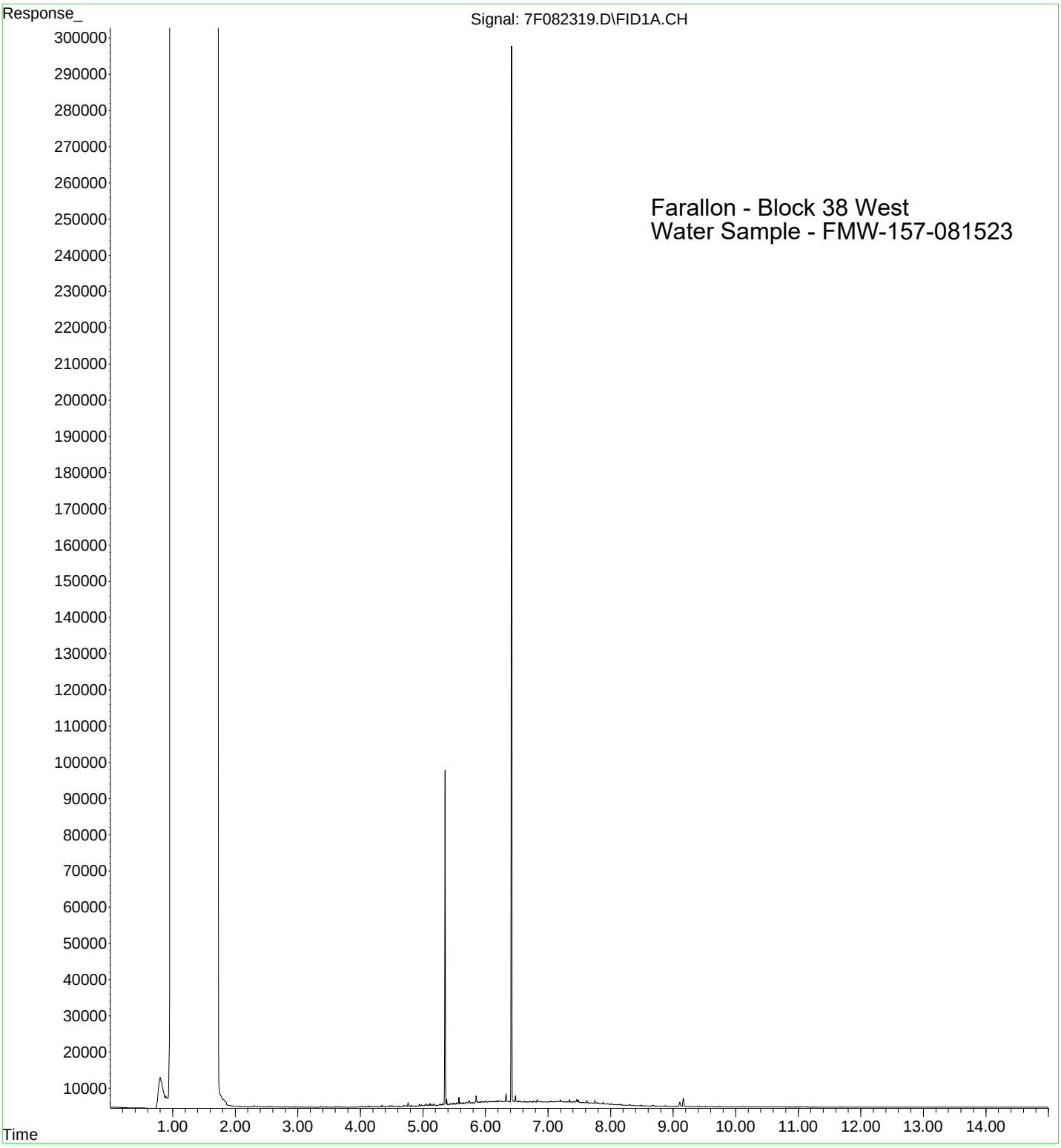
File :C:\gcms\1\data\3H23057\7F082313.D
Operator : BLL
Acquired : 23 Aug 2023 22:54 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-04
Misc Info :
Vial Number: 10



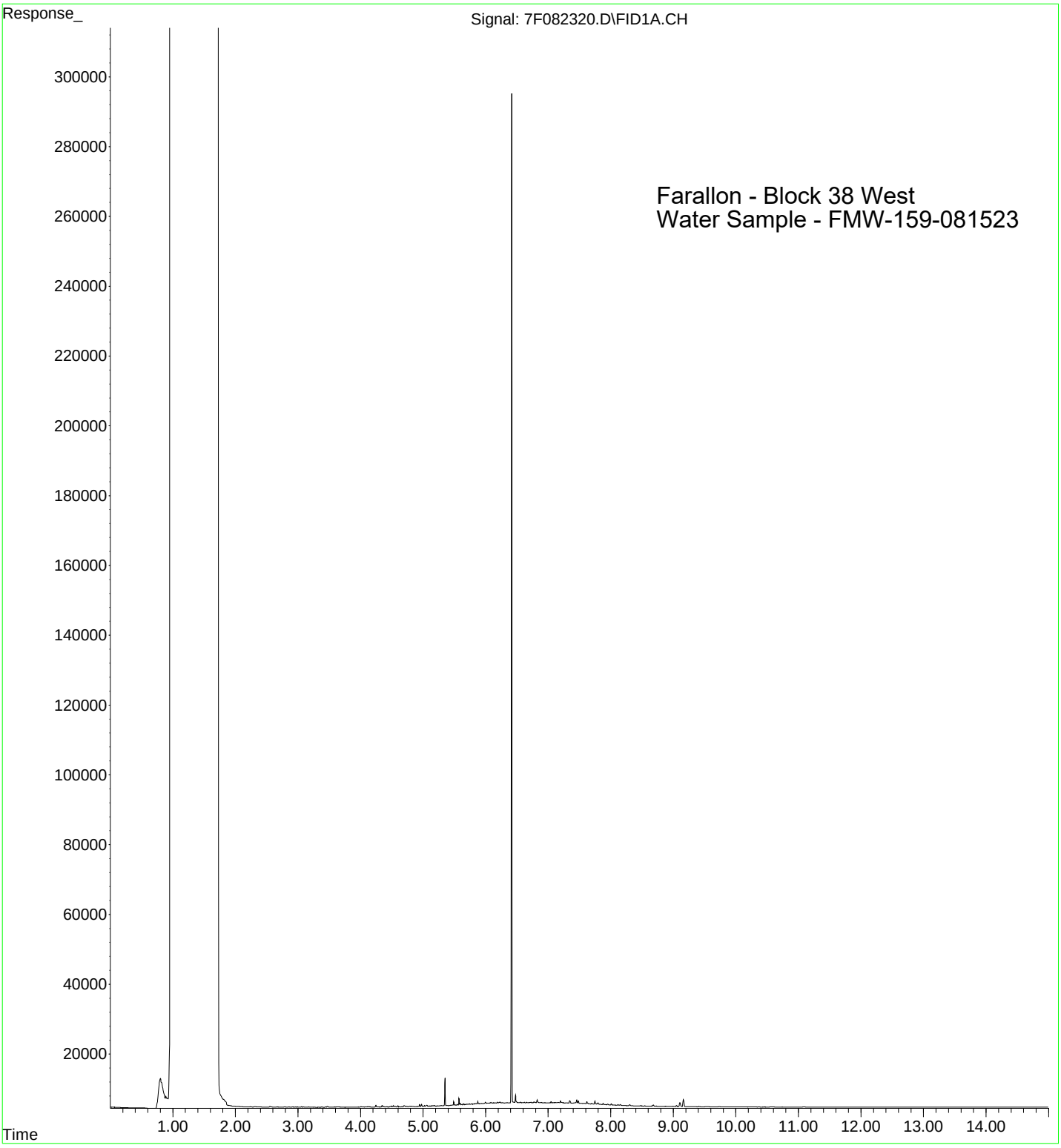
File :C:\gcms\1\data\3H23057\7F082314.D
Operator : BLL
Acquired : 23 Aug 2023 23:15 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-05
Misc Info :
Vial Number: 11



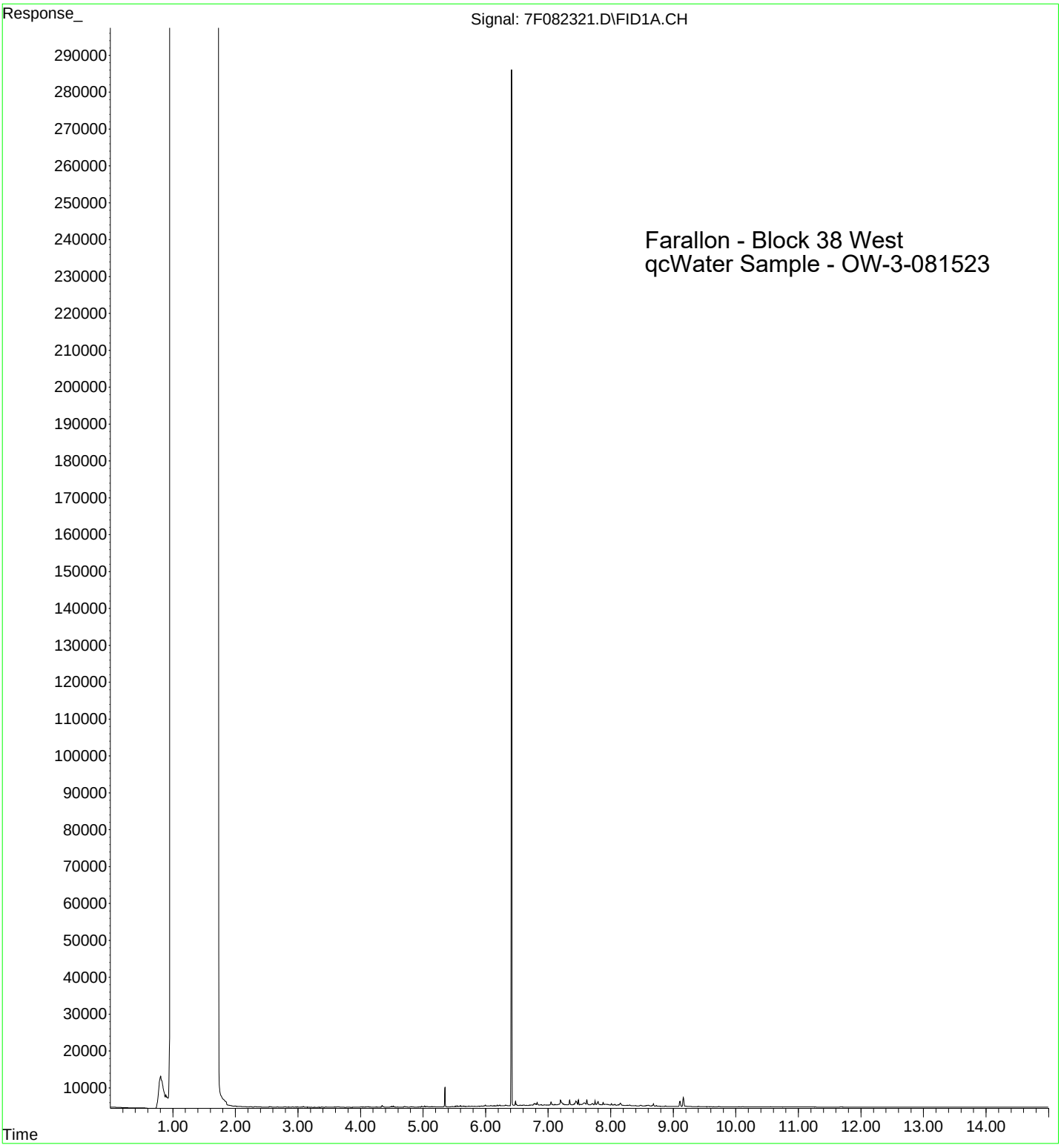
File :C:\gcms\1\data\3H23057\7F082319.D
Operator : BLL
Acquired : 24 Aug 2023 00:58 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-06
Misc Info :
Vial Number: 14



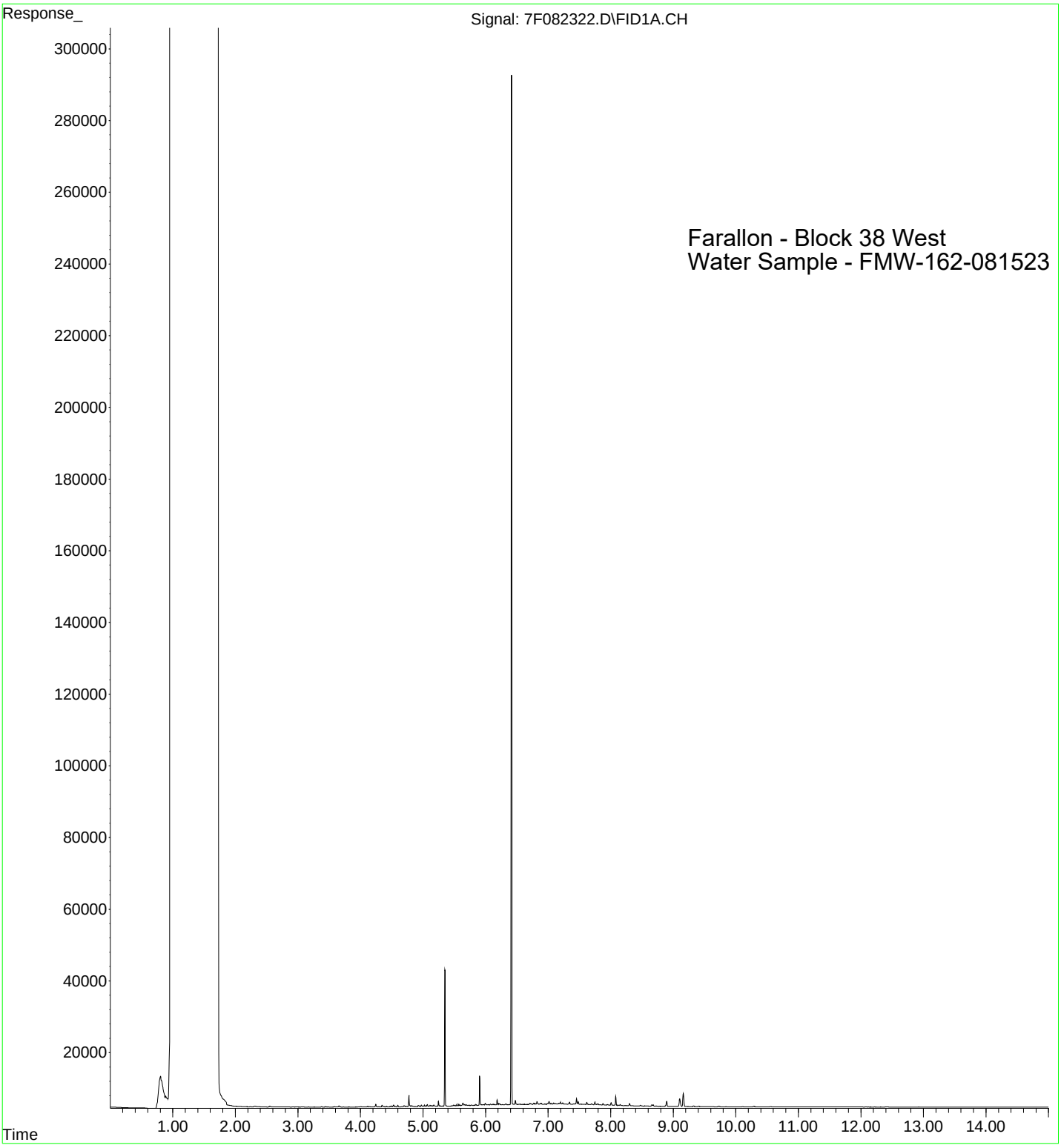
File :C:\gcms\1\data\3H23057\7F082320.D
Operator : BLL
Acquired : 24 Aug 2023 1:18 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-07
Misc Info :
Vial Number: 15



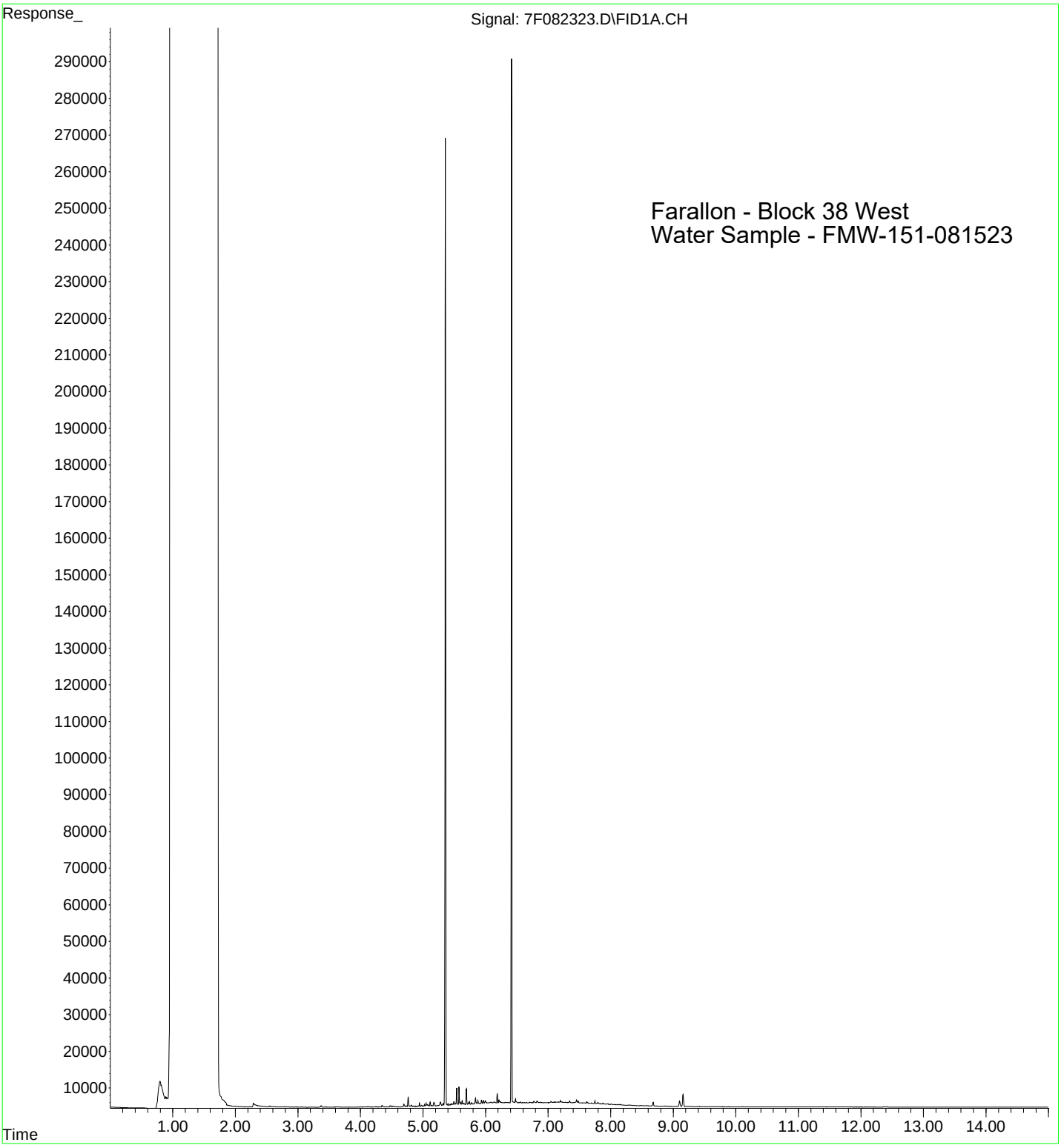
File :C:\gcms\1\data\3H23057\7F082321.D
Operator : BLL
Acquired : 24 Aug 2023 1:39 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-08
Misc Info :
Vial Number: 16



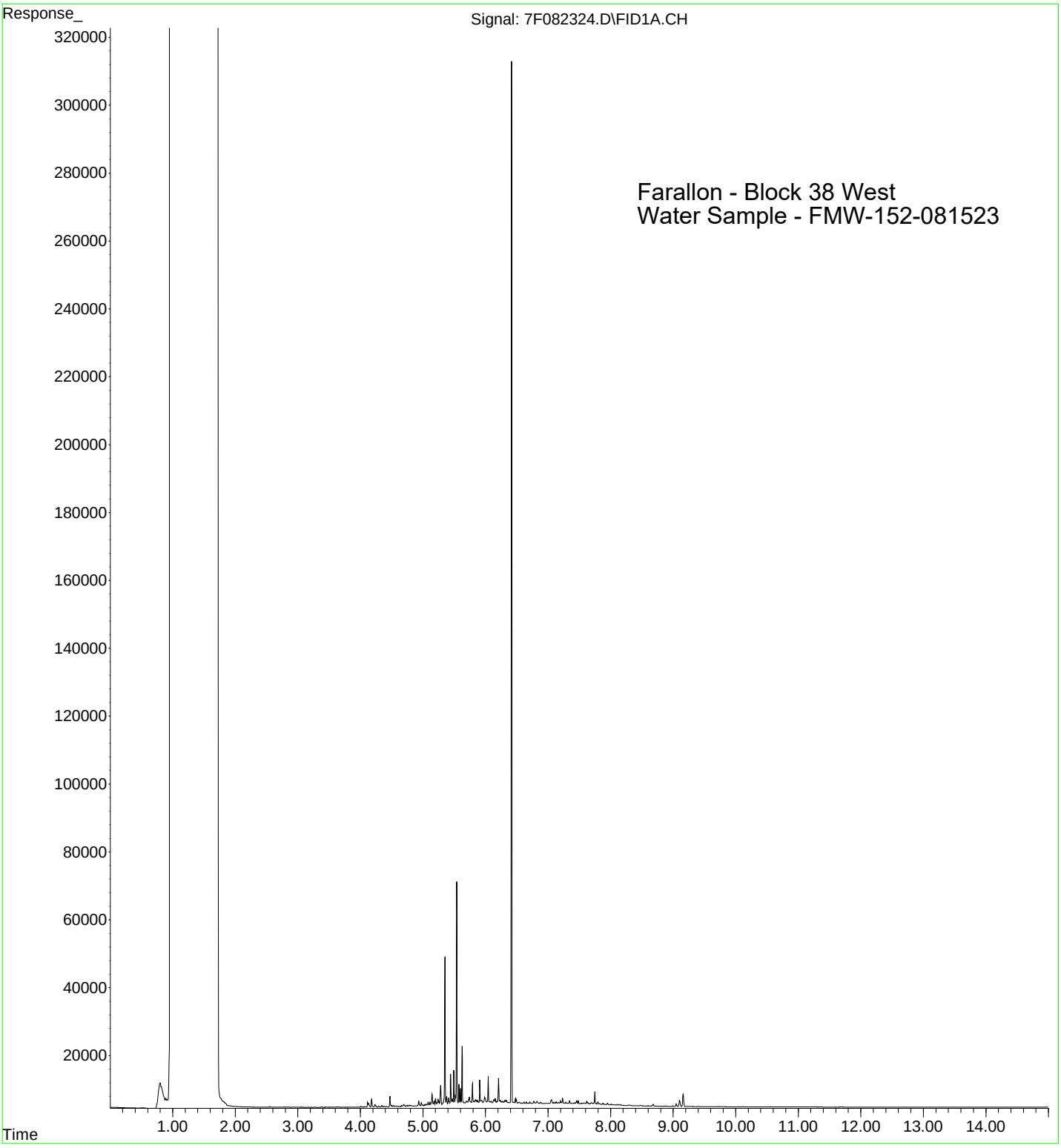
File   :C:\gcms\1\data\3H23057\7F082322.D
Operator   : BLL
Acquired   : 24 Aug 2023   1:59   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: A3H1155-09
Misc Info :
Vial Number: 17



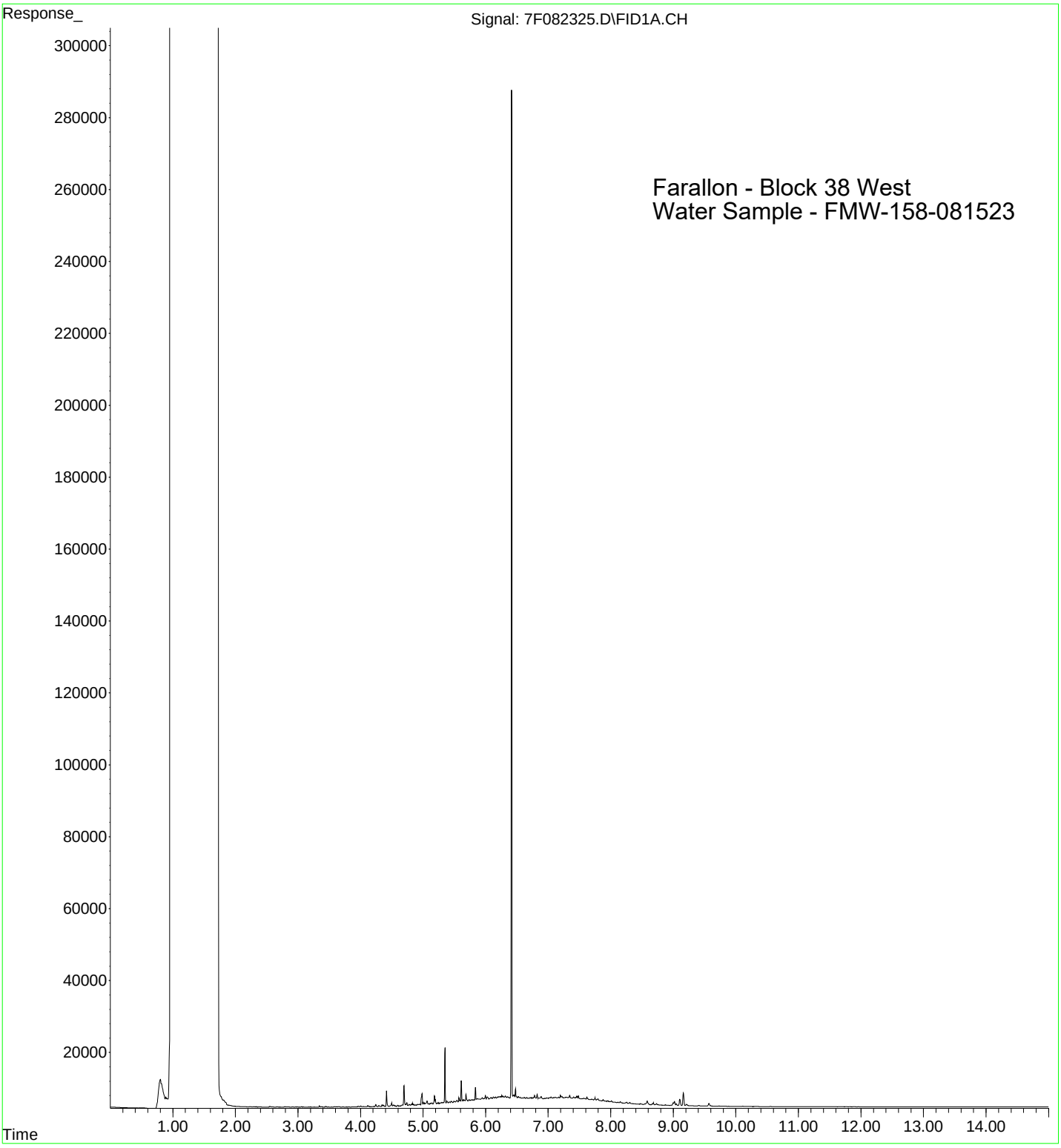
File :C:\gcms\1\data\3H23057\7F082323.D
Operator : BLL
Acquired : 24 Aug 2023 2:20 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: A3H1155-10
Misc Info :
Vial Number: 18



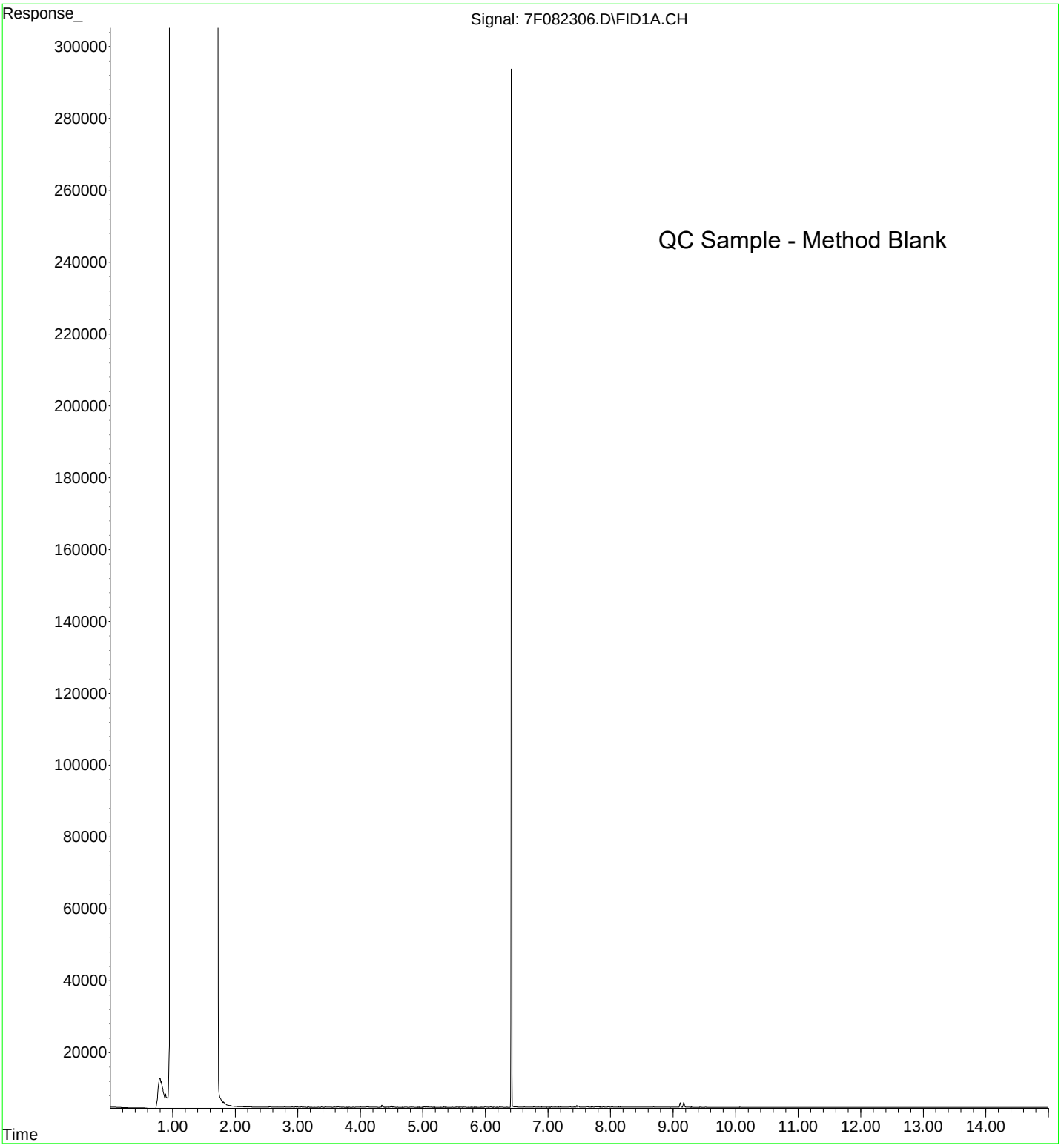
File   :C:\gcms\1\data\3H23057\7F082324.D
Operator   : BLL
Acquired   : 24 Aug 2023   2:41   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: A3H1155-11
Misc Info :
Vial Number: 19



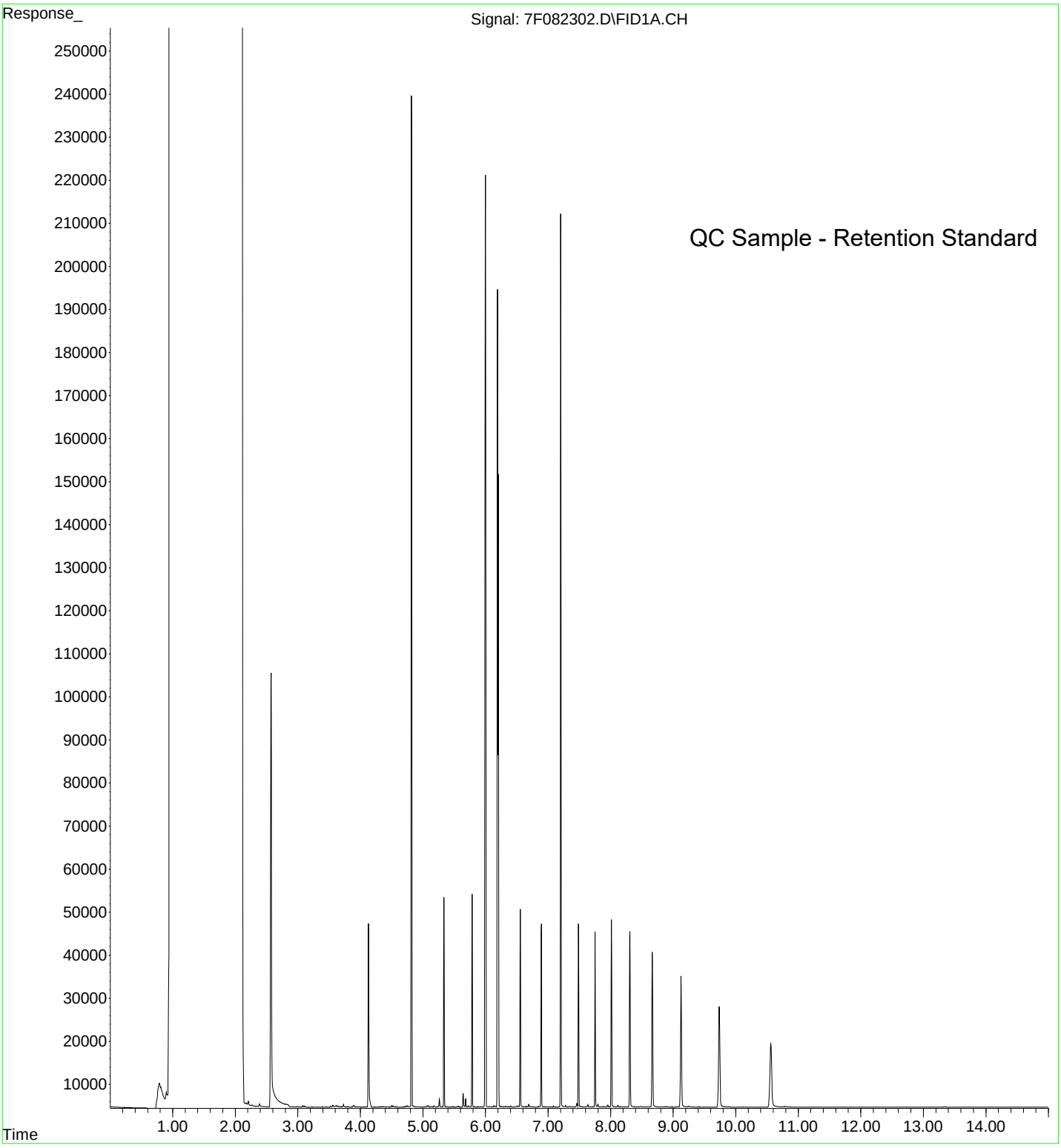
File   :C:\gcms\1\data\3H23057\7F082325.D
Operator   : BLL
Acquired   : 24 Aug 2023   3:01   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: A3H1155-12
Misc Info :
Vial Number: 20



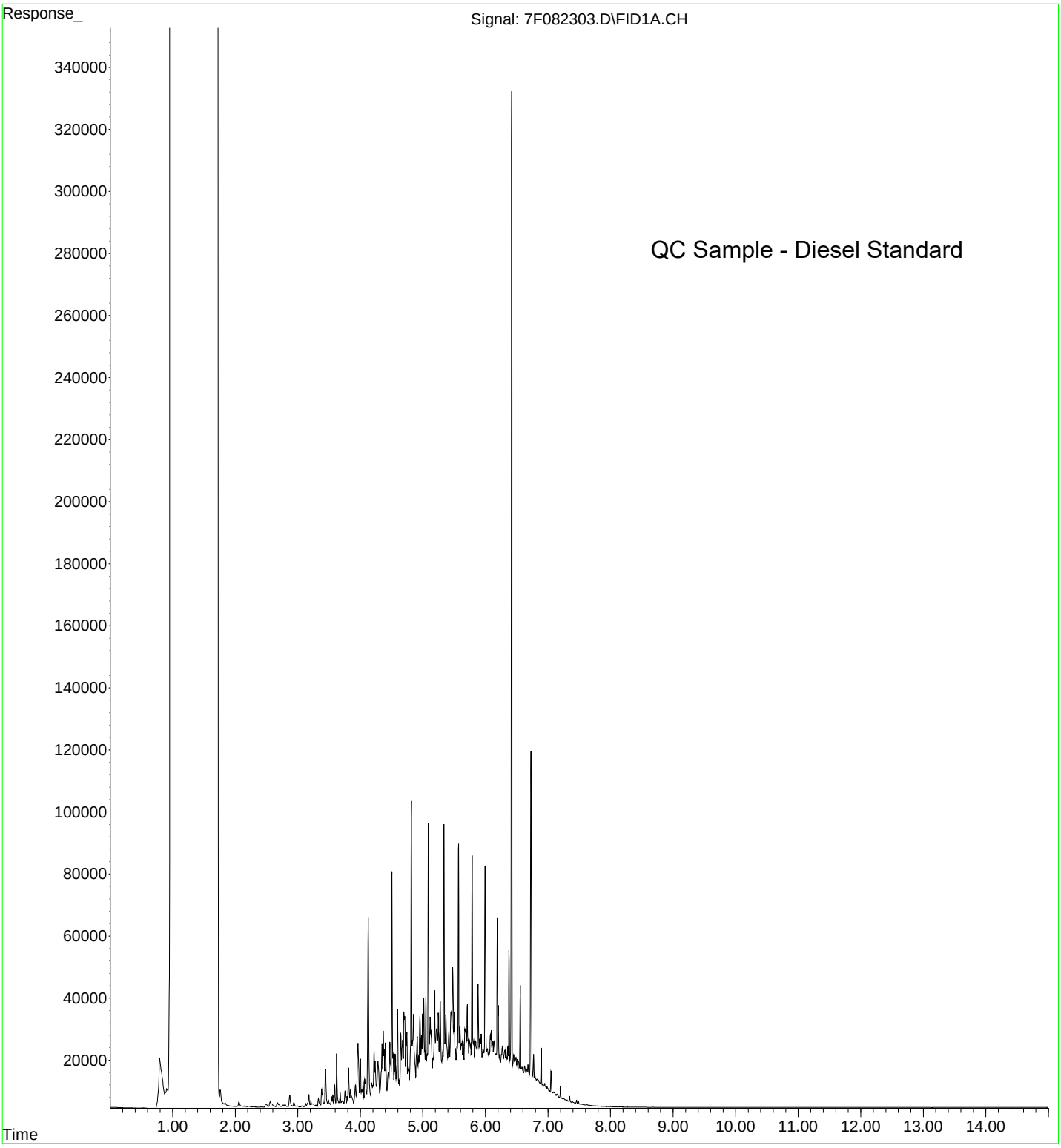
File :C:\gcms\1\data\3H23057\7F082306.D
Operator : BLL
Acquired : 23 Aug 2023 20:29 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: 23H0834-BLK1
Misc Info :
Vial Number: 3



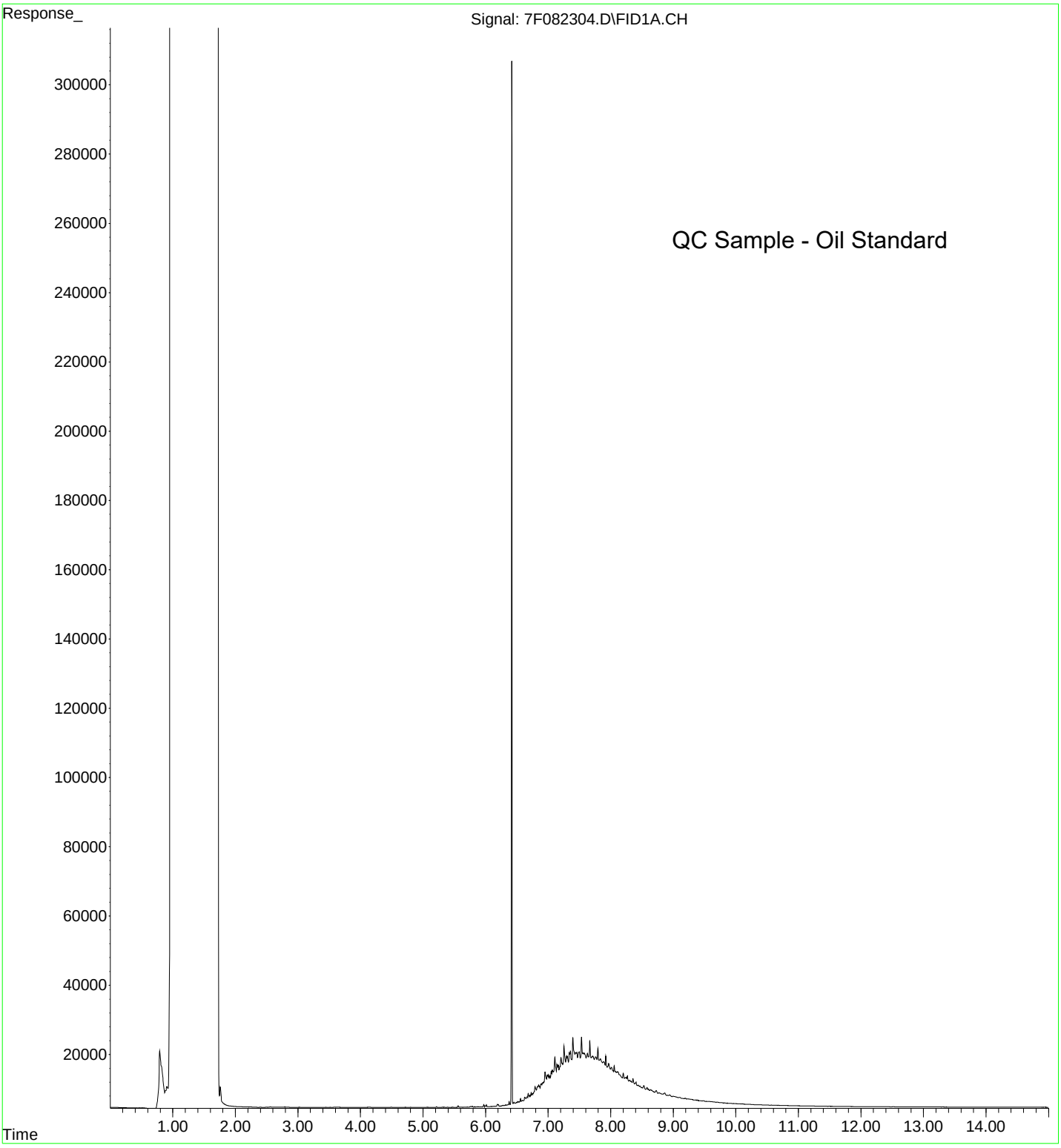
File :C:\gcms\1\data\3H23057\7F082302.D
Operator : BLL
Acquired : 23 Aug 2023 15:24 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: 3H23057-RES1
Misc Info :
Vial Number: 94



File :C:\gcms\1\data\3H23057\7F082303.D
Operator : BLL
Acquired : 23 Aug 2023 15:45 using AcqMethod FID7ACQ.M
Instrument : HP G1530A
Sample Name: 3H23057-CCV1
Misc Info :
Vial Number: 1



File   :C:\gcms\1\data\3H23057\7F082304.D
Operator   : BLL
Acquired   : 23 Aug 2023 16:06   using AcqMethod FID7ACQ.M
Instrument :   HP G1530A
Sample Name: 3H23057-CCV2
Misc Info :
Vial Number: 2



Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Friday, December 22, 2023

Greg Peters
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A3K1435 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3K1435, which was received by the laboratory on 11/16/2023 at 4:22:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.

(See Cooler Receipt Form for details)

Cooler #1	4.9	degC	Cooler #2	3.1	degC
Cooler #3	2.5	degC	Cooler #4	1.0	degC
Cooler #5	5.1	degC	Cooler #6	5.3	degC
Cooler #7	4.8	degC	Cooler #8	5.3	degC
Cooler #9	4.5	degC			

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-153-111523	A3K1435-01	Water	11/15/23 17:05	11/16/23 16:22
FMW-150-111523	A3K1435-02	Water	11/15/23 15:35	11/16/23 16:22
OW-1-111523	A3K1435-03	Water	11/15/23 14:15	11/16/23 16:22
OW-2-111523	A3K1435-04	Water	11/15/23 12:55	11/16/23 16:22
FMW-157-111523	A3K1435-05	Water	11/15/23 11:25	11/16/23 16:22
FMW-156-111523	A3K1435-06	Water	11/15/23 10:05	11/16/23 16:22
FMW-163-111523	A3K1435-07	Water	11/15/23 08:35	11/16/23 16:22
FMW-158-111523	A3K1435-08	Water	11/15/23 08:40	11/16/23 16:22
FMW-159-111523	A3K1435-09	Water	11/15/23 10:05	11/16/23 16:22
OW-3-111523	A3K1435-10	Water	11/15/23 11:45	11/16/23 16:22
FMW-164-111523	A3K1435-11	Water	11/15/23 13:01	11/16/23 16:22
FMW-162-111523	A3K1435-12	Water	11/15/23 14:15	11/16/23 16:22
FMW-152-111523	A3K1435-13	Water	11/15/23 15:51	11/16/23 16:22
FMW-151-111523	A3K1435-14	Water	11/15/23 18:02	11/16/23 16:22
FMW-160-111423	A3K1435-15	Water	11/14/23 14:25	11/16/23 16:22
FMW-154-111423	A3K1435-16	Water	11/14/23 12:50	11/16/23 16:22
FMW-155-111423	A3K1435-17	Water	11/14/23 12:30	11/16/23 16:22
FMW-161-111423	A3K1435-18	Water	11/14/23 14:05	11/16/23 16:22

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL CASE NARRATIVE

A3K1435	**Apex Laboratories**

Amended Report Revision 2:

Reporting to Reporting Limits (RLs)-

This report supersedes all previous reports.

Per client request, this report has been amended to report all NWTPH-Dx data to the RLs.

Michele Poquiz
Forensics Project Manager
12/22/2023

Amended Report Revision 1:

This report supersedes all previous reports.

Analysis of NWTPH-Dx LL with silica gel column cleanup was added to the following samples after the previous report version had been completed.

- FMW-158-111523 (A3K1435-08)
- FMW-159-111523 (A3K1435-09)

Michele Poquiz
Forensics Project Manager
12/19/2023

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-153-111523 (A3K1435-01)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	ND	---	76.9	ug/L	1	11/27/23 20:19	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	11/27/23 20:19	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*		*Limits: 50-150 %*	*1*	*11/27/23 20:19*	*NWTPH-Dx LL*	
FMW-150-111523 (A3K1435-02)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	ND	---	76.2	ug/L	1	11/27/23 20:40	NWTPH-Dx LL	
Oil	ND	---	152	ug/L	1	11/27/23 20:40	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*11/27/23 20:40*	*NWTPH-Dx LL*	
OW-1-111523 (A3K1435-03)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**628**	---	76.2	ug/L	1	11/27/23 21:00	NWTPH-Dx LL	**F-11**
Oil	ND	---	152	ug/L	1	11/27/23 21:00	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*11/27/23 21:00*	*NWTPH-Dx LL*	
OW-2-111523 (A3K1435-04)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**378**	---	76.9	ug/L	1	11/27/23 21:20	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	11/27/23 21:20	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*		*Limits: 50-150 %*	*1*	*11/27/23 21:20*	*NWTPH-Dx LL*	
FMW-157-111523 (A3K1435-05)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**283**	---	76.2	ug/L	1	11/27/23 21:40	NWTPH-Dx LL	**F-11**
Oil	ND	---	152	ug/L	1	11/27/23 21:40	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 84 %*		*Limits: 50-150 %*	*1*	*11/27/23 21:40*	*NWTPH-Dx LL*	
FMW-156-111523 (A3K1435-06)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**397**	---	76.9	ug/L	1	11/27/23 22:00	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	11/27/23 22:00	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*	*1*	*11/27/23 22:00*	*NWTPH-Dx LL*	
FMW-163-111523 (A3K1435-07)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**406**	---	76.9	ug/L	1	11/27/23 22:20	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	11/27/23 22:20	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*		*Limits: 50-150 %*	*1*	*11/27/23 22:20*	*NWTPH-Dx LL*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-111523 (A3K1435-08)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**398**	---	75.5	ug/L	1	11/27/23 22:41	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	11/27/23 22:41	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*11/27/23 22:41*	*NWTPH-Dx LL*	
FMW-159-111523 (A3K1435-09)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**249**	---	75.5	ug/L	1	11/27/23 23:01	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	11/27/23 23:01	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 81 %*		*Limits: 50-150 %*	*1*	*11/27/23 23:01*	*NWTPH-Dx LL*	
OW-3-111523 (A3K1435-10)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**238**	---	75.5	ug/L	1	11/27/23 23:21	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	11/27/23 23:21	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*		*Limits: 50-150 %*	*1*	*11/27/23 23:21*	*NWTPH-Dx LL*	
FMW-164-111523 (A3K1435-11RE1)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	ND	---	75.5	ug/L	1	11/28/23 08:50	NWTPH-Dx LL	
Oil	ND	---	151	ug/L	1	11/28/23 08:50	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 70 %*		*Limits: 50-150 %*	*1*	*11/28/23 08:50*	*NWTPH-Dx LL*	
FMW-162-111523 (A3K1435-12RE1)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	ND	---	75.5	ug/L	1	11/28/23 09:23	NWTPH-Dx LL	
Oil	ND	---	151	ug/L	1	11/28/23 09:23	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 69 %*		*Limits: 50-150 %*	*1*	*11/28/23 09:23*	*NWTPH-Dx LL*	
FMW-152-111523 (A3K1435-13)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**269**	---	75.5	ug/L	1	11/28/23 01:43	NWTPH-Dx LL	**F-03, F-11**
Oil	ND	---	151	ug/L	1	11/28/23 01:43	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 73 %*		*Limits: 50-150 %*	*1*	*11/28/23 01:43*	*NWTPH-Dx LL*	
FMW-151-111523 (A3K1435-14)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**263**	---	75.5	ug/L	1	11/28/23 02:03	NWTPH-Dx LL	**F-03, F-11**
Oil	ND	---	151	ug/L	1	11/28/23 02:03	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*11/28/23 02:03*	*NWTPH-Dx LL*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-111423 (A3K1435-15)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**375**	---	76.9	ug/L	1	11/28/23 02:23	NWTPH-Dx LL	**F-11**
Oil	ND	---	154	ug/L	1	11/28/23 02:23	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*11/28/23 02:23*	*NWTPH-Dx LL*	
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**791**	---	76.2	ug/L	1	11/28/23 02:43	NWTPH-Dx LL	**F-11**
Oil	ND	---	152	ug/L	1	11/28/23 02:43	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*		*Limits: 50-150 %*	*1*	*11/28/23 02:43*	*NWTPH-Dx LL*	
FMW-155-111423 (A3K1435-17)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**943**	---	76.2	ug/L	1	11/28/23 03:04	NWTPH-Dx LL	**F-11**
Oil	ND	---	152	ug/L	1	11/28/23 03:04	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 70 %*		*Limits: 50-150 %*	*1*	*11/28/23 03:04*	*NWTPH-Dx LL*	
FMW-161-111423 (A3K1435-18)				**Matrix: Water**		**Batch: 23K0934**		
Diesel	**423**	---	75.5	ug/L	1	11/28/23 03:24	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	11/28/23 03:24	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 86 %*		*Limits: 50-150 %*	*1*	*11/28/23 03:24*	*NWTPH-Dx LL*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-1-111523 (A3K1435-03)				**Matrix: Water**		**Batch: 23K1067**		
Diesel	ND	---	76.2	ug/L	1	11/29/23 20:02	NWTPH-Dx/SGC	
Oil	ND	---	152	ug/L	1	11/29/23 20:02	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*		*Limits: 50-150 %*	*1*	*11/29/23 20:02*	*NWTPH-Dx/SGC*	
FMW-158-111523 (A3K1435-08)				**Matrix: Water**		**Batch: 23L0687**		
Diesel	ND	---	75.5	ug/L	1	12/18/23 19:44	NWTPH-Dx/SGC	
Oil	ND	---	151	ug/L	1	12/18/23 19:44	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 71 %*		*Limits: 50-150 %*	*1*	*12/18/23 19:44*	*NWTPH-Dx/SGC*	
FMW-159-111523 (A3K1435-09)				**Matrix: Water**		**Batch: 23L0687**		
Diesel	ND	---	75.5	ug/L	1	12/18/23 20:55	NWTPH-Dx/SGC	
Oil	ND	---	151	ug/L	1	12/18/23 20:55	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 68 %*		*Limits: 50-150 %*	*1*	*12/18/23 20:55*	*NWTPH-Dx/SGC*	
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K1067**		
Diesel	ND	---	76.2	ug/L	1	11/29/23 20:42	NWTPH-Dx/SGC	
Oil	ND	---	152	ug/L	1	11/29/23 20:42	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 65 %*		*Limits: 50-150 %*	*1*	*11/29/23 20:42*	*NWTPH-Dx/SGC*	
FMW-155-111423 (A3K1435-17)				**Matrix: Water**		**Batch: 23K1067**		
Diesel	ND	---	76.2	ug/L	1	11/29/23 21:23	NWTPH-Dx/SGC	
Oil	ND	---	152	ug/L	1	11/29/23 21:23	NWTPH-Dx/SGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*	*1*	*11/29/23 21:23*	*NWTPH-Dx/SGC*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-156-111523 (A3K1435-06)				**Matrix: Water**		**Batch: 23K0755**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/18/23 16:56	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 84 %*	*Limits: 50-150 %*	*1*	*11/18/23 16:56*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*	*1*	*11/18/23 16:56*	*NWTPH-Gx (MS)*	
FMW-163-111523 (A3K1435-07)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/19/23 23:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 84 %*	*Limits: 50-150 %*	*1*	*11/19/23 23:23*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*	*1*	*11/19/23 23:23*	*NWTPH-Gx (MS)*	
FMW-158-111523 (A3K1435-08)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/19/23 23:45	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 82 %*	*Limits: 50-150 %*	*1*	*11/19/23 23:45*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*11/19/23 23:45*	*NWTPH-Gx (MS)*	
FMW-160-111423 (A3K1435-15)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/20/23 00:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 84 %*	*Limits: 50-150 %*	*1*	*11/20/23 00:07*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*11/20/23 00:07*	*NWTPH-Gx (MS)*	
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/20/23 00:30	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 84 %*	*Limits: 50-150 %*	*1*	*11/20/23 00:30*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*11/20/23 00:30*	*NWTPH-Gx (MS)*	
FMW-155-111423 (A3K1435-17)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/20/23 00:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 78 %*	*Limits: 50-150 %*	*1*	*11/20/23 00:52*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*	*1*	*11/20/23 00:52*	*NWTPH-Gx (MS)*	
FMW-161-111423 (A3K1435-18)				**Matrix: Water**		**Batch: 23K0756**		
Gasoline Range Organics	ND	50.0	100	ug/L	1	11/20/23 01:15	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)			*Recovery: 81 %*	*Limits: 50-150 %*	*1*	*11/20/23 01:15*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*11/20/23 01:15*	*NWTPH-Gx (MS)*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-156-111523 (A3K1435-06)				**Matrix: Water**		**Batch: 23K0755**		
Benzene	ND	0.100	0.200	ug/L	1	11/18/23 16:56	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/18/23 16:56	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/18/23 16:56	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/18/23 16:56	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*11/18/23 16:56*	*EPA 8260D*	
Toluene-d8 (Surr)			*104 %*	*80-120 %*	*1*	*11/18/23 16:56*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*11/18/23 16:56*	*EPA 8260D*	
FMW-163-111523 (A3K1435-07)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	**0.750**	0.100	0.200	ug/L	1	11/19/23 23:23	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/19/23 23:23	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/19/23 23:23	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/19/23 23:23	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*11/19/23 23:23*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*11/19/23 23:23*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*11/19/23 23:23*	*EPA 8260D*	
FMW-158-111523 (A3K1435-08)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	ND	0.100	0.200	ug/L	1	11/19/23 23:45	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/19/23 23:45	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/19/23 23:45	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/19/23 23:45	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits: 80-120 %*	*1*	*11/19/23 23:45*	*EPA 8260D*	
Toluene-d8 (Surr)			*107 %*	*80-120 %*	*1*	*11/19/23 23:45*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*11/19/23 23:45*	*EPA 8260D*	
FMW-160-111423 (A3K1435-15)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	**0.170**	0.100	0.200	ug/L	1	11/20/23 00:07	EPA 8260D	**J**
Toluene	ND	0.500	1.00	ug/L	1	11/20/23 00:07	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/20/23 00:07	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/20/23 00:07	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*11/20/23 00:07*	*EPA 8260D*	
Toluene-d8 (Surr)			*105 %*	*80-120 %*	*1*	*11/20/23 00:07*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*11/20/23 00:07*	*EPA 8260D*	

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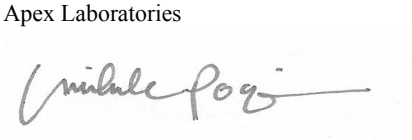

Michele Poquiz For Kurt Johnson, Senior Chemist

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6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	ND	0.100	0.200	ug/L	1	11/20/23 00:30	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/20/23 00:30	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/20/23 00:30	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/20/23 00:30	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*11/20/23 00:30*	*EPA 8260D*	
Toluene-d8 (Surr)			*104 %*	*80-120 %*	*1*	*11/20/23 00:30*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*11/20/23 00:30*	*EPA 8260D*	
FMW-155-111423 (A3K1435-17)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	ND	0.100	0.200	ug/L	1	11/20/23 00:52	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/20/23 00:52	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/20/23 00:52	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/20/23 00:52	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*11/20/23 00:52*	*EPA 8260D*	
Toluene-d8 (Surr)			*104 %*	*80-120 %*	*1*	*11/20/23 00:52*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*11/20/23 00:52*	*EPA 8260D*	
FMW-161-111423 (A3K1435-18)				**Matrix: Water**		**Batch: 23K0756**		
Benzene	ND	0.100	0.200	ug/L	1	11/20/23 01:15	EPA 8260D	
Toluene	ND	0.500	1.00	ug/L	1	11/20/23 01:15	EPA 8260D	
Ethylbenzene	ND	0.250	0.500	ug/L	1	11/20/23 01:15	EPA 8260D	
Xylenes, total	ND	0.750	1.50	ug/L	1	11/20/23 01:15	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*11/20/23 01:15*	*EPA 8260D*	
Toluene-d8 (Surr)			*105 %*	*80-120 %*	*1*	*11/20/23 01:15*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*11/20/23 01:15*	*EPA 8260D*	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-153-111523 (A3K1435-01RE1)				**Matrix: Water**		**Batch: 23K0832**		
1-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:21	EPA 8270E	
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:21	EPA 8270E	
Naphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:21	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*46 %*	*Limits: 44-120 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*51 %*	*44-120 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
Phenol-d6 (Surr)			*12 %*	*10-133 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*77 %*	*50-134 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
2-Fluorophenol (Surr)			*21 %*	*19-120 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*99 %*	*43-140 %*	*1*	*11/21/23 15:21*	*EPA 8270E*	
FMW-150-111523 (A3K1435-02)				**Matrix: Water**		**Batch: 23K0832**		
1-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:55	EPA 8270E	
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:55	EPA 8270E	
Naphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 15:55	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*59 %*	*Limits: 44-120 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*55 %*	*44-120 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
Phenol-d6 (Surr)			*17 %*	*10-133 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*61 %*	*50-134 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
2-Fluorophenol (Surr)			*26 %*	*19-120 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*103 %*	*43-140 %*	*1*	*11/21/23 15:55*	*EPA 8270E*	
OW-1-111523 (A3K1435-03)				**Matrix: Water**		**Batch: 23K0832**		
1-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 16:28	EPA 8270E	
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 16:28	EPA 8270E	
Naphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 16:28	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*67 %*	*Limits: 44-120 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*71 %*	*44-120 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
Phenol-d6 (Surr)			*13 %*	*10-133 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*61 %*	*50-134 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
2-Fluorophenol (Surr)			*31 %*	*19-120 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*124 %*	*43-140 %*	*1*	*11/21/23 16:28*	*EPA 8270E*	
OW-2-111523 (A3K1435-04)				**Matrix: Water**		**Batch: 23K0832**		
1-Methylnaphthalene	**0.0322**	0.0192	0.0385	ug/L	1	11/21/23 17:02	EPA 8270E	**J**

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ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Greg Peters	A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-2-111523 (A3K1435-04)				**Matrix: Water**		**Batch: 23K0832**		
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	11/21/23 17:02	EPA 8270E	
Naphthalene	**0.387**	0.0192	0.0385	ug/L	1	11/21/23 17:02	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*50 %*	*Limits: 44-120 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*51 %*	*44-120 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
Phenol-d6 (Surr)			*15 %*	*10-133 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*58 %*	*50-134 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
2-Fluorophenol (Surr)			*23 %*	*19-120 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*103 %*	*43-140 %*	*1*	*11/21/23 17:02*	*EPA 8270E*	
FMW-157-111523 (A3K1435-05)				**Matrix: Water**		**Batch: 23K0832**		**DCNT**
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 17:36	EPA 8270E	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 17:36	EPA 8270E	
Naphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 17:36	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*53 %*	*44-120 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
Phenol-d6 (Surr)			*18 %*	*10-133 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*69 %*	*50-134 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
2-Fluorophenol (Surr)			*23 %*	*19-120 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*110 %*	*43-140 %*	*1*	*11/21/23 17:36*	*EPA 8270E*	
FMW-156-111523 (A3K1435-06)				**Matrix: Water**		**Batch: 23K0832**		**DCNT**
1-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 18:10	EPA 8270E	
2-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 18:10	EPA 8270E	
Naphthalene	**0.0234**	0.0204	0.0408	ug/L	1	11/21/23 18:10	EPA 8270E	**J**
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*68 %*	*Limits: 44-120 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*71 %*	*44-120 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
Phenol-d6 (Surr)			*23 %*	*10-133 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*69 %*	*50-134 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
2-Fluorophenol (Surr)			*32 %*	*19-120 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*111 %*	*43-140 %*	*1*	*11/21/23 18:10*	*EPA 8270E*	
FMW-163-111523 (A3K1435-07)				**Matrix: Water**		**Batch: 23K0832**		**DCNT**
1-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 18:44	EPA 8270E	
2-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 18:44	EPA 8270E	

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-163-111523 (A3K1435-07)				**Matrix: Water**		**Batch: 23K0832**		**DCNT**
Naphthalene	**0.0755**	0.0204	0.0408	ug/L	1	11/21/23 18:44	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*57 %*	*44-120 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
Phenol-d6 (Surr)			*19 %*	*10-133 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*72 %*	*50-134 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
2-Fluorophenol (Surr)			*23 %*	*19-120 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*106 %*	*43-140 %*	*1*	*11/21/23 18:44*	*EPA 8270E*	
FMW-158-111523 (A3K1435-08)				**Matrix: Water**		**Batch: 23K0832**		**DCNT**
1-Methylnaphthalene	**0.0693**	0.0200	0.0400	ug/L	1	11/21/23 19:18	EPA 8270E	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 19:18	EPA 8270E	
Naphthalene	**0.0458**	0.0200	0.0400	ug/L	1	11/21/23 19:18	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*71 %*	*Limits: 44-120 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*66 %*	*44-120 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
Phenol-d6 (Surr)			*24 %*	*10-133 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*56 %*	*50-134 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
2-Fluorophenol (Surr)			*33 %*	*19-120 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*108 %*	*43-140 %*	*1*	*11/21/23 19:18*	*EPA 8270E*	
FMW-159-111523 (A3K1435-09RE1)				**Matrix: Water**		**Batch: 23K0891**		**DCNT**
1-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/22/23 14:11	EPA 8270E	
2-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/22/23 14:11	EPA 8270E	
Naphthalene	ND	0.0204	0.0408	ug/L	1	11/22/23 14:11	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*66 %*	*44-120 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	
Phenol-d6 (Surr)			*26 %*	*10-133 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*72 %*	*50-134 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	
2-Fluorophenol (Surr)			*39 %*	*19-120 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*105 %*	*43-140 %*	*1*	*11/22/23 14:11*	*EPA 8270E*	*Q-41*
OW-3-111523 (A3K1435-10RE1)				**Matrix: Water**		**Batch: 23K0891**		**DCNT**
1-Methylnaphthalene	ND	0.0206	0.0412	ug/L	1	11/22/23 14:45	EPA 8270E	
2-Methylnaphthalene	ND	0.0206	0.0412	ug/L	1	11/22/23 14:45	EPA 8270E	
Naphthalene	ND	0.0206	0.0412	ug/L	1	11/22/23 14:45	EPA 8270E	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-3-111523 (A3K1435-10RE1)				**Matrix: Water**		**Batch: 23K0891**		**DCNT**
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*41 %*	*Limits: 44-120 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	*S-03*
2-Fluorobiphenyl (Surr)			*48 %*	*44-120 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	
Phenol-d6 (Surr)			*18 %*	*10-133 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*65 %*	*50-134 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	
2-Fluorophenol (Surr)			*25 %*	*19-120 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*89 %*	*43-140 %*	*1*	*11/22/23 14:45*	*EPA 8270E*	*Q-41*
FMW-164-111523 (A3K1435-11)				**Matrix: Water**		**Batch: 23K0792**		
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 09:39	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 09:39	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 09:39	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*37 %*	*Limits: 44-120 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	*S-03*
2-Fluorobiphenyl (Surr)			*31 %*	*44-120 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	*S-03*
Phenol-d6 (Surr)			*10 %*	*10-133 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*62 %*	*50-134 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	
2-Fluorophenol (Surr)			*15 %*	*19-120 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	*S-03*
2,4,6-Tribromophenol (Surr)			*58 %*	*43-140 %*	*1*	*11/21/23 09:39*	*EPA 8270E*	
FMW-162-111523 (A3K1435-12)				**Matrix: Water**		**Batch: 23K0792**		**DCNT**
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 10:13	EPA 8270E	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 10:13	EPA 8270E	
Naphthalene	ND	0.0200	0.0400	ug/L	1	11/21/23 10:13	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*48 %*	*Limits: 44-120 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*41 %*	*44-120 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	*S-06*
Phenol-d6 (Surr)			*13 %*	*10-133 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*61 %*	*50-134 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	
2-Fluorophenol (Surr)			*21 %*	*19-120 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*73 %*	*43-140 %*	*1*	*11/21/23 10:13*	*EPA 8270E*	
FMW-152-111523 (A3K1435-13)				**Matrix: Water**		**Batch: 23K0792**		**DCNT**
1-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 10:47	EPA 8270E	
2-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 10:47	EPA 8270E	
Naphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 10:47	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-152-111523 (A3K1435-13)				**Matrix: Water**		**Batch: 23K0792**		**DCNT**
Surrogate: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*	*Limits: 44-120 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	
Phenol-d6 (Surr)			*22 %*	*10-133 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*68 %*	*50-134 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	
2-Fluorophenol (Surr)			*37 %*	*19-120 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*102 %*	*43-140 %*	*1*	*11/21/23 10:47*	*EPA 8270E*	
FMW-151-111523 (A3K1435-14)				**Matrix: Water**		**Batch: 23K0792**		
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 11:22	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 11:22	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 11:22	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 47 %*	*Limits: 44-120 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*46 %*	*44-120 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
Phenol-d6 (Surr)			*12 %*	*10-133 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*63 %*	*50-134 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
2-Fluorophenol (Surr)			*21 %*	*19-120 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*86 %*	*43-140 %*	*1*	*11/21/23 11:22*	*EPA 8270E*	
FMW-160-111423 (A3K1435-15)				**Matrix: Water**		**Batch: 23K0792**		**DCNT**
1-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 11:56	EPA 8270E	
2-Methylnaphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 11:56	EPA 8270E	
Naphthalene	ND	0.0204	0.0408	ug/L	1	11/21/23 11:56	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 65 %*	*Limits: 44-120 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*66 %*	*44-120 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
Phenol-d6 (Surr)			*20 %*	*10-133 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*74 %*	*50-134 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
2-Fluorophenol (Surr)			*35 %*	*19-120 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*108 %*	*43-140 %*	*1*	*11/21/23 11:56*	*EPA 8270E*	
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K0792**		
1-Methylnaphthalene	ND	0.0769	0.154	ug/L	4	11/20/23 19:23	EPA 8270E	
2-Methylnaphthalene	ND	0.0769	0.154	ug/L	4	11/20/23 19:23	EPA 8270E	
Naphthalene	**0.992**	0.0769	0.154	ug/L	4	11/20/23 19:23	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 45 %*	*Limits: 44-120 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*50 %*	*44-120 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-111423 (A3K1435-16)				**Matrix: Water**		**Batch: 23K0792**		
Surrogate: Phenol-d6 (Surr)		*Recovery:*	*16 %*	*Limits: 10-133 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*73 %*	*50-134 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	
2-Fluorophenol (Surr)			*24 %*	*19-120 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*109 %*	*43-140 %*	*4*	*11/20/23 19:23*	*EPA 8270E*	
FMW-155-111423 (A3K1435-17)				**Matrix: Water**		**Batch: 23K0792**		
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 12:30	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 12:30	EPA 8270E	
Naphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 12:30	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*75 %*	*44-120 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
Phenol-d6 (Surr)			*22 %*	*10-133 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*58 %*	*50-134 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
2-Fluorophenol (Surr)			*35 %*	*19-120 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*119 %*	*43-140 %*	*1*	*11/21/23 12:30*	*EPA 8270E*	
FMW-161-111423 (A3K1435-18)				**Matrix: Water**		**Batch: 23K0792**		
1-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 13:04	EPA 8270E	
2-Methylnaphthalene	ND	0.0189	0.0377	ug/L	1	11/21/23 13:04	EPA 8270E	
Naphthalene	**0.0503**	0.0189	0.0377	ug/L	1	11/21/23 13:04	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*40 %*	*Limits: 44-120 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	*S-06*
2-Fluorobiphenyl (Surr)			*51 %*	*44-120 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	
Phenol-d6 (Surr)			*12 %*	*10-133 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*81 %*	*50-134 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	
2-Fluorophenol (Surr)			*19 %*	*19-120 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*104 %*	*43-140 %*	*1*	*11/21/23 13:04*	*EPA 8270E*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0934 - EPA 3510C (Fuels/Acid Ext.)									Water			
Blank (23K0934-BLK1)			Prepared: 11/27/23 06:15		Analyzed: 11/27/23 19:19							
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 75 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23K0934-BS1)			Prepared: 11/27/23 06:15		Analyzed: 11/27/23 19:39							
NWTPH-Dx LL												
Diesel	360	---	80.0	ug/L	1	500	---	72	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 86 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23K0934-BSD1)			Prepared: 11/27/23 06:15		Analyzed: 11/27/23 19:59							**Q-19**
NWTPH-Dx LL												
Diesel	348	---	80.0	ug/L	1	500	---	70	36-132%	4	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 79 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K1067 - EPA 3510C (Fuels/Acid Ext.) w/SGC							**Water**					
Blank (23K1067-BLK1)			Prepared: 11/27/23 06:15		Analyzed: 11/29/23 19:01							
NWTPH-Dx/SGC												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (23K1067-BS1)			Prepared: 11/27/23 06:15		Analyzed: 11/29/23 19:21							
NWTPH-Dx/SGC												
Diesel	363	---	80.0	ug/L	1	500	---	73	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (23K1067-BSD1)			Prepared: 11/27/23 06:15		Analyzed: 11/29/23 19:41							**Q-19**
NWTPH-Dx/SGC												
Diesel	336	---	80.0	ug/L	1	500	---	67	36-132%	8	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 86 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23L0687 - EPA 3510C (Fuels/Acid Ext.) w/SGC							**Water**					
Blank (23L0687-BLK1)			Prepared: 11/27/23 06:15		Analyzed: 12/18/23 18:34							**A-01**
NWTPH-Dx/SGC												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 94 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (23L0687-BS1)			Prepared: 11/27/23 06:15		Analyzed: 12/18/23 18:58							**A-01**
NWTPH-Dx/SGC												
Diesel	465	---	80.0	ug/L	1	500	---	93	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 93 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS Dup (23L0687-BSD1)			Prepared: 11/27/23 06:15		Analyzed: 12/18/23 19:21							**A-01, Q-19**
NWTPH-Dx/SGC												
Diesel	463	---	80.0	ug/L	1	500	---	93	36-132%	0.4	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0755 - EPA 5030C									Water			
Blank (23K0755-BLK1)				Prepared: 11/18/23 09:29		Analyzed: 11/18/23 12:26						
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 87 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*			*"*					
LCS (23K0755-BS2)				Prepared: 11/18/23 09:29		Analyzed: 11/18/23 12:03						
NWTPH-Gx (MS)												
Gasoline Range Organics	475	50.0	100	ug/L	1	500	---	95	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 89 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					
Duplicate (23K0755-DUP1)				Prepared: 11/18/23 09:29		Analyzed: 11/18/23 17:19						
QC Source Sample: FMW-156-111523 (A3K1435-06)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 90 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*			*"*					

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0756 - EPA 5030C							**Water**					
Blank (23K0756-BLK1)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 18:55									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	50.0	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 81 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*			*"*					
LCS (23K0756-BS2)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 18:33									
NWTPH-Gx (MS)												
Gasoline Range Organics	503	50.0	100	ug/L	1	500	---	101	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 87 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*100 %*	*50-150 %*			*"*					
Duplicate (23K0756-DUP1)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 21:54									
QC Source Sample: Non-SDG (A3K1301-01RE1)												
Gasoline Range Organics	**1350**	1000	2000	ug/L	20	---	1430	---	---	5	30%	J
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 74 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*91 %*	*50-150 %*			*"*					
Duplicate (23K0756-DUP2)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 23:00									
QC Source Sample: Non-SDG (A3K1301-11RE1)												
Gasoline Range Organics	**1940**	1000	2000	ug/L	20	---	1920	---	---	1	30%	J
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 70 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*88 %*	*50-150 %*			*"*					

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0755 - EPA 5030C												**Water**
Blank (23K0755-BLK1)			Prepared: 11/18/23 09:29 Analyzed: 11/18/23 12:26									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
LCS (23K0755-BS1)			Prepared: 11/18/23 09:29 Analyzed: 11/18/23 11:34									
EPA 8260D												
Benzene	21.4	0.100	0.200	ug/L	1	20.0	---	107	80-120%	---	---	
Toluene	20.2	0.500	1.00	ug/L	1	20.0	---	101	80-120%	---	---	
Ethylbenzene	21.3	0.250	0.500	ug/L	1	20.0	---	107	80-120%	---	---	
Xylenes, total	55.3	0.750	1.50	ug/L	1	60.0	---	92	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				
Duplicate (23K0755-DUP1)			Prepared: 11/18/23 09:29 Analyzed: 11/18/23 17:19									
QC Source Sample: FMW-156-111523 (A3K1435-06)												
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	ND	---	---	---	30%	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (23K0755-MS1)			Prepared: 11/18/23 09:29 Analyzed: 11/18/23 17:42									
QC Source Sample: FMW-156-111523 (A3K1435-06)												
EPA 8260D												

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0755 - EPA 5030C							**Water**					
Matrix Spike (23K0755-MS1)			Prepared: 11/18/23 09:29 Analyzed: 11/18/23 17:42									
QC Source Sample: FMW-156-111523 (A3K1435-06)												
Benzene	21.9	0.100	0.200	ug/L	1	20.0	ND	109	79-120%	---	---	
Toluene	20.2	0.500	1.00	ug/L	1	20.0	ND	101	80-121%	---	---	
Ethylbenzene	21.7	0.250	0.500	ug/L	1	20.0	ND	109	79-121%	---	---	
Xylenes, total	55.9	0.750	1.50	ug/L	1	60.0	ND	93	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*94 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				

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Tigard, OR 97223
503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0756 - EPA 5030C												**Water**
Blank (23K0756-BLK1)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 18:55									
EPA 8260D												
Benzene	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	0.750	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
LCS (23K0756-BS1)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 17:48									
EPA 8260D												
Benzene	20.7	0.100	0.200	ug/L	1	20.0	---	104	80-120%	---	---	
Toluene	19.2	0.500	1.00	ug/L	1	20.0	---	96	80-120%	---	---	
Ethylbenzene	20.3	0.250	0.500	ug/L	1	20.0	---	102	80-120%	---	---	
Xylenes, total	52.8	0.750	1.50	ug/L	1	60.0	---	88	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*91 %*		*80-120 %*			*"*				
Duplicate (23K0756-DUP1)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 21:54									
QC Source Sample: Non-SDG (A3K1301-01RE1)												
Benzene	**286**	2.00	4.00	ug/L	20	---	286	---	---	0.1	30%	
Toluene	ND	10.0	20.0	ug/L	20	---	ND	---	---	---	30%	
Ethylbenzene	ND	5.00	10.0	ug/L	20	---	ND	---	---	---	30%	
Xylenes, total	ND	15.0	30.0	ug/L	20	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*104 %*		*80-120 %*			*"*				
Duplicate (23K0756-DUP2)			Prepared: 11/19/23 14:15 Analyzed: 11/19/23 23:00									
QC Source Sample: Non-SDG (A3K1301-11RE1)												
Benzene	**484**	2.00	4.00	ug/L	20	---	441	---	---	9	30%	
Toluene	ND	10.0	20.0	ug/L	20	---	ND	---	---	---	30%	

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ANALYTICAL REPORT

AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0756 - EPA 5030C												**Water**
Duplicate (23K0756-DUP2)				Prepared: 11/19/23 14:15 Analyzed: 11/19/23 23:00								
QC Source Sample: Non-SDG (A3K1301-11RE1)												
Ethylbenzene	**11.6**	5.00	10.0	ug/L	20	---	9.60	---	---	19	30%	
Xylenes, total	ND	15.0	30.0	ug/L	20	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 93 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (23K0756-MS1)				Prepared: 11/19/23 14:15 Analyzed: 11/20/23 01:37								
QC Source Sample: FMW-161-111423 (A3K1435-18)												
EPA 8260D												
Benzene	24.3	0.100	0.200	ug/L	1	20.0	ND	**121**	**79-120%**	---	---	Q-01
Toluene	23.0	0.500	1.00	ug/L	1	20.0	ND	115	80-121%	---	---	
Ethylbenzene	24.4	0.250	0.500	ug/L	1	20.0	ND	**122**	**79-121%**	---	---	Q-01
Xylenes, total	62.7	0.750	1.50	ug/L	1	60.0	ND	104	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*94 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*89 %*		*80-120 %*			*"*				

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AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0792 - EPA 3510C (Acid Extraction)												**Water**
Blank (23K0792-BLK1)			Prepared: 11/20/23 10:38 Analyzed: 11/20/23 17:41									
EPA 8270E												
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 73 %*		*Limits: 44-120 %*				*Dilution: 1x*			
2-Fluorobiphenyl (Surr)			*63 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*27 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*84 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*41 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*73 %*		*43-140 %*				*"*			
LCS (23K0792-BS1)			Prepared: 11/20/23 10:38 Analyzed: 11/20/23 18:15									
EPA 8270E												
1-Methylnaphthalene	2.09	0.0800	0.160	ug/L	4	4.00	---	52	41-120%	---	---	
2-Methylnaphthalene	2.04	0.0800	0.160	ug/L	4	4.00	---	51	40-121%	---	---	
Naphthalene	2.05	0.0800	0.160	ug/L	4	4.00	---	51	40-121%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 79 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*75 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*29 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*96 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*44 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*96 %*		*43-140 %*				*"*			
LCS Dup (23K0792-BSD1)			Prepared: 11/20/23 10:38 Analyzed: 11/20/23 18:49									**Q-19**
EPA 8270E												
1-Methylnaphthalene	2.09	0.0800	0.160	ug/L	4	4.00	---	52	41-120%	0.1	30%	
2-Methylnaphthalene	2.01	0.0800	0.160	ug/L	4	4.00	---	50	40-121%	1	30%	
Naphthalene	2.04	0.0800	0.160	ug/L	4	4.00	---	51	40-121%	0.2	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*73 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*32 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*93 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*47 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*92 %*		*43-140 %*				*"*			

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0792 - EPA 3510C (Acid Extraction)												**Water**

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Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0832 - EPA 3510C (Acid Extraction)												**Water**
Blank (23K0832-BLK1)			Prepared: 11/21/23 06:08		Analyzed: 11/21/23 13:38							
EPA 8270E												
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 75 %*		*Limits: 44-120 %*				*Dilution: 1x*			
2-Fluorobiphenyl (Surr)			*59 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*26 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*74 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*39 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*91 %*		*43-140 %*				*"*			
LCS (23K0832-BS1)			Prepared: 11/21/23 06:08		Analyzed: 11/21/23 14:12							
EPA 8270E												
1-Methylnaphthalene	2.37	0.0800	0.160	ug/L	4	4.00	---	59	41-120%	---	---	
2-Methylnaphthalene	2.28	0.0800	0.160	ug/L	4	4.00	---	57	40-121%	---	---	
Naphthalene	2.08	0.0800	0.160	ug/L	4	4.00	---	52	40-121%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 94 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*82 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*33 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*95 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*47 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*110 %*		*43-140 %*				*"*			
LCS Dup (23K0832-BSD1)			Prepared: 11/21/23 06:08		Analyzed: 11/21/23 14:46							**Q-19**
EPA 8270E												
1-Methylnaphthalene	2.05	0.0800	0.160	ug/L	4	4.00	---	51	41-120%	15	30%	
2-Methylnaphthalene	2.01	0.0800	0.160	ug/L	4	4.00	---	50	40-121%	13	30%	
Naphthalene	1.87	0.0800	0.160	ug/L	4	4.00	---	47	40-121%	11	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 86 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*75 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*29 %*		*10-133 %*				*"*			
p-Terphenyl-d14 (Surr)			*91 %*		*50-134 %*				*"*			
2-Fluorophenol (Surr)			*42 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*99 %*		*43-140 %*				*"*			

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0832 - EPA 3510C (Acid Extraction)												**Water**

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0891 - EPA 3510C (Acid Extraction)							**Water**					
Blank (23K0891-BLK1)			Prepared: 11/22/23 05:49 Analyzed: 11/22/23 12:27									
EPA 8270E												
1-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	**0.0264**	0.0200	0.0400	ug/L	1	---	---	---	---	---	---	B-02, J
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 79 %*	*Limits: 44-120 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*71 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*32 %*	*10-133 %*			*"*					
p-Terphenyl-d14 (Surr)			*87 %*	*50-134 %*			*"*					
2-Fluorophenol (Surr)			*50 %*	*19-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*87 %*	*43-140 %*			*"*					*Q-41*
LCS (23K0891-BS1)			Prepared: 11/22/23 05:49 Analyzed: 11/22/23 13:01									
EPA 8270E												
1-Methylnaphthalene	2.91	0.0800	0.160	ug/L	4	4.00	---	73	41-120%	---	---	
2-Methylnaphthalene	2.92	0.0800	0.160	ug/L	4	4.00	---	73	40-121%	---	---	
Naphthalene	2.69	0.0800	0.160	ug/L	4	4.00	---	67	40-121%	---	---	B-02
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 84 %*	*Limits: 44-120 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*84 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*29 %*	*10-133 %*			*"*					
p-Terphenyl-d14 (Surr)			*84 %*	*50-134 %*			*"*					
2-Fluorophenol (Surr)			*46 %*	*19-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*110 %*	*43-140 %*			*"*					*Q-41*
LCS Dup (23K0891-BSD1)			Prepared: 11/22/23 05:49 Analyzed: 11/22/23 13:36									**Q-19**
EPA 8270E												
1-Methylnaphthalene	2.55	0.0800	0.160	ug/L	4	4.00	---	64	41-120%	13	30%	
2-Methylnaphthalene	2.50	0.0800	0.160	ug/L	4	4.00	---	63	40-121%	15	30%	
Naphthalene	2.29	0.0800	0.160	ug/L	4	4.00	---	57	40-121%	16	30%	B-02
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 80 %*	*Limits: 44-120 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*79 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*27 %*	*10-133 %*			*"*					
p-Terphenyl-d14 (Surr)			*81 %*	*50-134 %*			*"*					
2-Fluorophenol (Surr)			*42 %*	*19-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*105 %*	*43-140 %*			*"*					*Q-41*

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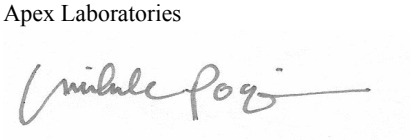

Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0891 - EPA 3510C (Acid Extraction)												**Water**

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ANALYTICAL REPORT

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K0934							
A3K1435-01	Water	NWTPH-Dx LL	11/15/23 17:05	11/27/23 10:07	1040mL/2mL	1000mL/2mL	0.96
A3K1435-02	Water	NWTPH-Dx LL	11/15/23 15:35	11/27/23 10:07	1050mL/2mL	1000mL/2mL	0.95
A3K1435-03	Water	NWTPH-Dx LL	11/15/23 14:15	11/27/23 10:07	1050mL/2mL	1000mL/2mL	0.95
A3K1435-04	Water	NWTPH-Dx LL	11/15/23 12:55	11/27/23 10:07	1040mL/2mL	1000mL/2mL	0.96
A3K1435-05	Water	NWTPH-Dx LL	11/15/23 11:25	11/27/23 10:07	1050mL/2mL	1000mL/2mL	0.95
A3K1435-06	Water	NWTPH-Dx LL	11/15/23 10:05	11/27/23 06:15	1040mL/2mL	1000mL/2mL	0.96
A3K1435-07	Water	NWTPH-Dx LL	11/15/23 08:35	11/27/23 06:15	1040mL/2mL	1000mL/2mL	0.96
A3K1435-08	Water	NWTPH-Dx LL	11/15/23 08:40	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-09	Water	NWTPH-Dx LL	11/15/23 10:05	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-10	Water	NWTPH-Dx LL	11/15/23 11:45	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-11RE1	Water	NWTPH-Dx LL	11/15/23 13:01	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-12RE1	Water	NWTPH-Dx LL	11/15/23 14:15	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-13	Water	NWTPH-Dx LL	11/15/23 15:51	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-14	Water	NWTPH-Dx LL	11/15/23 18:02	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-15	Water	NWTPH-Dx LL	11/14/23 14:25	11/27/23 06:15	1040mL/2mL	1000mL/2mL	0.96
A3K1435-16	Water	NWTPH-Dx LL	11/14/23 12:50	11/27/23 06:15	1050mL/2mL	1000mL/2mL	0.95
A3K1435-17	Water	NWTPH-Dx LL	11/14/23 12:30	11/27/23 06:15	1050mL/2mL	1000mL/2mL	0.95
A3K1435-18	Water	NWTPH-Dx LL	11/14/23 14:05	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.) w/SGC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K1067							
A3K1435-03	Water	NWTPH-Dx/SGC	11/15/23 14:15	11/27/23 10:07	1050mL/2mL	1000mL/2mL	0.95
A3K1435-16	Water	NWTPH-Dx/SGC	11/14/23 12:50	11/27/23 06:15	1050mL/2mL	1000mL/2mL	0.95
A3K1435-17	Water	NWTPH-Dx/SGC	11/14/23 12:30	11/27/23 06:15	1050mL/2mL	1000mL/2mL	0.95
Batch: 23L0687							
A3K1435-08	Water	NWTPH-Dx/SGC	11/15/23 08:40	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94
A3K1435-09	Water	NWTPH-Dx/SGC	11/15/23 10:05	11/27/23 06:15	1060mL/2mL	1000mL/2mL	0.94

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K0755							

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A3K1435-06	Water	NWTPH-Gx (MS)	11/15/23 10:05	11/18/23 09:29	5mL/5mL	5mL/5mL	1.00
Batch: 23K0756							
A3K1435-07	Water	NWTPH-Gx (MS)	11/15/23 08:35	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-08	Water	NWTPH-Gx (MS)	11/15/23 08:40	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-15	Water	NWTPH-Gx (MS)	11/14/23 14:25	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-16	Water	NWTPH-Gx (MS)	11/14/23 12:50	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-17	Water	NWTPH-Gx (MS)	11/14/23 12:30	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-18	Water	NWTPH-Gx (MS)	11/14/23 14:05	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K0755							
A3K1435-06	Water	EPA 8260D	11/15/23 10:05	11/18/23 09:29	5mL/5mL	5mL/5mL	1.00
Batch: 23K0756							
A3K1435-07	Water	EPA 8260D	11/15/23 08:35	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-08	Water	EPA 8260D	11/15/23 08:40	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-15	Water	EPA 8260D	11/14/23 14:25	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-16	Water	EPA 8260D	11/14/23 12:50	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-17	Water	EPA 8260D	11/14/23 12:30	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00
A3K1435-18	Water	EPA 8260D	11/14/23 14:05	11/19/23 14:15	5mL/5mL	5mL/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K0792							
A3K1435-11	Water	EPA 8270E	11/15/23 13:01	11/20/23 10:42	1060mL/1mL	1000mL/1mL	0.94
A3K1435-12	Water	EPA 8270E	11/15/23 14:15	11/20/23 10:42	1000mL/1mL	1000mL/1mL	1.00
A3K1435-13	Water	EPA 8270E	11/15/23 15:51	11/20/23 10:41	980mL/1mL	1000mL/1mL	1.02
A3K1435-14	Water	EPA 8270E	11/15/23 18:02	11/20/23 10:41	1060mL/1mL	1000mL/1mL	0.94
A3K1435-15	Water	EPA 8270E	11/14/23 14:25	11/20/23 10:41	980mL/1mL	1000mL/1mL	1.02
A3K1435-16	Water	EPA 8270E	11/14/23 12:50	11/20/23 10:41	1040mL/1mL	1000mL/1mL	0.96
A3K1435-17	Water	EPA 8270E	11/14/23 12:30	11/20/23 10:41	1060mL/1mL	1000mL/1mL	0.94
A3K1435-18	Water	EPA 8270E	11/14/23 14:05	11/20/23 10:41	1060mL/1mL	1000mL/1mL	0.94

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832

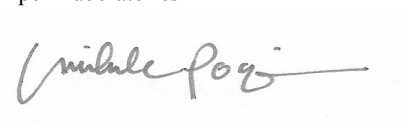
SAMPLE PREPARATION INFORMATION

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23K0832							
A3K1435-01RE1	Water	EPA 8270E	11/15/23 17:05	11/21/23 06:08	1040mL/1mL	1000mL/1mL	0.96
A3K1435-02	Water	EPA 8270E	11/15/23 15:35	11/21/23 06:08	1040mL/1mL	1000mL/1mL	0.96
A3K1435-03	Water	EPA 8270E	11/15/23 14:15	11/21/23 06:08	1040mL/1mL	1000mL/1mL	0.96
A3K1435-04	Water	EPA 8270E	11/15/23 12:55	11/21/23 06:08	1040mL/1mL	1000mL/1mL	0.96
A3K1435-05	Water	EPA 8270E	11/15/23 11:25	11/21/23 06:08	1000mL/1mL	1000mL/1mL	1.00
A3K1435-06	Water	EPA 8270E	11/15/23 10:05	11/21/23 06:08	980mL/1mL	1000mL/1mL	1.02
A3K1435-07	Water	EPA 8270E	11/15/23 08:35	11/21/23 06:08	980mL/1mL	1000mL/1mL	1.02
A3K1435-08	Water	EPA 8270E	11/15/23 08:40	11/21/23 06:08	1000mL/1mL	1000mL/1mL	1.00
Batch: 23K0891							
A3K1435-09RE1	Water	EPA 8270E	11/15/23 10:05	11/22/23 05:49	980mL/1mL	1000mL/1mL	1.02
A3K1435-10RE1	Water	EPA 8270E	11/15/23 11:45	11/22/23 05:49	970mL/1mL	1000mL/1mL	1.03

Apex Laboratories



Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

A-01	QC was re-created for silica gel clean up
B-02	Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
DCNT	Sample decanted due to the presence of sediment. Sample bottle not rinsed with solvent.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
S-03	Sample re-extract, or the analysis of an associated Batch QC sample, confirms surrogate failure due to sample matrix effect.
S-06	Surrogate recovery is outside of established control limits.

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ANALYTICAL REPORT

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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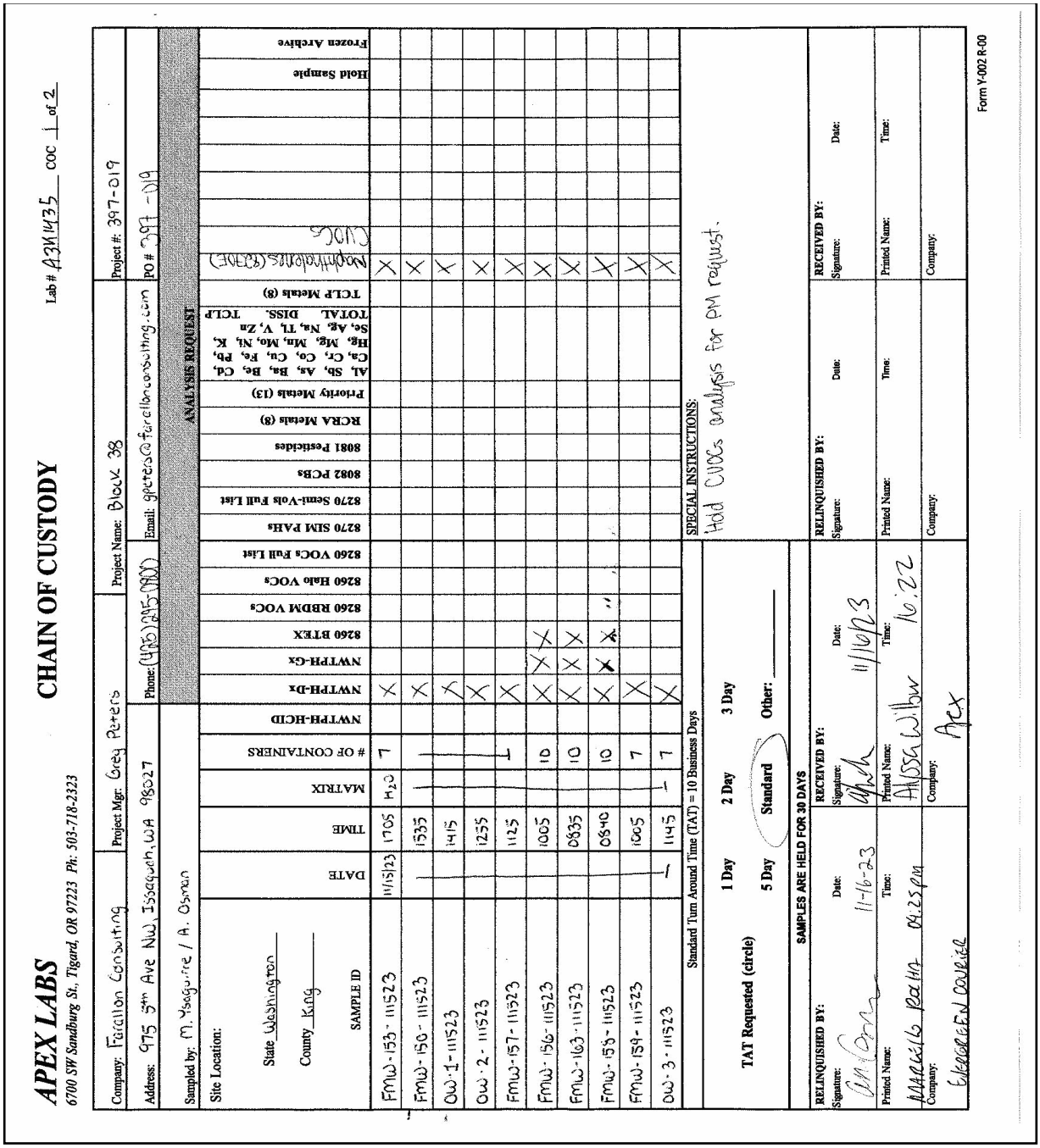

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3K1435 COC 1 of 2

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: (425) 295-0800 | Email: gpeters@farallonconsulting.com | PO # 397-019
Sampled by: M. Yaggie / A. Osman
Site Location: State Washington County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Geochemistry (GEOCHEM)	Hold Samples	Frozen Archive
FMW-153-111523	11/15/23	1705	H2O	7		X														X		
FMW-150-111523	"	1535	"	"		X														X		
OW-1-111523	"	1415	"	"		X														X		
OW-2-111523	"	1255	"	"		X														X		
FMW-157-111523	"	1125	"	4		X														X		
FMW-156-111523	"	1005	"	10		X	X	X												X		
FMW-163-111523	"	0835	"	10		X	X	X												X		
FMW-155-111523	"	0840	"	10		X	X	X	"	"										X		
FMW-159-111523	"	1005	"	7		X														X		
OW-3-111523	"	1145	"	7		X														X		

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: ____

SPECIAL INSTRUCTIONS: Hold CVOCs analysis for PM request.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:	11/16/23	Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Company:	11-16-23	Company:	10:22	Company:		Company:	

Form Y-002 R-00

Apex Laboratories

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503-718-2323
ORELAP ID: **OR100062**

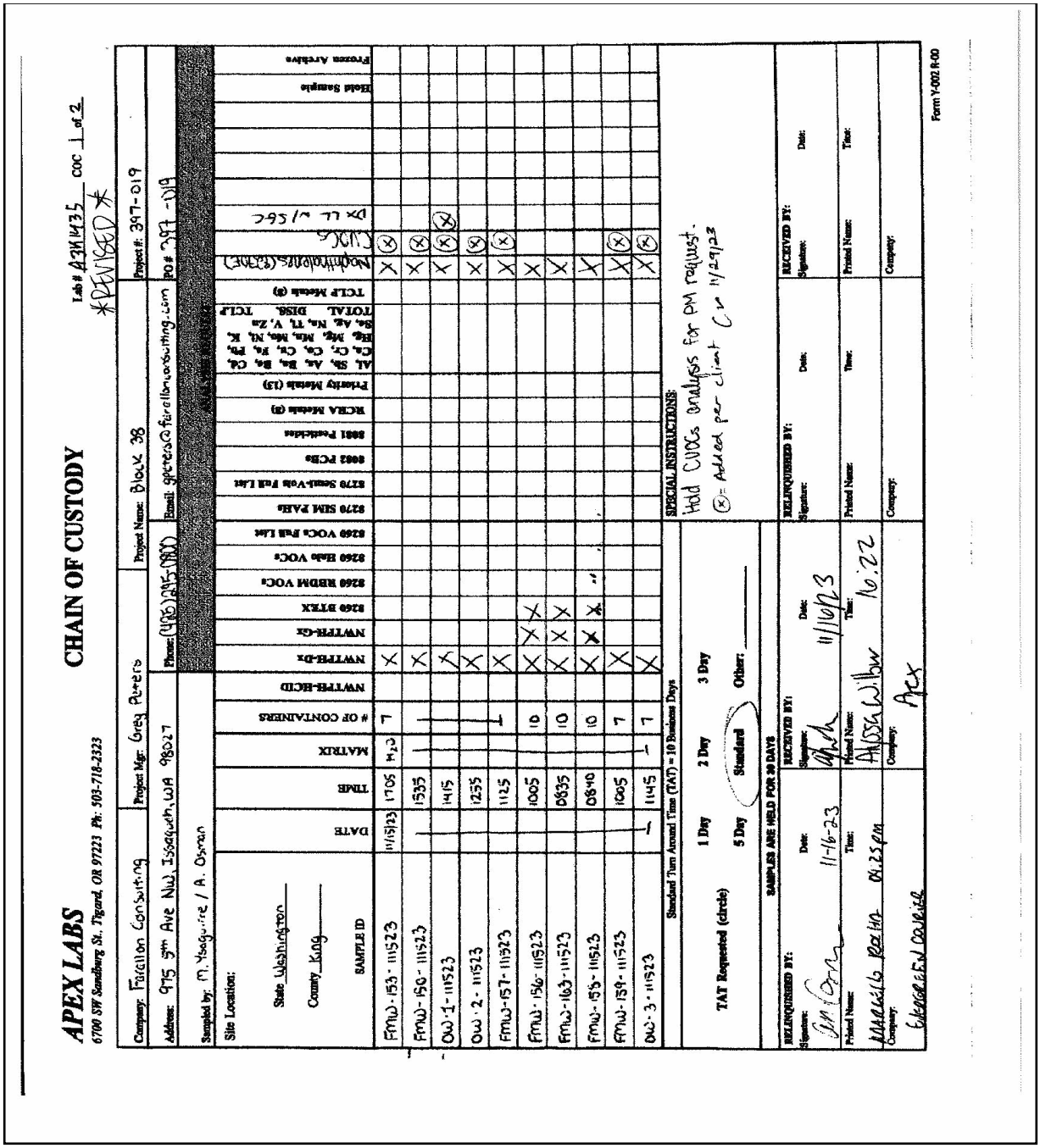
ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Greg Peters**

Report ID:
A3K1435 - 12 22 23 1832



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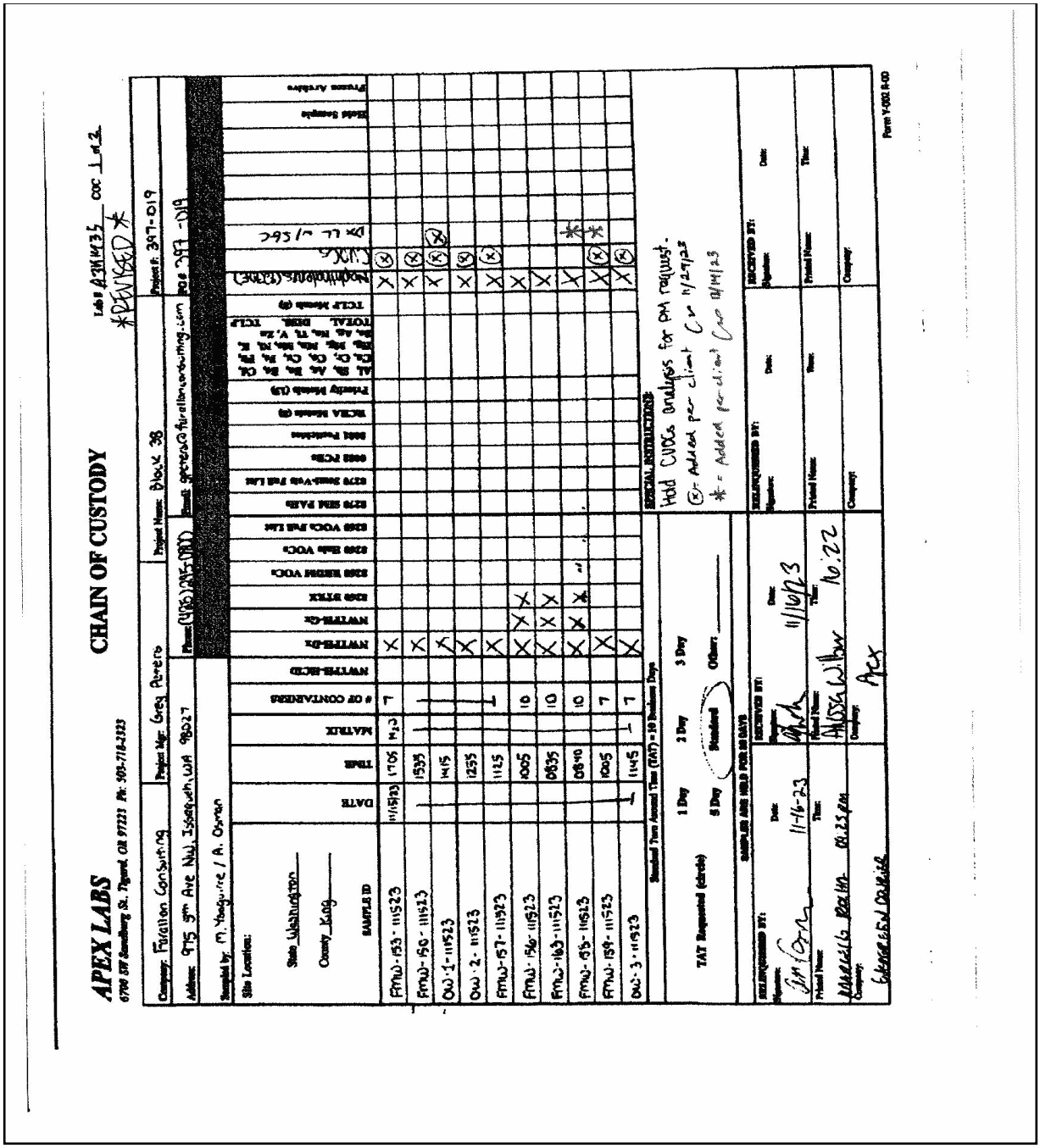
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**



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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

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Farallon-Seattle	Project: **397-019 Block 38 West**	
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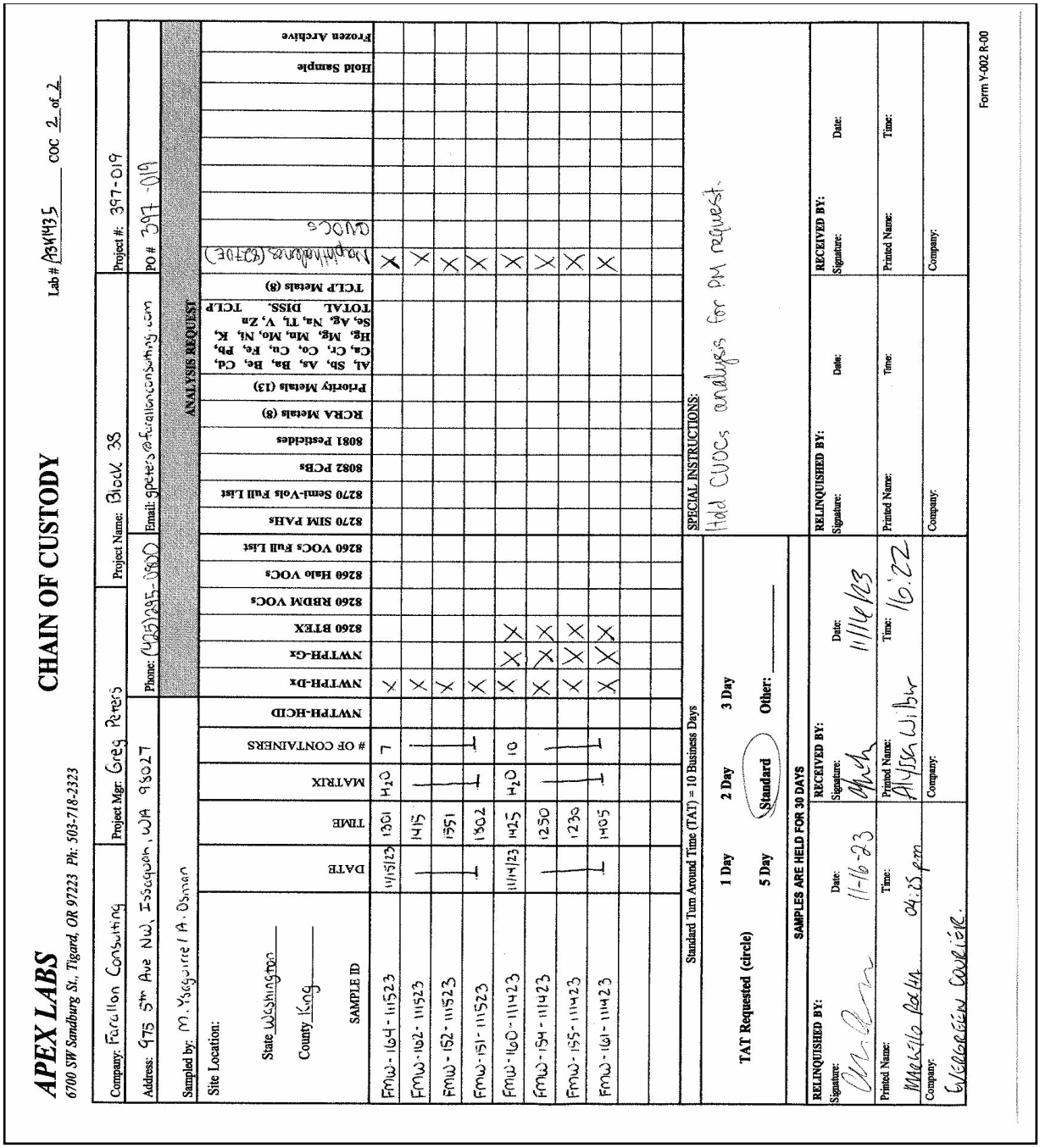

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3K1435 COC 2 of 2

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: (425)295-0800 | Email: gpeters@farallonconsulting.com | PO # 397-019
Sampled by: M. Yaggarre / A. Osman

ANALYSIS REQUEST

Site Location: State Washington, County King	SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hydrocarbons (8270E)	CUOCs	Hold Sample	Frozen Archive
	FMW-164-111523	11/15/23	1301	H_2O	7		X													X				
	FMW-162-111523	"	1415	"	1		X													X				
	FMW-152-111523	"	1351	"	1		X													X				
	FMW-151-111523	"	1302	"	1		X													X				
	FMW-160-111423	11/14/23	1425	H_2O	10		X	X	X											X				
	FMW-154-111423	"	1250	"	1		X	X	X											X				
	FMW-155-111423	"	1230	"	1		X	X	X											X				
	FMW-161-111423	"	1405	"	1		X	X	X											X				

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SPECIAL INSTRUCTIONS: Hold CUOCs analysis for PM request.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 11-16-23	Date: 11/16/23	Date:	Date:
Time: 04:25 pm	Time: 16:22	Time:	Time:
Printed Name: Michelle Poquiz	Printed Name: Alyssa Wilbur	Printed Name:	Printed Name:
Company: Evergreen Analytical	Company:	Company:	Company:

Form Y-002 R-00

Apex Laboratories

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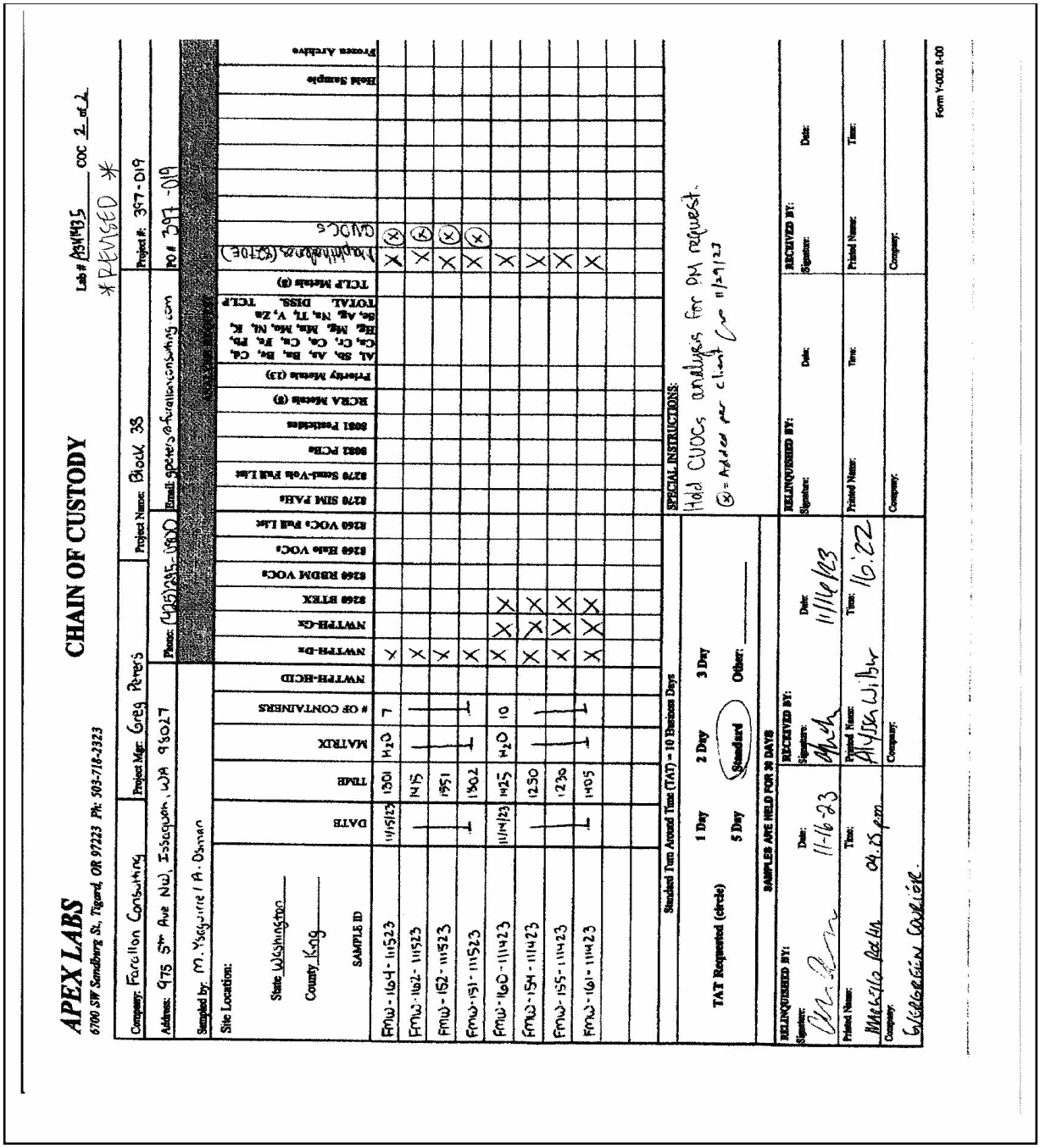
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**



APEX LABS
6700 SW Sandburg St. Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3K1435 COC 2 of 2
*REVISED *

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: (425)295-0800 | Email: gpeters@farallonconsulting.com | PO # 397-019
Sampled by: M. Yasgur / A. Osman

Site Location: State Washington County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOC+ PAH List	8270 SIM PAHs	8270 Semi-Vols PAH List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS.	TCLP Metals (8)	cVOCs	Hold Sample	Process Archive
FMW-164-111523	11/15/23	1301	H2O	7		X	X	X	X											X		
FMW-162-111523		N15				X	X	X	X											X		
FMW-152-111523		1951				X	X	X	X											X		
FMW-151-111523		1902				X	X	X	X											X		
FMW-160-111423	11/14/23	1425	H2O	10		X	X	X	X											X		
FMW-154-111423		1230				X	X	X	X											X		
FMW-155-111423		1230				X	X	X	X											X		
FMW-161-111423		1405				X	X	X	X											X		

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day (Standard) Other:

SPECIAL INSTRUCTIONS:
Hold cVOCs analyses for DM request.
(X) = Added per client (on 11/29/23

RELINQUISHED BY: Signature: Date: 11/16/23 Printed Name: Company: Farallon Consulting
RECEIVED BY: Signature: Date: 11/16/23 Printed Name: Time: 16:22 Company:

SAMPLES ARE HELD FOR 30 DAYS
RELINQUISHED BY: Signature: Date: 11-16-23 Printed Name: Time: 04:15 pm Company:
RECEIVED BY: Signature: Printed Name: Time: Company:

Form Y-002 R-00

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ORELAP ID: **OR100062**

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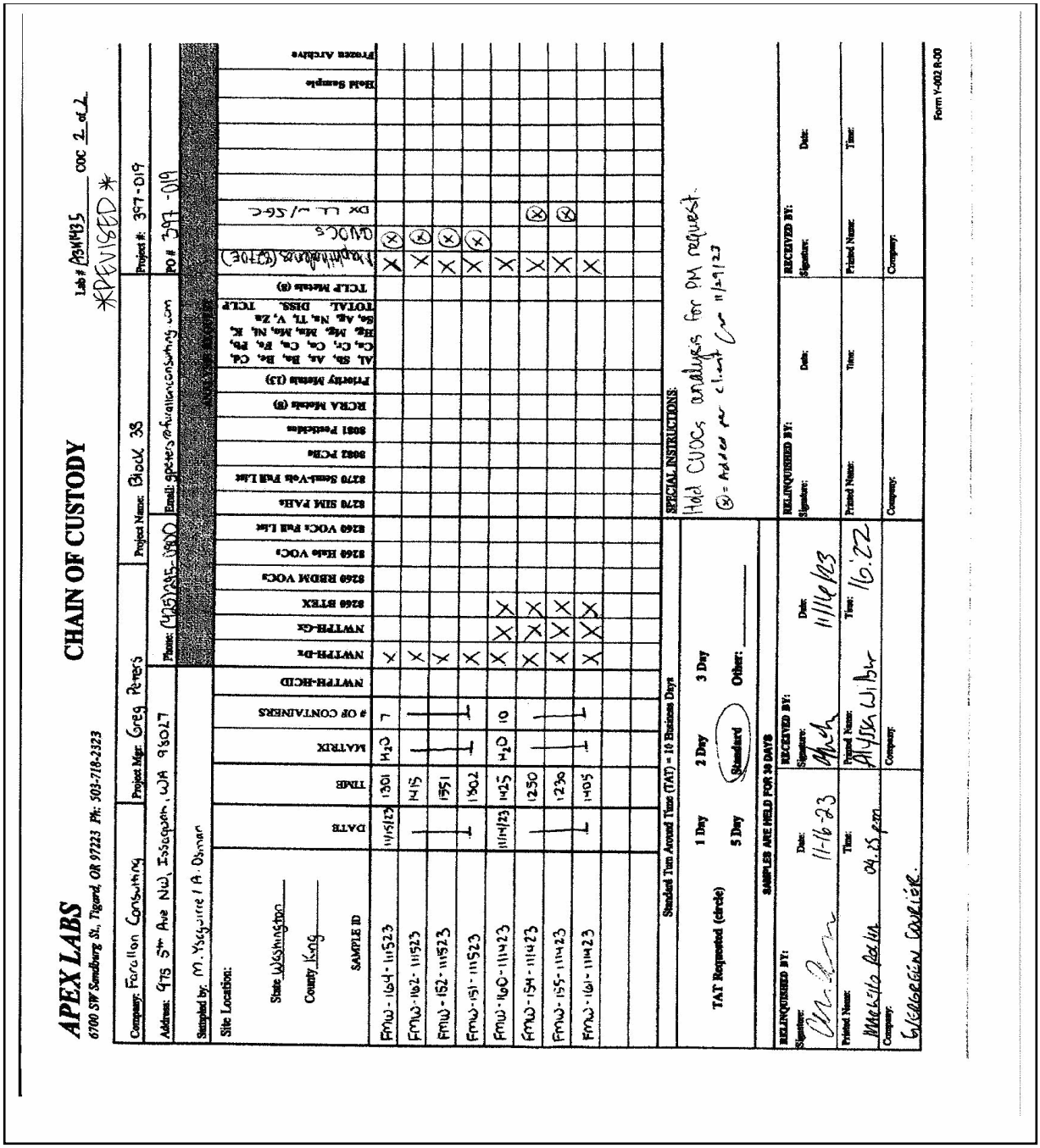

APEX LABS
6700 SW Sandburg St, Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A3K1435 COC 1 of 1
REVISED

Company: Farallon Consulting | Project Mgr: Greg Peters | Project Name: Block 38 | Project #: 397-019
Address: 975 5th Ave NW, Issaquah, WA 98027 | Phone: (425)295-0800 | Email: gpeters@farallonconsulting.com | PO # 397-019
Sampled by: M. Yaguinto / A. Osman
Site Location: State Washington, County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RSKM VOCs	8260 Halo VOCs	8260 VOC+ PAH List	8270 SIM PAHs	8270 Semi-Vols PAH List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Cyanide (Total)	DX LL / SG-C	Hold Sample	Freeze Archive
FMW-164-111523	11/15/23	1301	H_2O	7		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-162-111523		1415		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-152-111523		1951		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-151-111523		1902		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-160-111423	11/14/23	1425	H_2O	10		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-154-111423		1250		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-155-111423		1230		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FMW-161-111423		1405		1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SPECIAL INSTRUCTIONS:
Hold CVOCs analysis for PM request.
(X) = Added per client Em 11/29/23

SAMPLERS ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:	11/16/23	Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time: 16:22	Printed Name:	Time:	Printed Name:	Time:
Company: Farallon Consulting	11-16-23 04:15 pm	Company:		Company:		Company:	

Form Y-002 R-00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

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APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3K1435

Project/Project #: Block 38 397-019

Delivery Info:

Date/time received: 11/16/23 @ 16:22 By: DAW

Delivered by: Apex__Client__ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen X Other__

Cooler Inspection Date/time inspected: 11/16/23 @ 16:25 By: DAW

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.9	3.1	2.5	1.0	5.1	5.3	4.8
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/(N)) Possible reason why: ____

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 11/17/23 @ 1024 By: JS

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments ____

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ____ pH ID: A23I72

Comments: ____

Additional information: ____

Labeled by: DJS

Witness: KAM aac for kam 11/17/23

Cooler Inspected by: AJM/KAG 11/17

Form V-003 R-01

Apex Laboratories

Michele Poquiz

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Greg Peters**	**A3K1435 - 12 22 23 1832**

pg2

APEX LABS COOLER RECEIPT FORM

Client: Farallon Consulting Element WO#: A3 K1435

Project/Project #: Block 38 397-019

Delivery Info:

Date/time received: 11/16/23 @ 16:22 By: APW

Delivered by: Apex__Client__ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen X Other__

Cooler Inspection Date/time inspected: 11/16/23 @ 16:25 By: APW

Chain of Custody included? Yes X No _____

Signed/dated by client? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	5.3	4.5					
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 11/17/23 @ 1024 By: JS

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes X No ___ Comments:

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes X No___NA___ pH ID: A23I172

Comments:

Additional information:

Labeled by: DJS

Witness: KAM

Cooler Inspected by: AJM/KAC JS 11/17

Form Y-003 R-01

Apex Laboratories

Michele Poquiz

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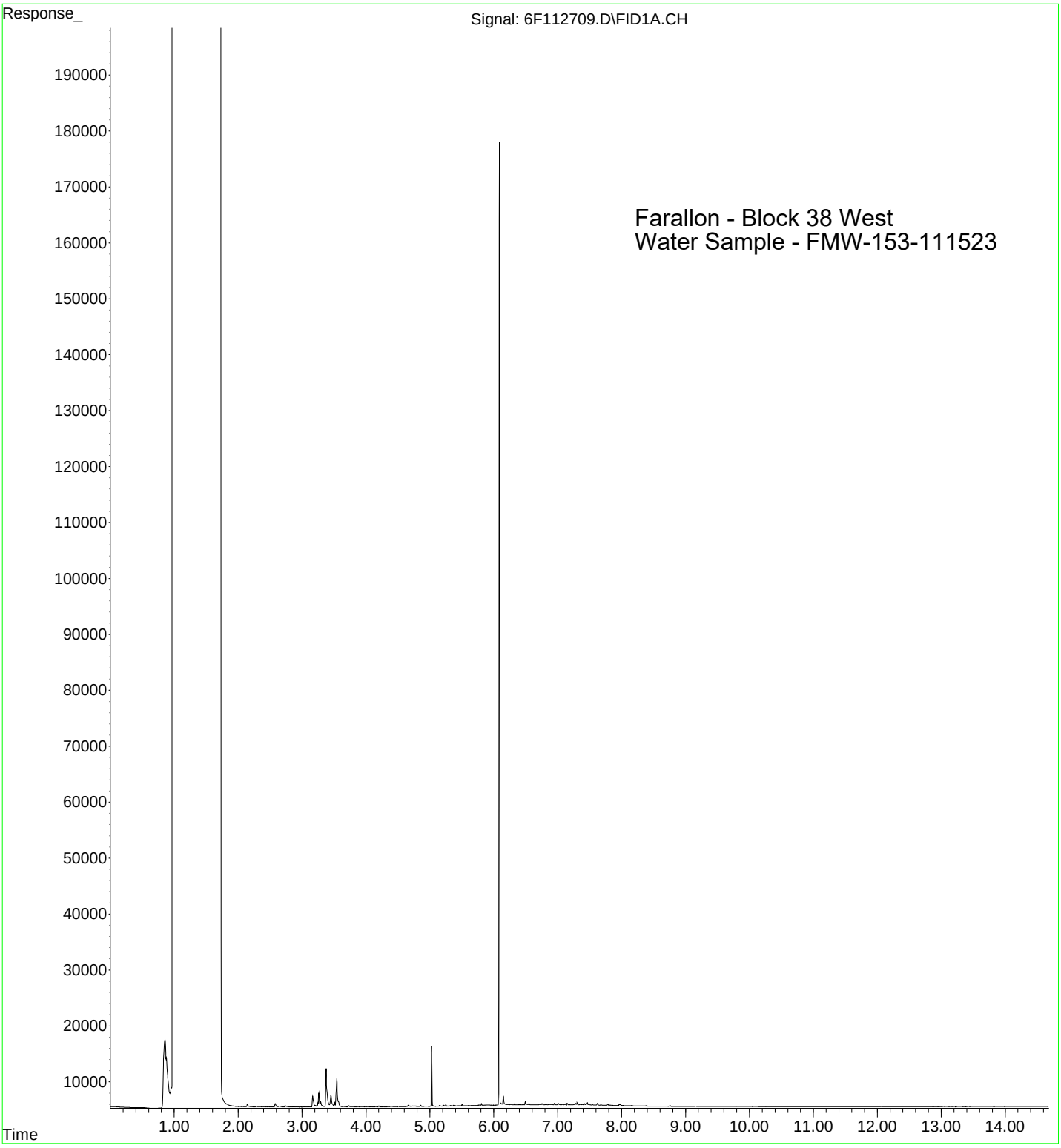
Michele Poquiz For Kurt Johnson, Senior Chemist

File   :C:\gcms\1\data\3K27060\6F112709.D
Operator   : BLL
Acquired   : 27 Nov 2023 20:19   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3K1435-01
Misc Info :
Vial Number: 6



File :C:\gcms\1\data\3K27060\6F112710.D
Operator : BLL
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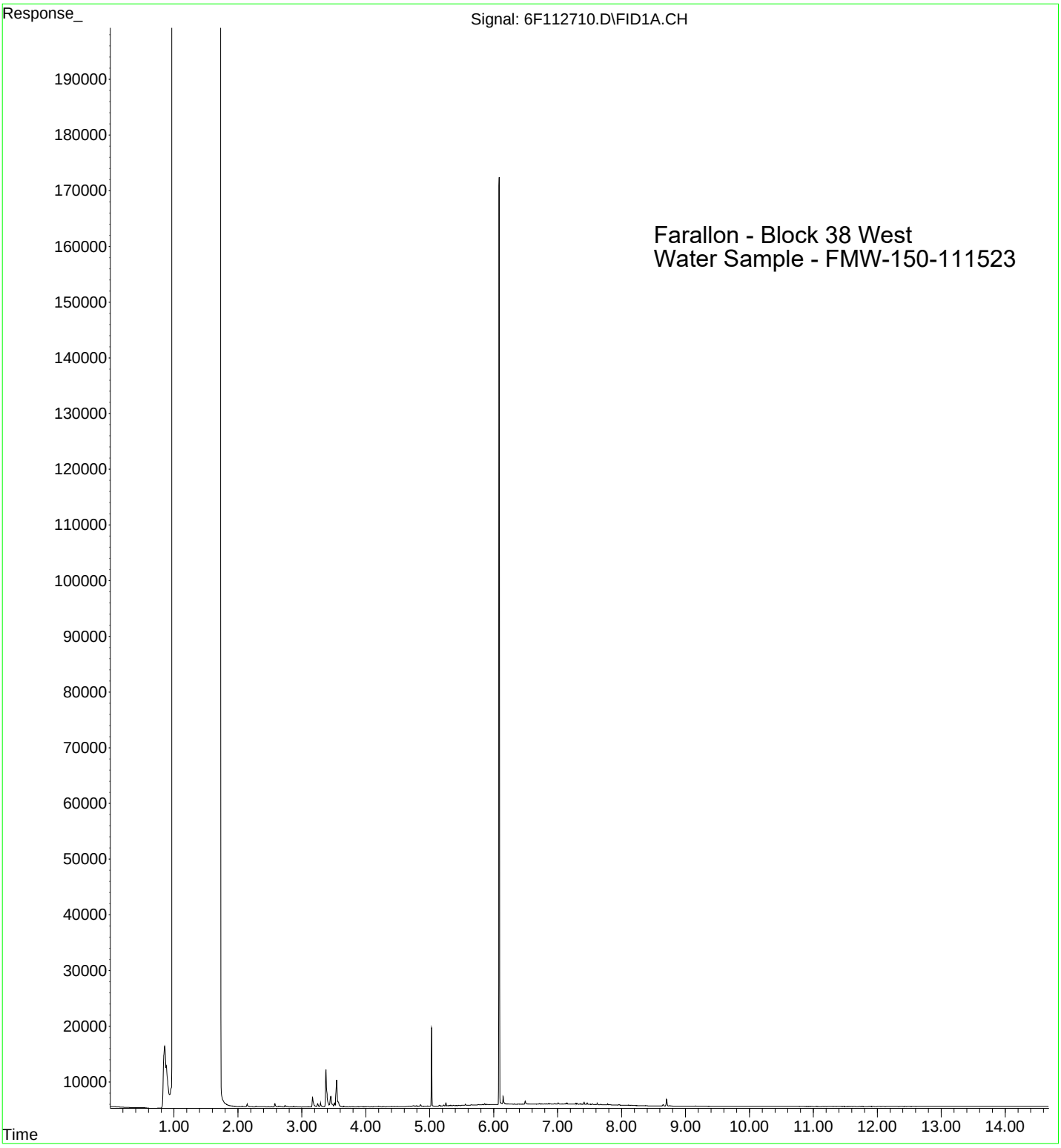
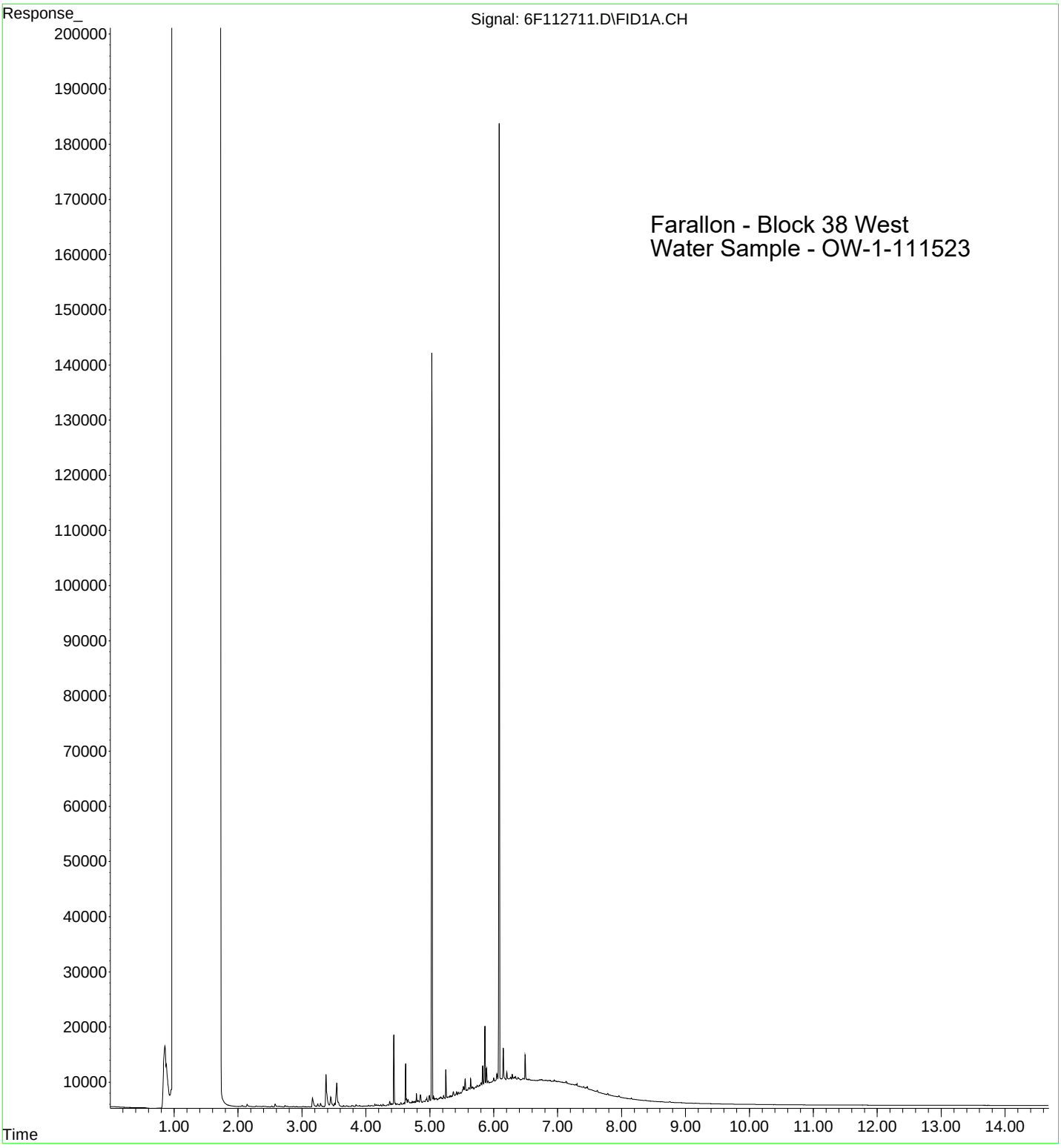
Instrument : HP G1530A
Sample Name: A3K1435-02
Misc Info :
Vial Number: 7



File :C:\gcms\1\data\3K27060\6F112711.D
Operator : BLL
Acquired : 27 Nov 2023 21:00 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-03
Misc Info :
Vial Number: 8



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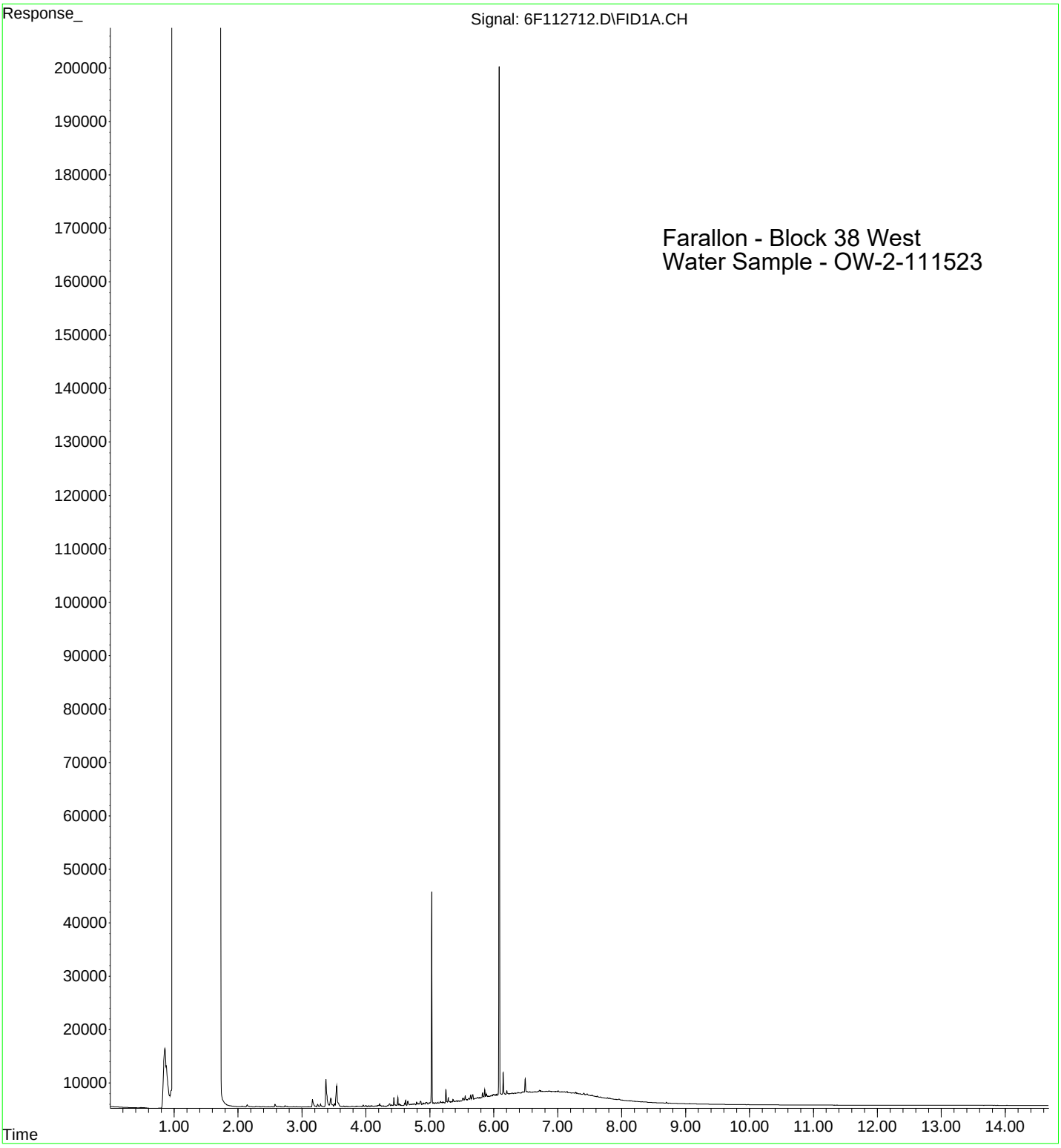
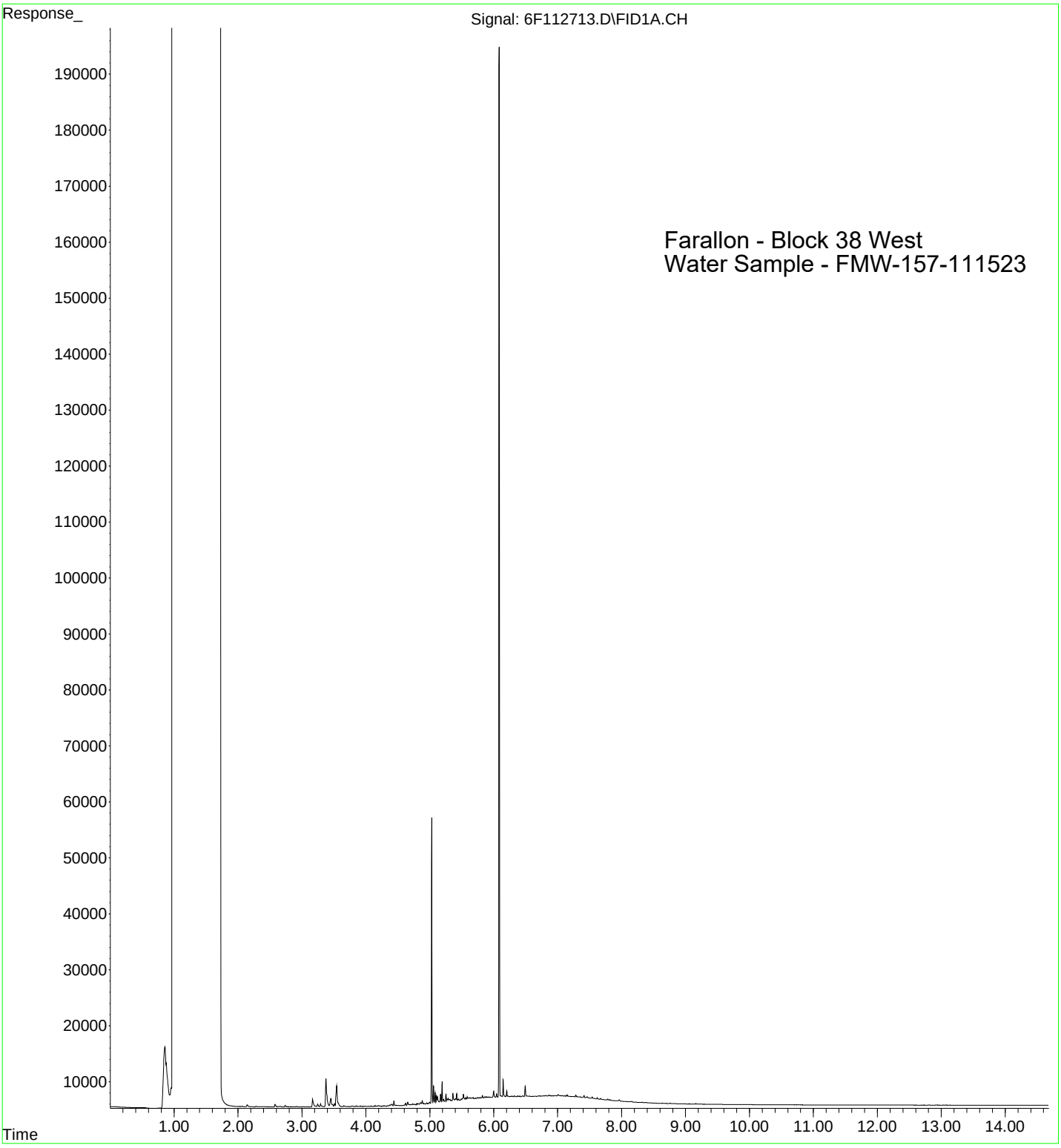
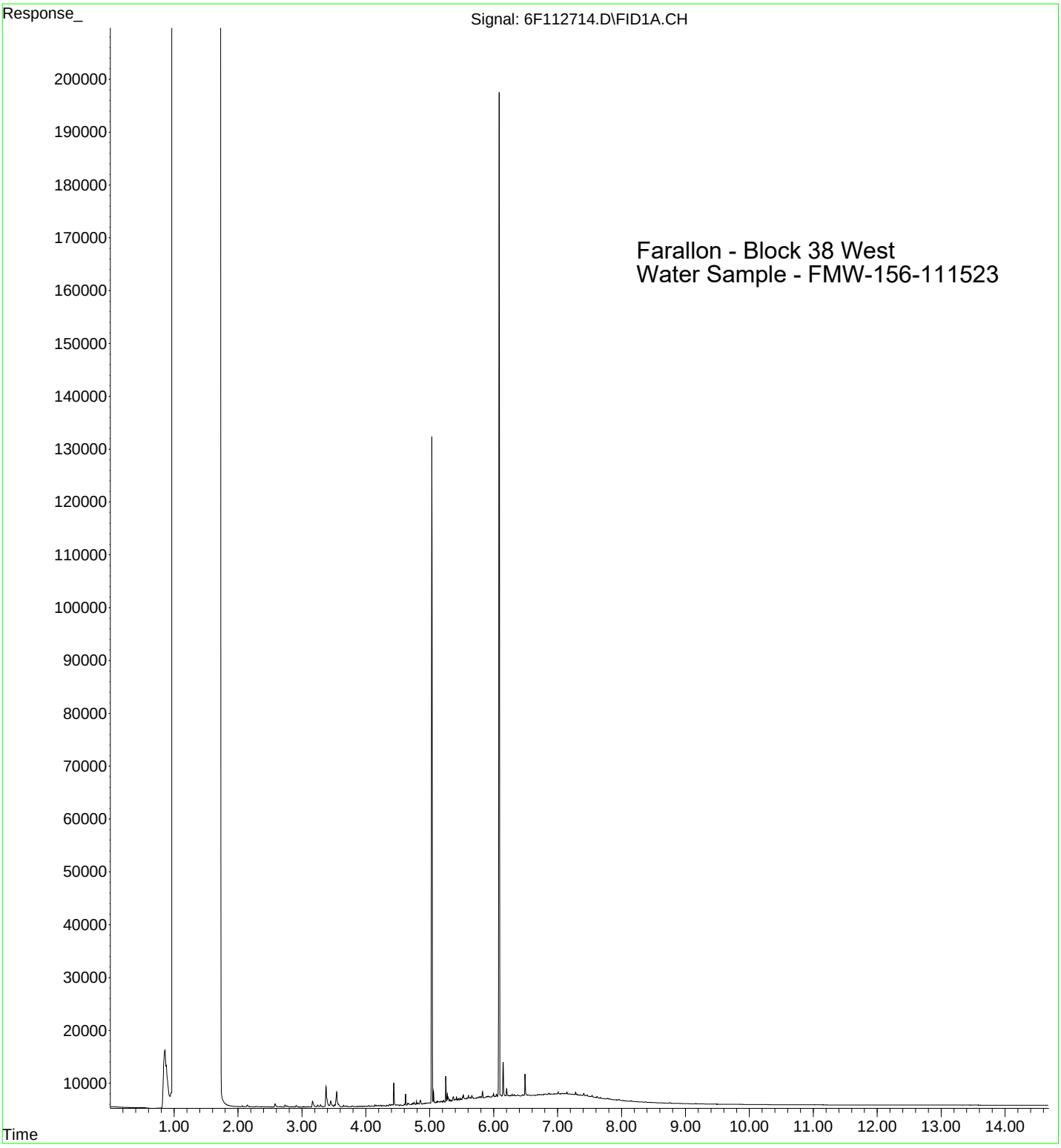
Operator   : BLL
Acquired   : 27 Nov 2023 21:20   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3K1435-04
Misc Info :
Vial Number: 9



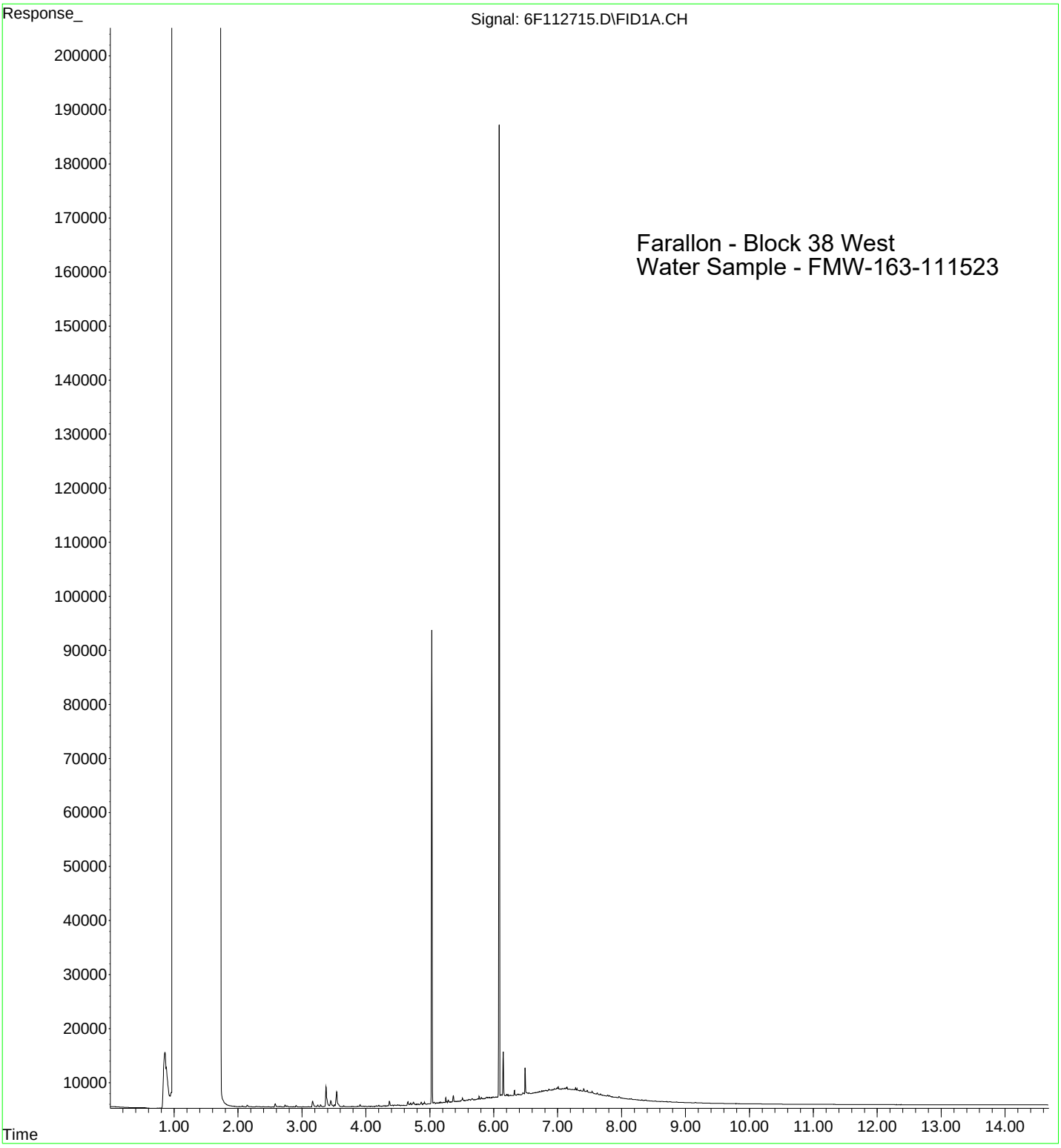
File :C:\gcms\1\data\3K27060\6F112713.D
Operator : BLL
Acquired : 27 Nov 2023 21:40 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-05
Misc Info :
Vial Number: 10



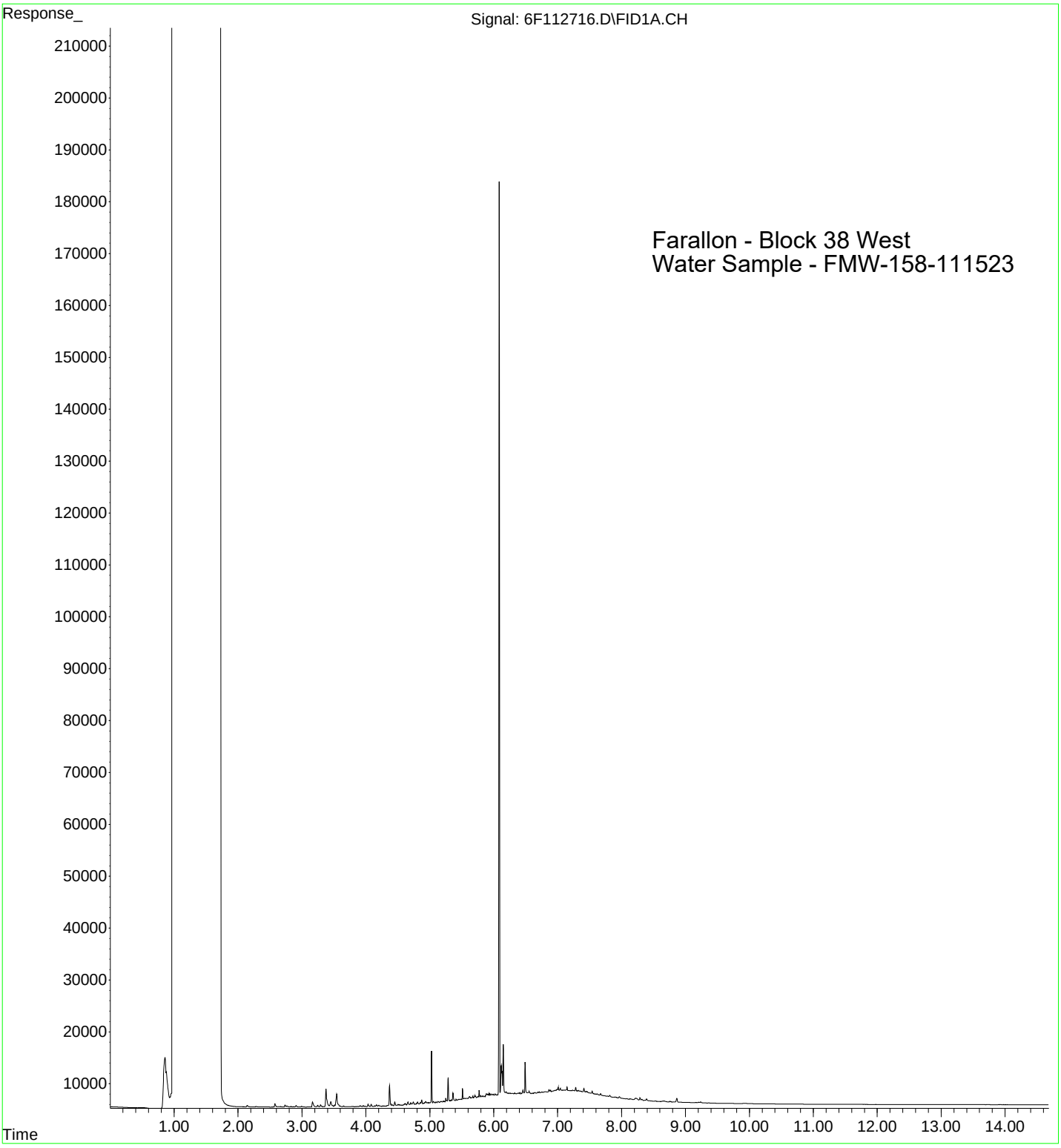
File :C:\gcms\1\data\3K27060\6F112714.D
Operator : BLL
Acquired : 27 Nov 2023 22:00 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-06
Misc Info :
Vial Number: 11



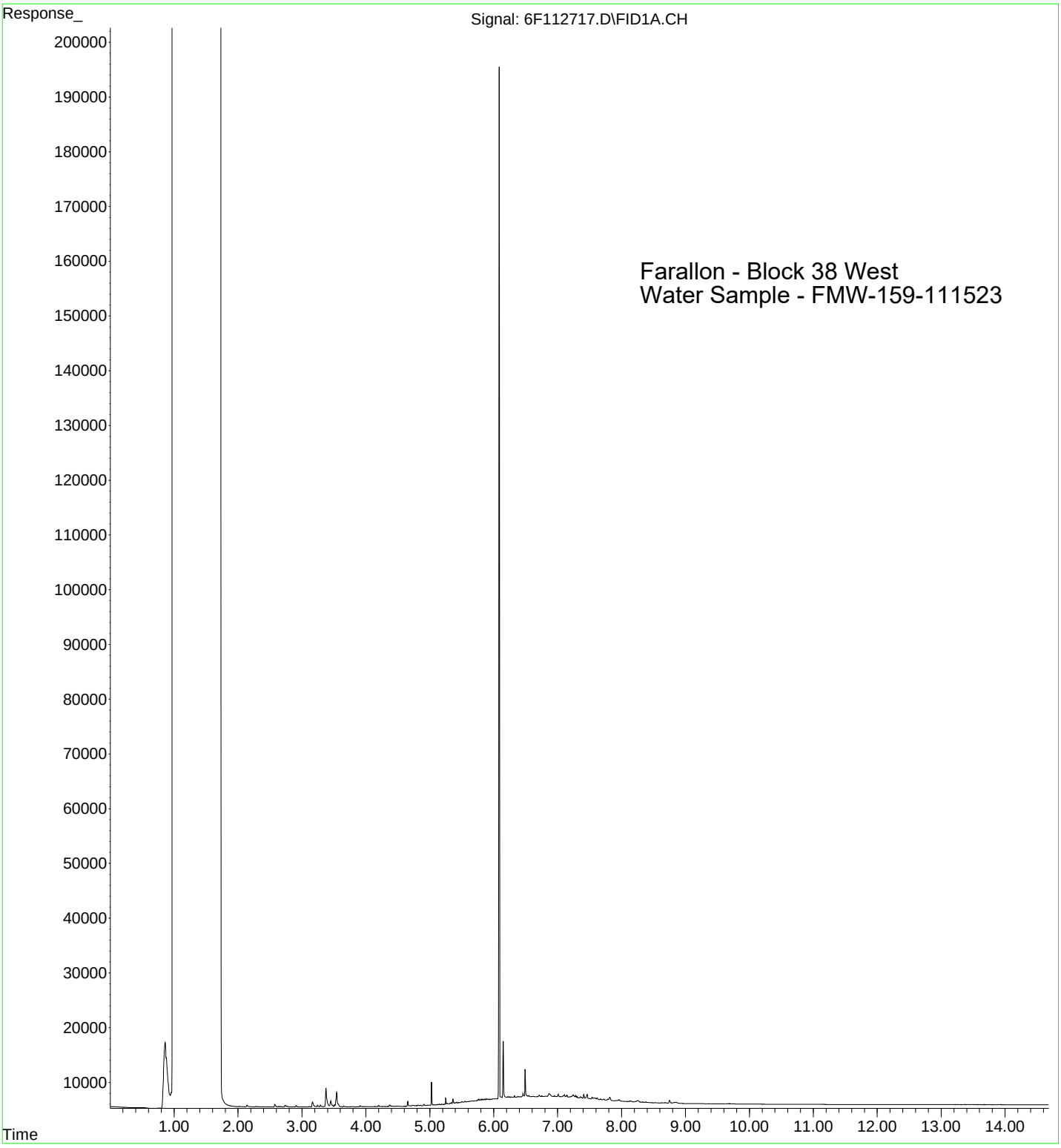
File :C:\gcms\1\data\3K27060\6F112715.D
Operator : BLL
Acquired : 27 Nov 2023 22:20 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-07
Misc Info :
Vial Number: 12



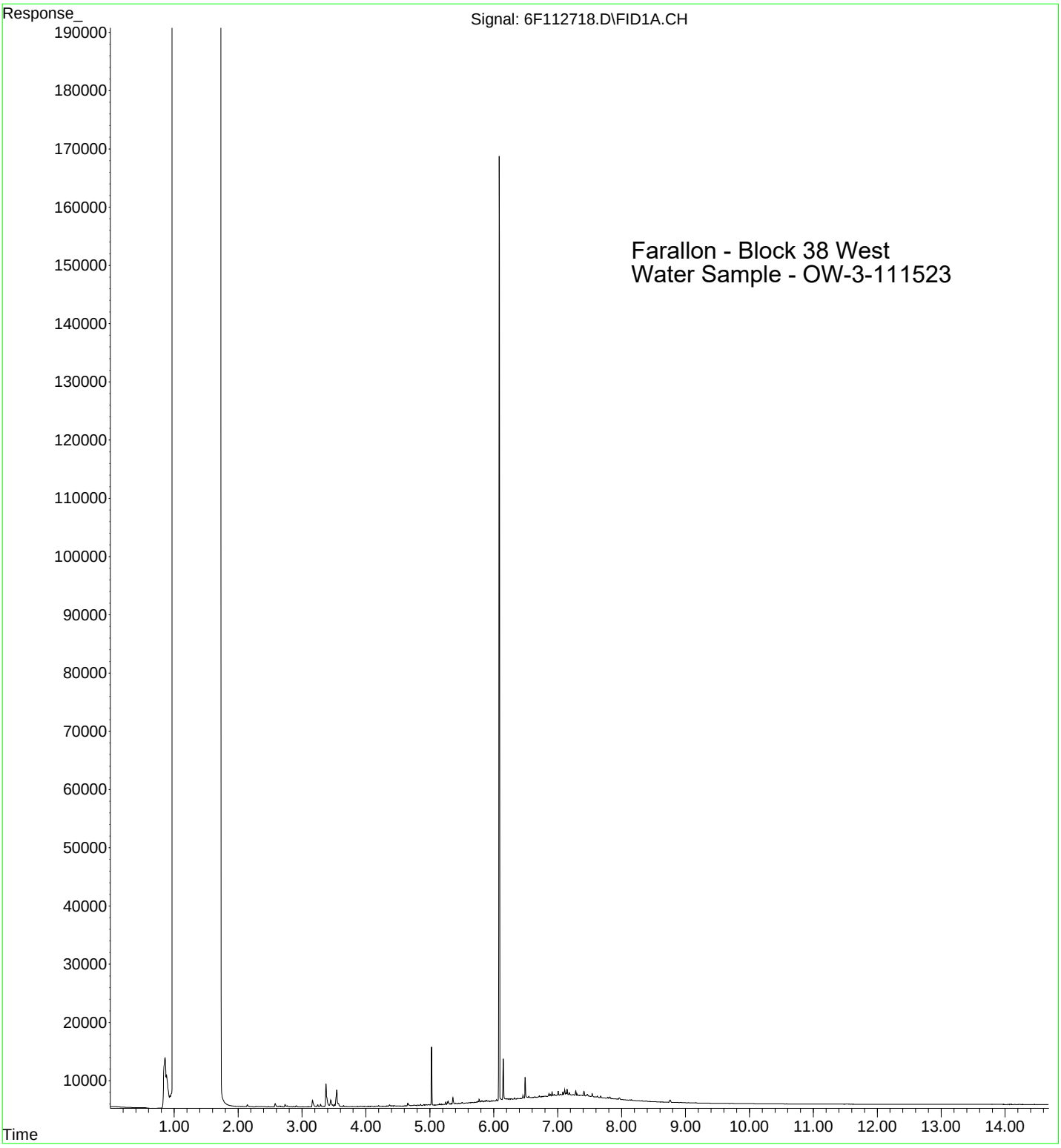
File :C:\gcms\1\data\3K27060\6F112716.D
Operator : BLL
Acquired : 27 Nov 2023 22:41 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-08
Misc Info :
Vial Number: 13



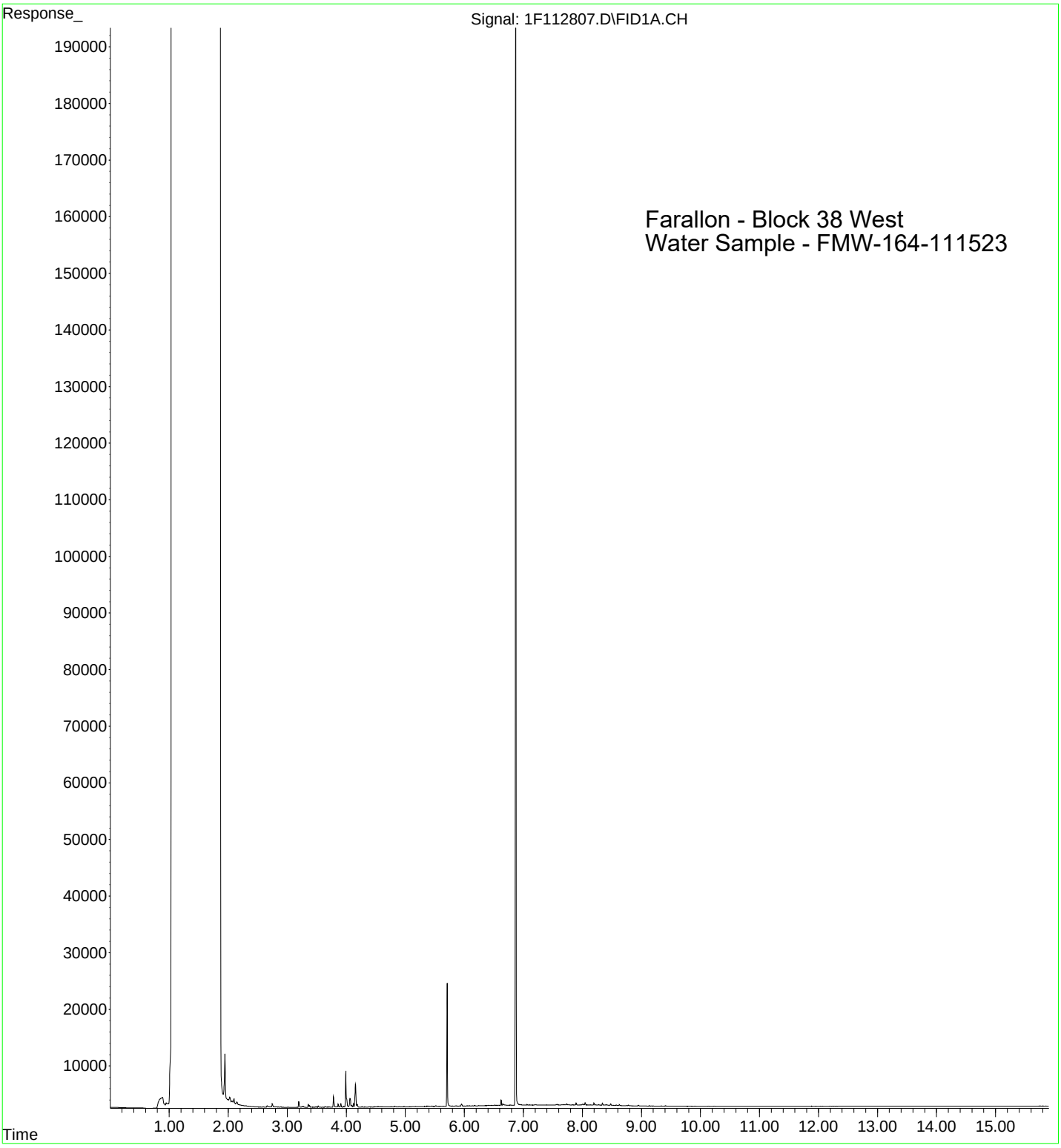
File :C:\gcms\1\data\3K27060\6F112717.D
Operator : BLL
Acquired : 27 Nov 2023 23:01 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-09
Misc Info :
Vial Number: 14



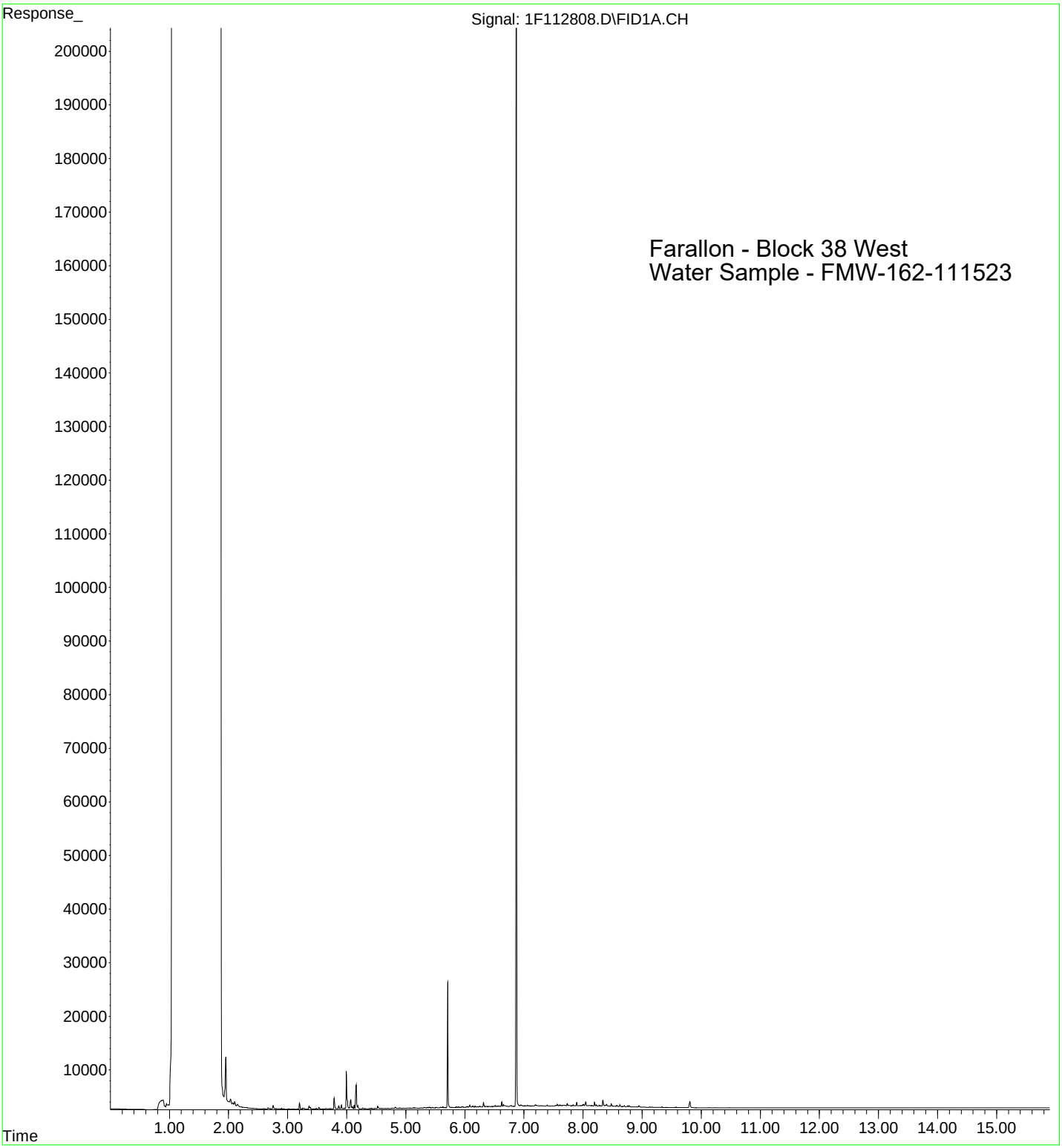
File :C:\gcms\1\data\3K27060\6F112718.D
Operator : BLL
Acquired : 27 Nov 2023 23:21 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-10
Misc Info :
Vial Number: 15



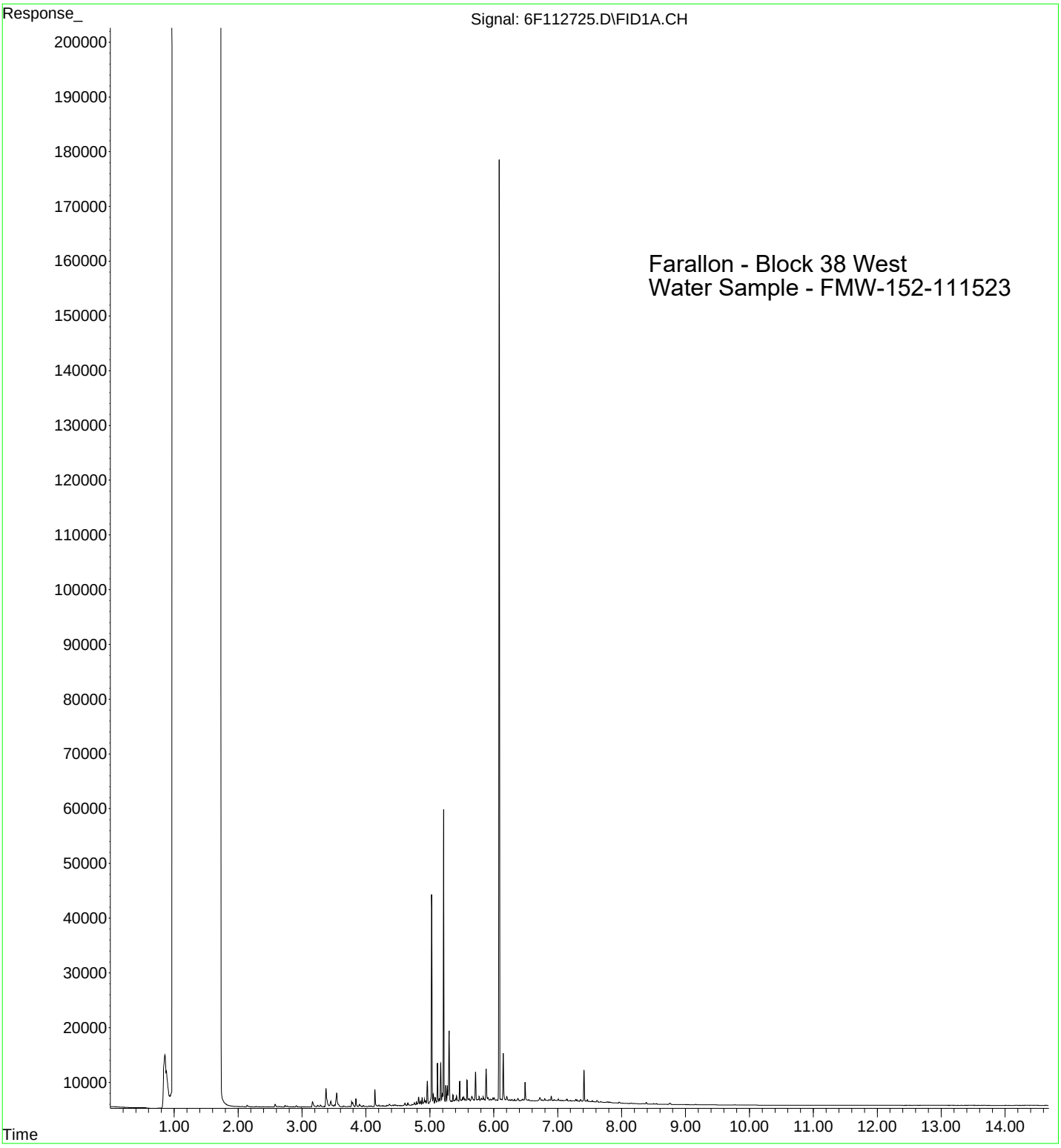
File :C:\gcms\1\data\3K28001\1F112807.D
Operator : BLL
Acquired : 28 Nov 2023 8:50 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A3K1435-11RE1
Misc Info :
Vial Number: 4



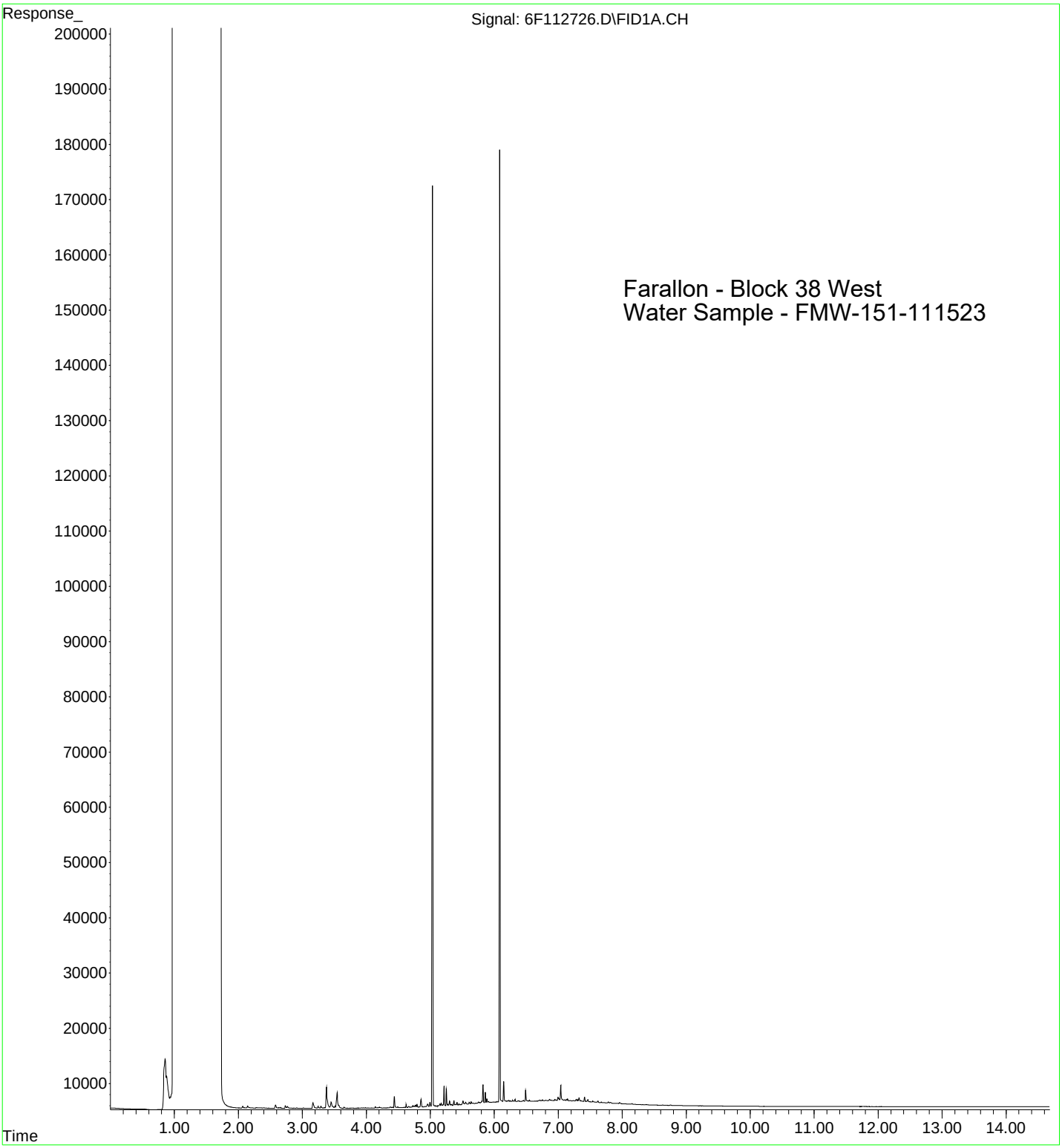
File   :C:\gcms\1\data\3K28001\1F112808.D
Operator   : BLL
Acquired   : 28 Nov 2023   9:23   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3K1435-12RE1
Misc Info :
Vial Number: 5



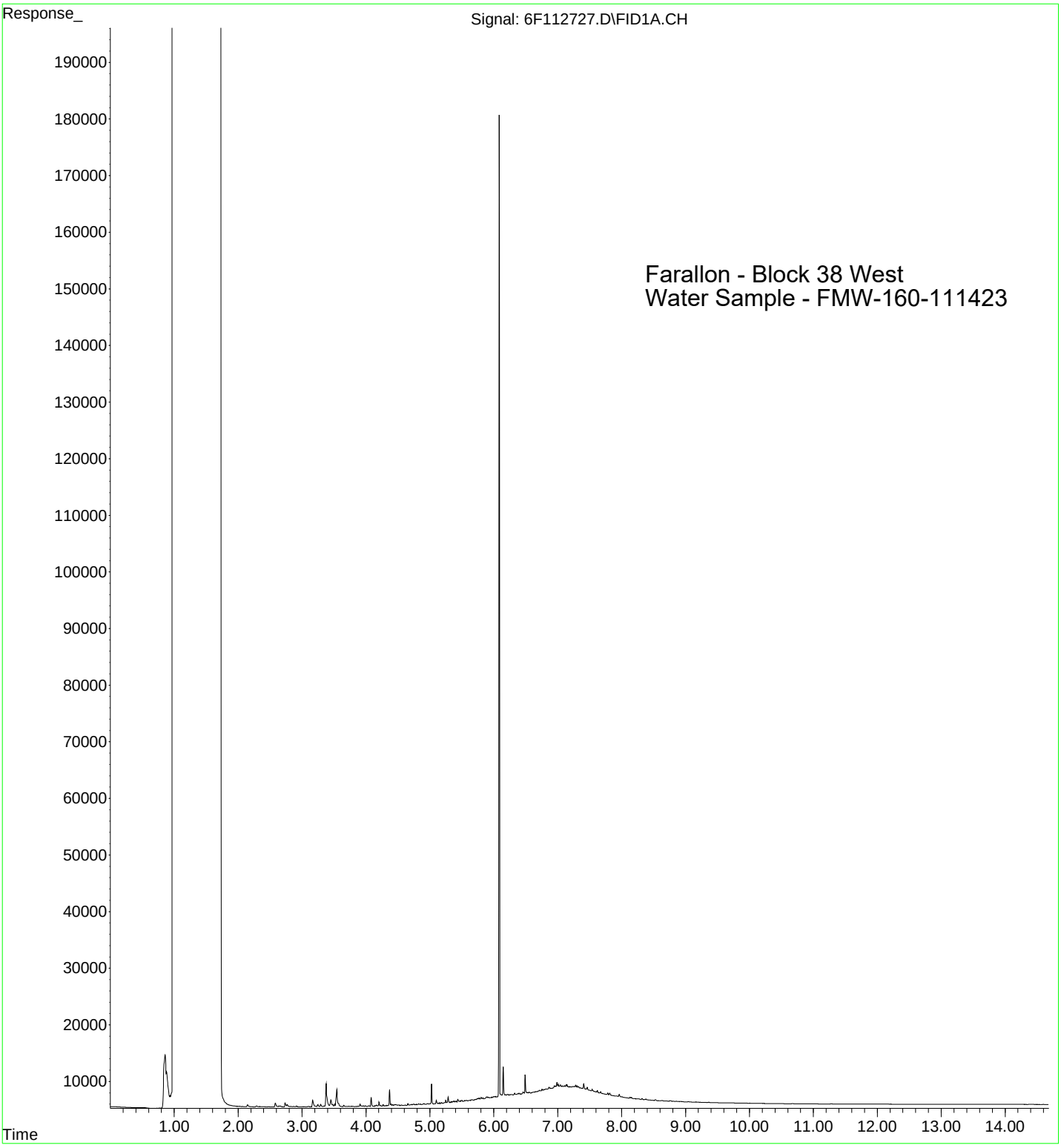
File   :C:\gcms\1\data\3K27060\6F112725.D
Operator   : BLL
Acquired   : 28 Nov 2023   1:43   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3K1435-13
Misc Info :
Vial Number: 20



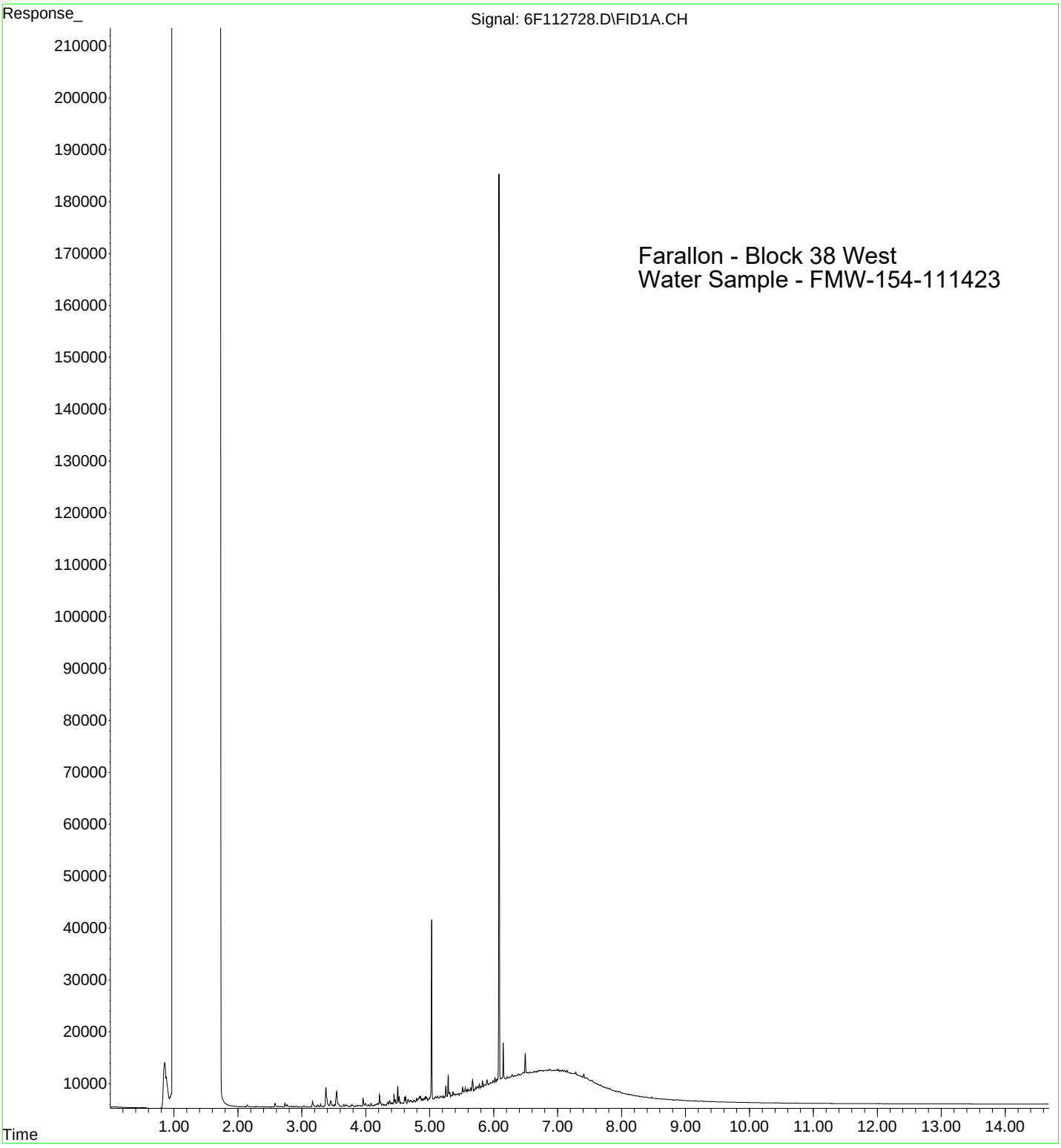
File :C:\gcms\1\data\3K27060\6F112726.D
Operator : BLL
Acquired : 28 Nov 2023 2:03 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-14
Misc Info :
Vial Number: 21



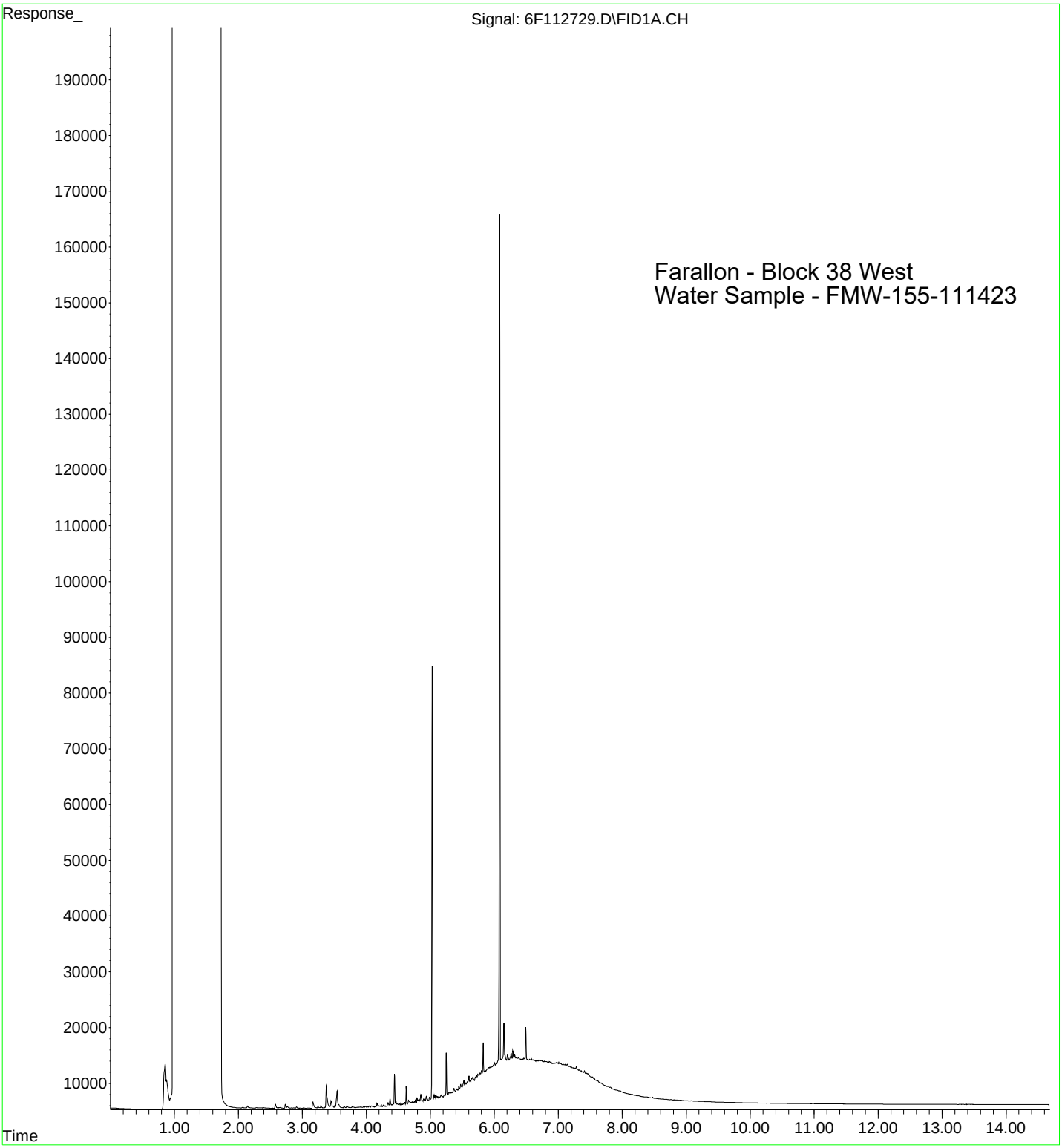
File :C:\gcms\1\data\3K27060\6F112727.D
Operator : BLL
Acquired : 28 Nov 2023 2:23 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-15
Misc Info :
Vial Number: 22



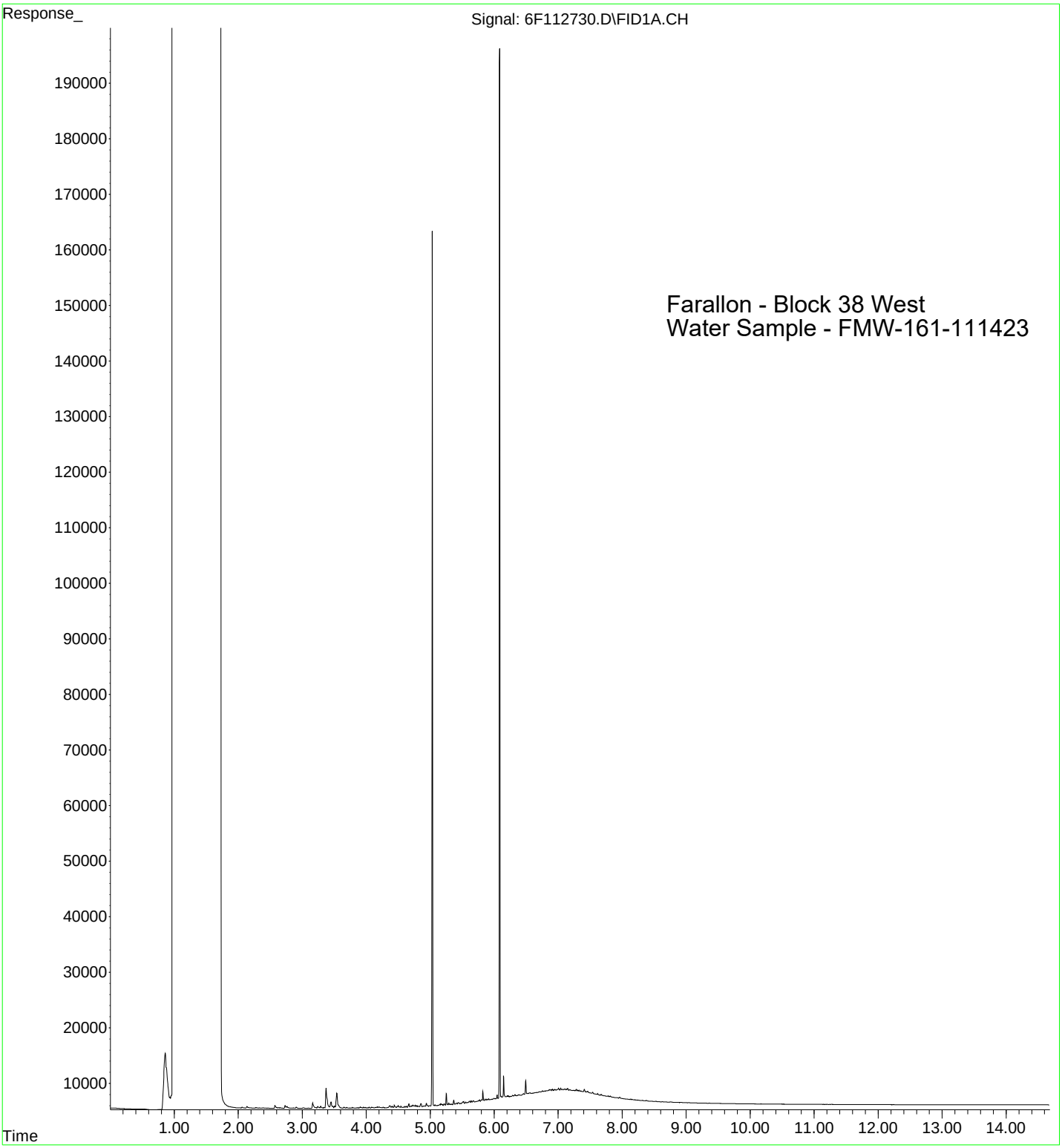
File :C:\gcms\1\data\3K27060\6F112728.D
Operator : BLL
Acquired : 28 Nov 2023 2:43 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-16
Misc Info :
Vial Number: 23



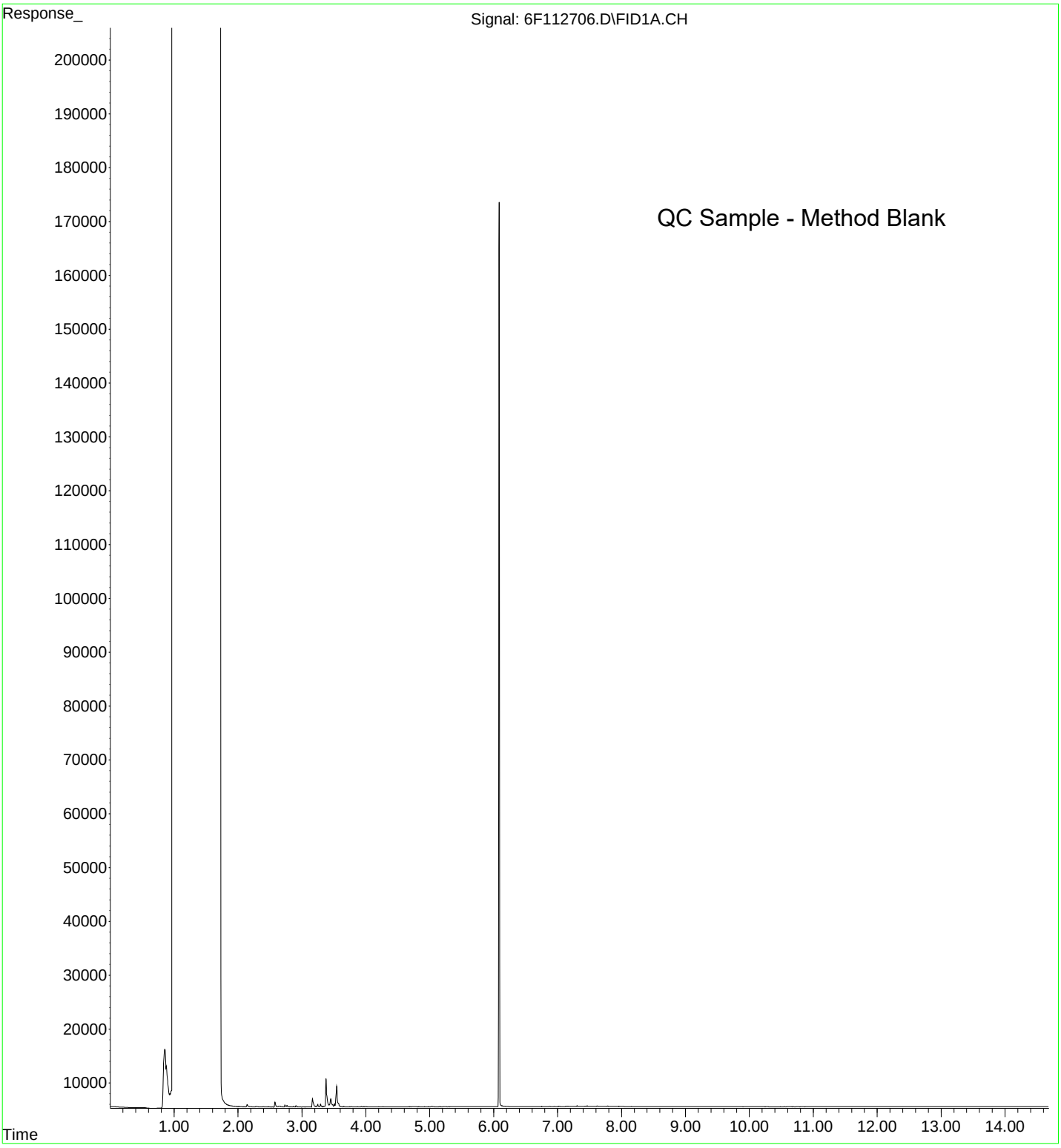
File :C:\gcms\1\data\3K27060\6F112729.D
Operator : BLL
Acquired : 28 Nov 2023 3:04 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-17
Misc Info :
Vial Number: 24



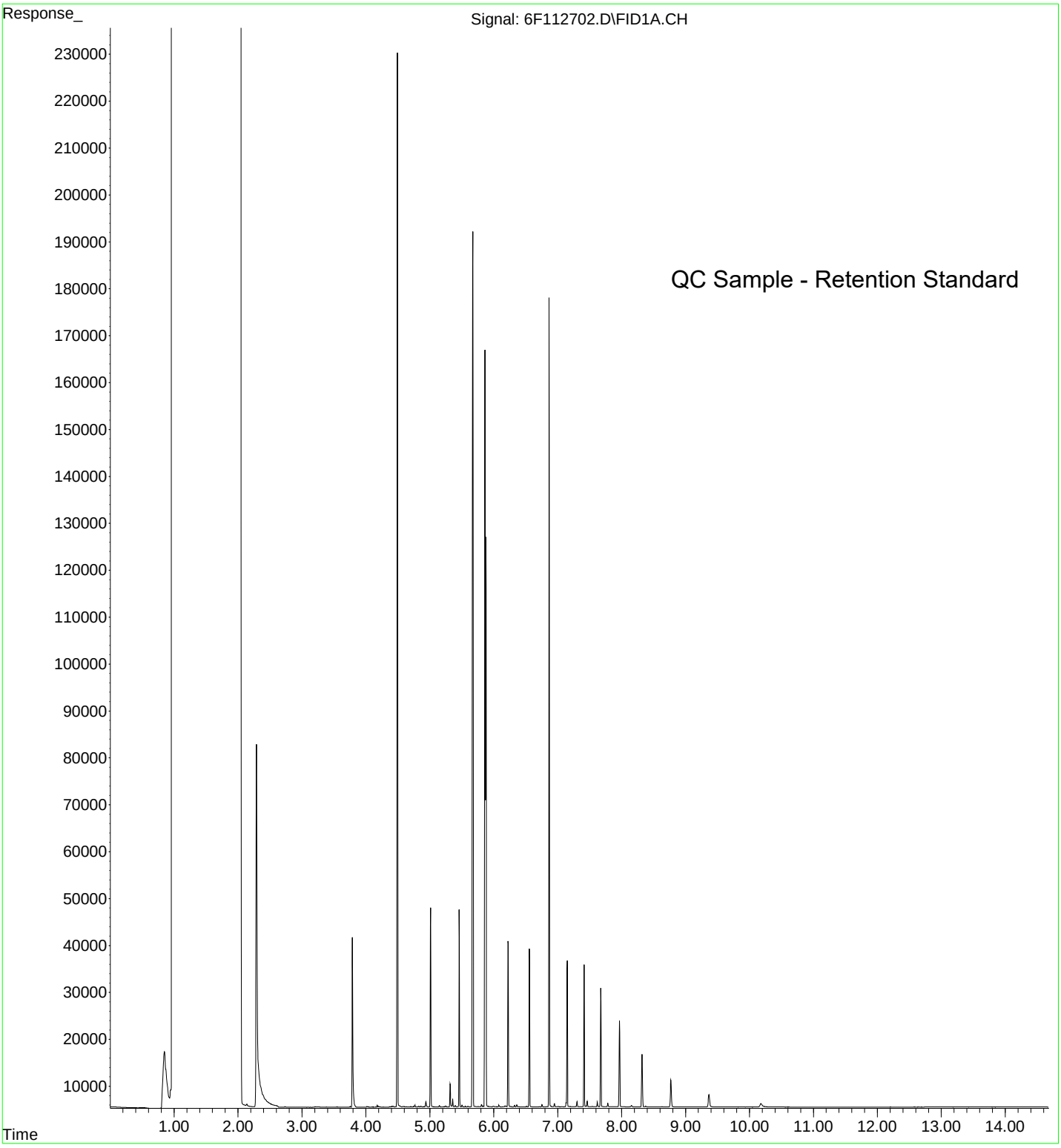
File :C:\gcms\1\data\3K27060\6F112730.D
Operator : BLL
Acquired : 28 Nov 2023 3:24 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-18
Misc Info :
Vial Number: 25



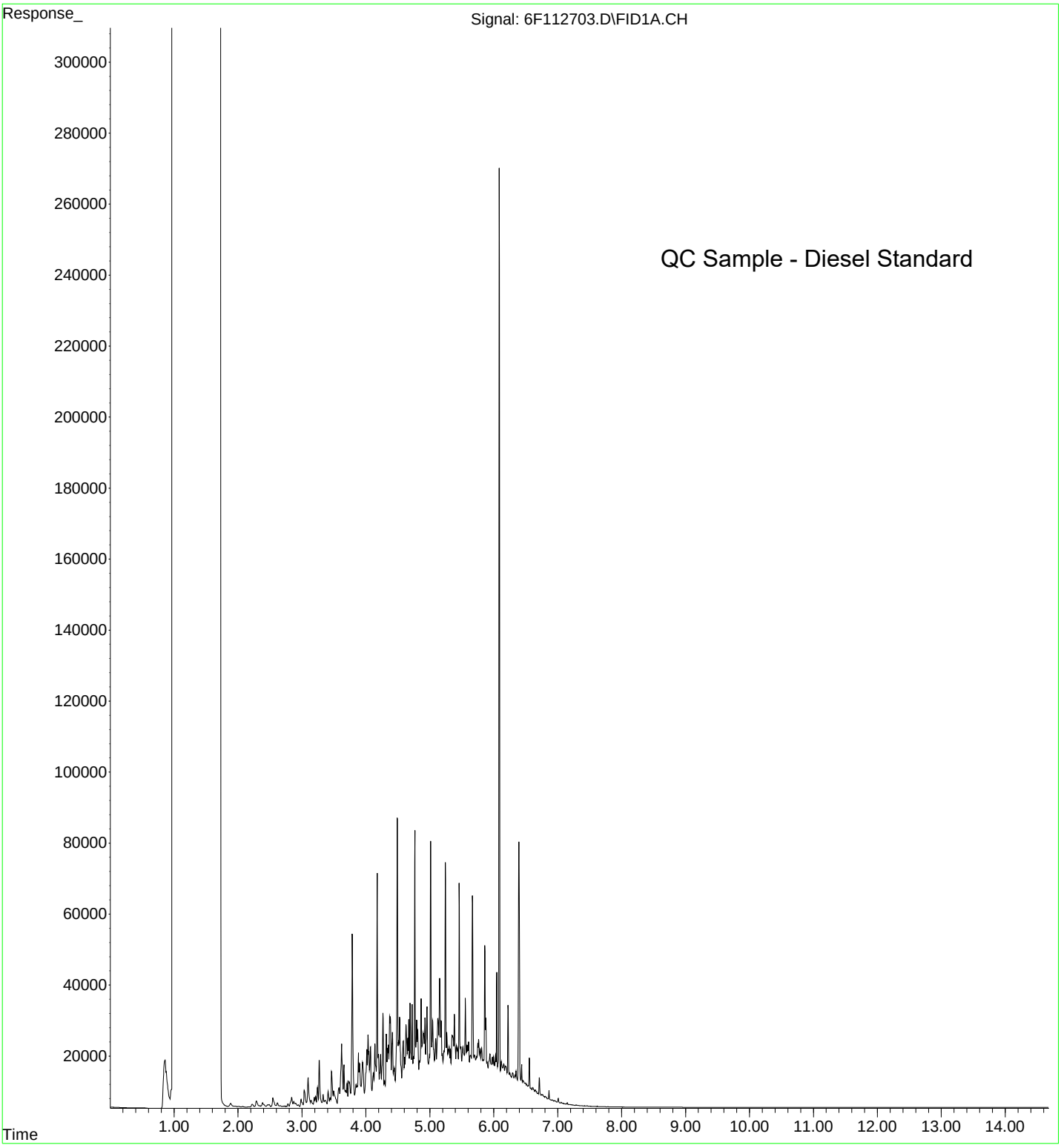
File   :C:\gcms\1\data\3K27060\6F112706.D
Operator   : BLL
Acquired   : 27 Nov 2023 19:19   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 23K0934-BLK1
Misc Info :
Vial Number: 3



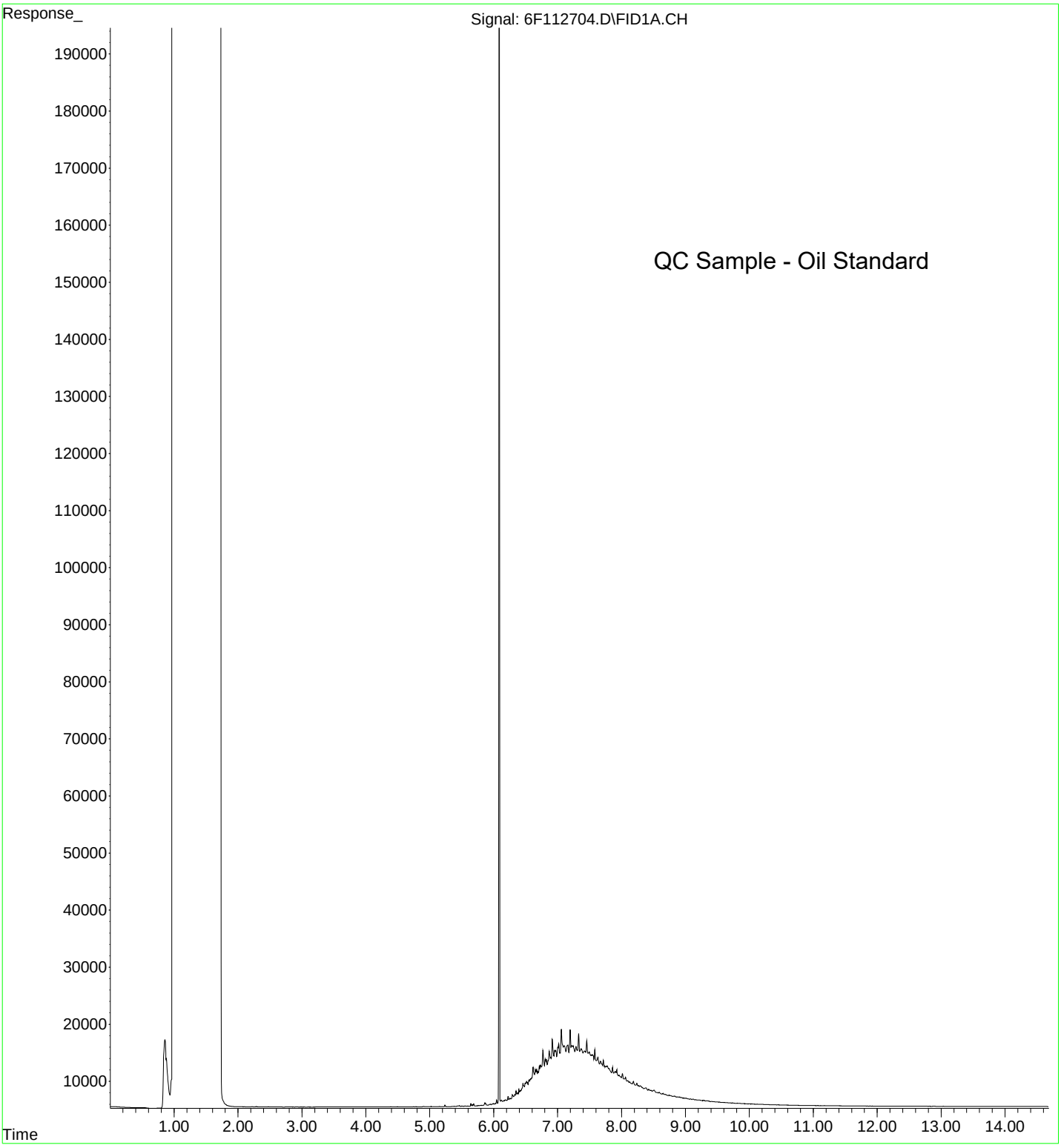
File   :C:\gcms\1\data\3K27060\6F112702.D
Operator   : BLL
Acquired   : 27 Nov 2023 17:43   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K27060-RES1
Misc Info :
Vial Number: 94



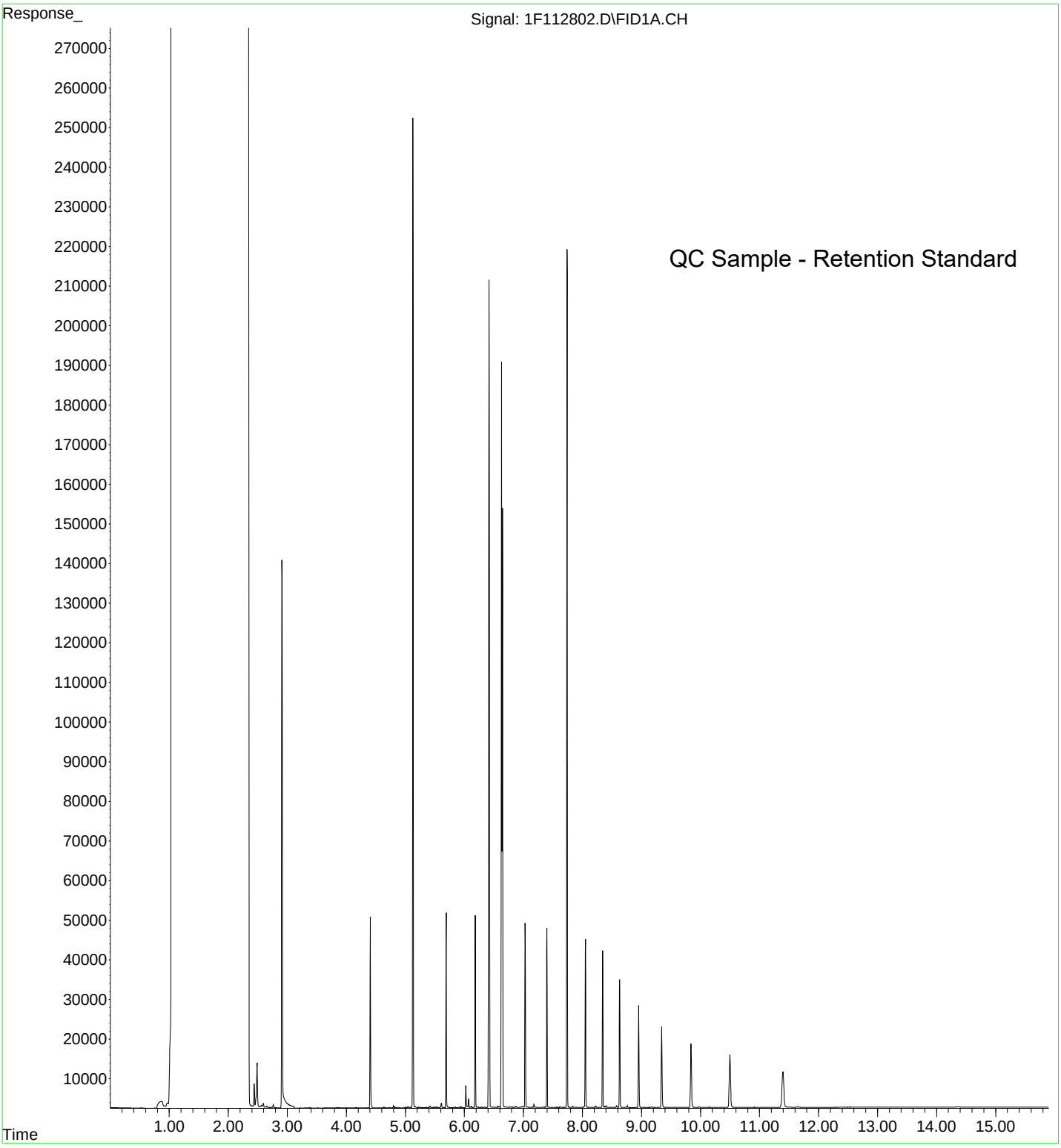
File   :C:\gcms\1\data\3K27060\6F112703.D
Operator   : BLL
Acquired   : 27 Nov 2023 18:03   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K27060-CCV1
Misc Info :
Vial Number: 1



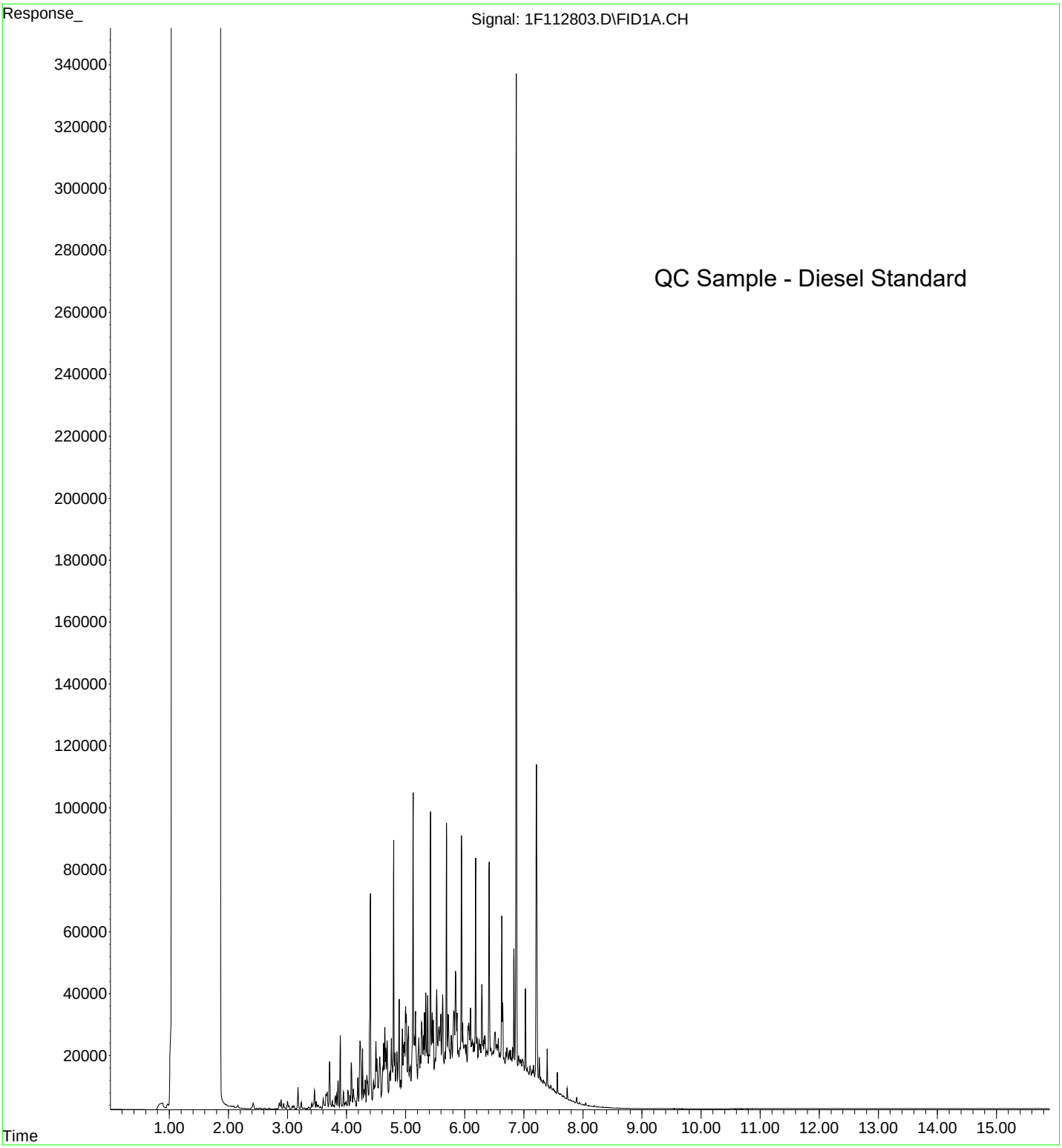
File   :C:\gcms\1\data\3K27060\6F112704.D
Operator   : BLL
Acquired   : 27 Nov 2023 18:24   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K27060-CCV2
Misc Info :
Vial Number: 2



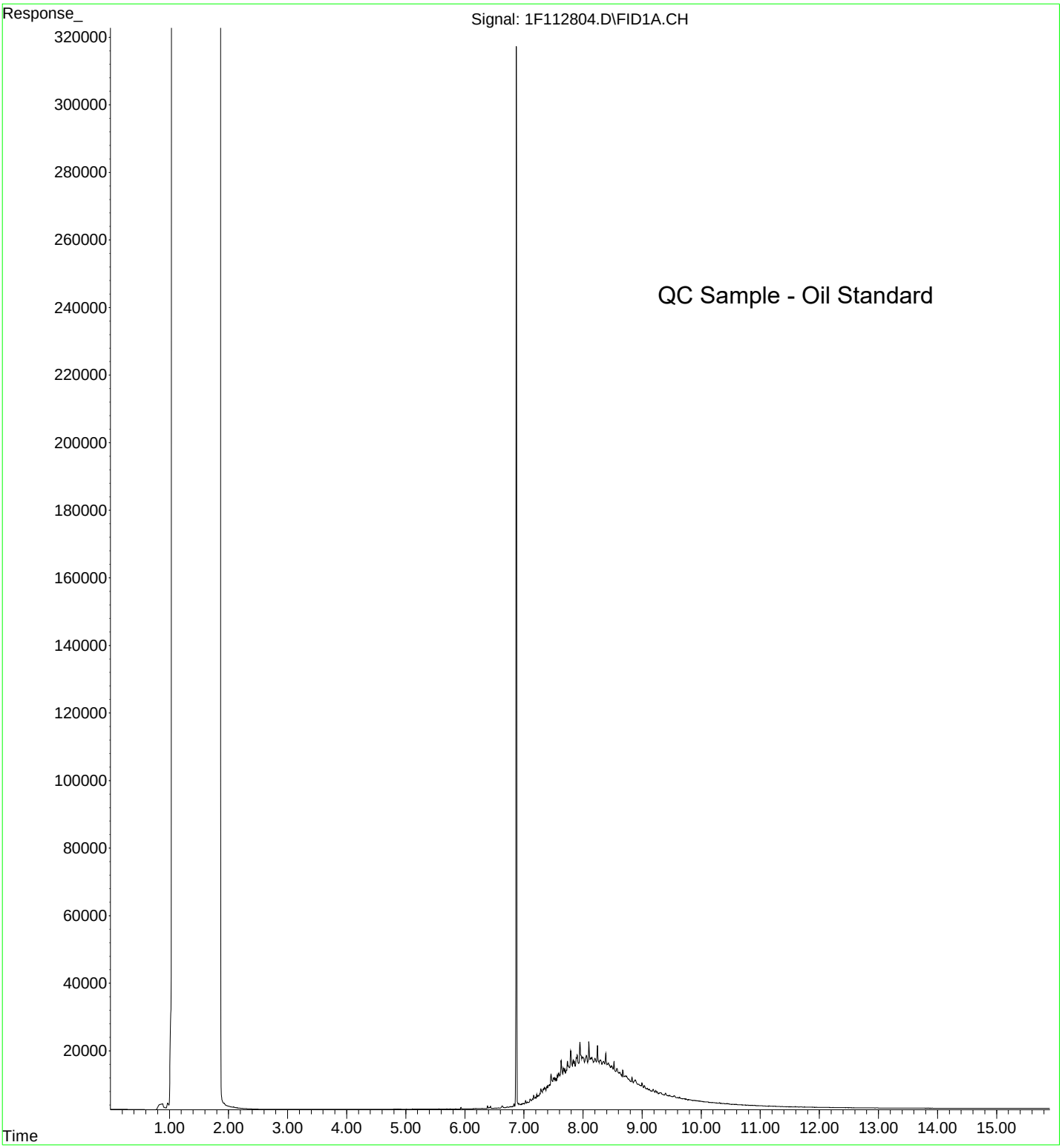
File   :C:\gcms\1\data\3K28001\1F112802.D
Operator   : BLL
Acquired   : 28 Nov 2023   6:04   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3K28001-RES1
Misc Info :
Vial Number: 94



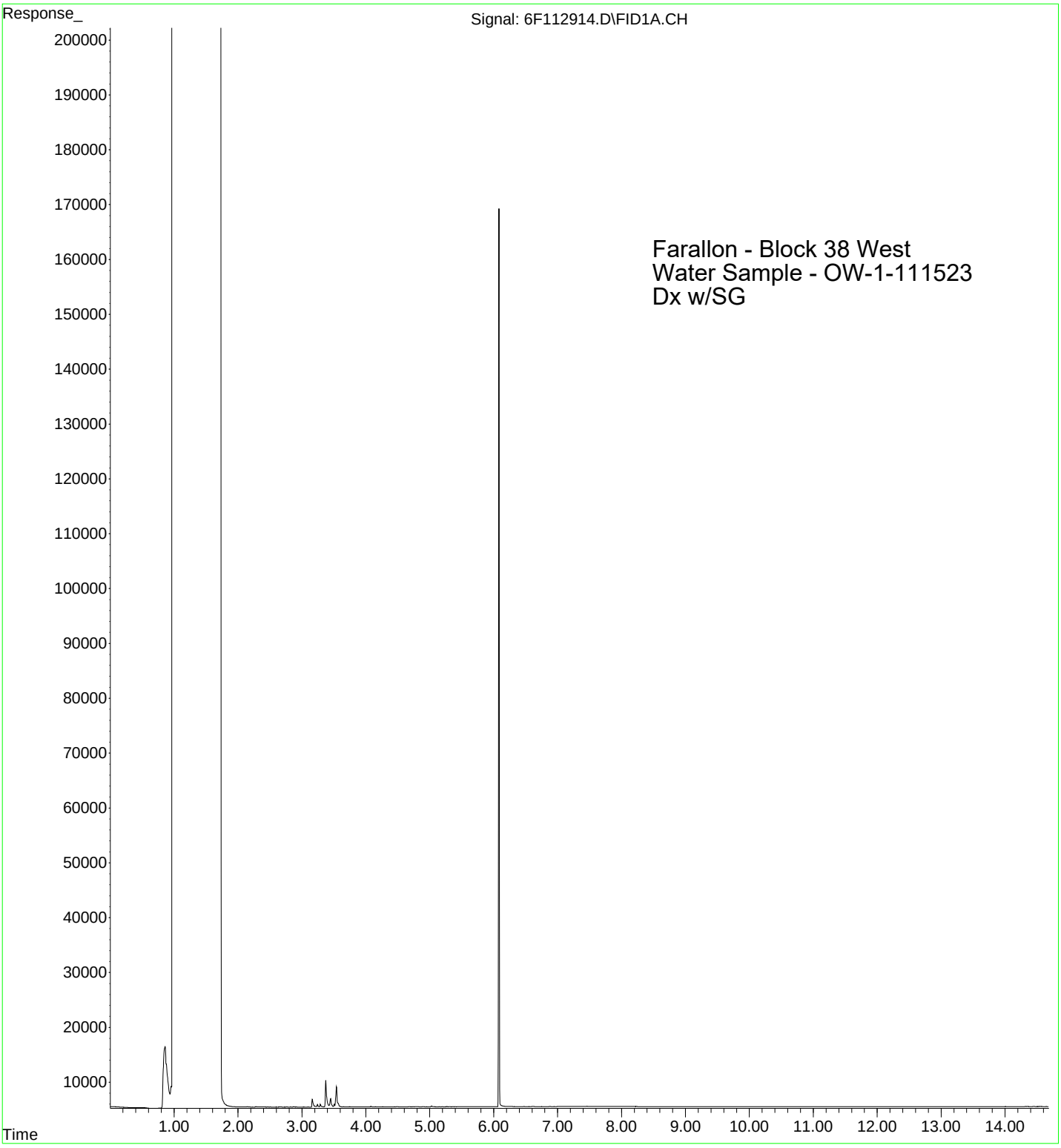
File   :C:\gcms\1\data\3K28001\1F112803.D
Operator   : BLL
Acquired   : 28 Nov 2023   6:27   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3K28001-CCV1
Misc Info :
Vial Number: 1



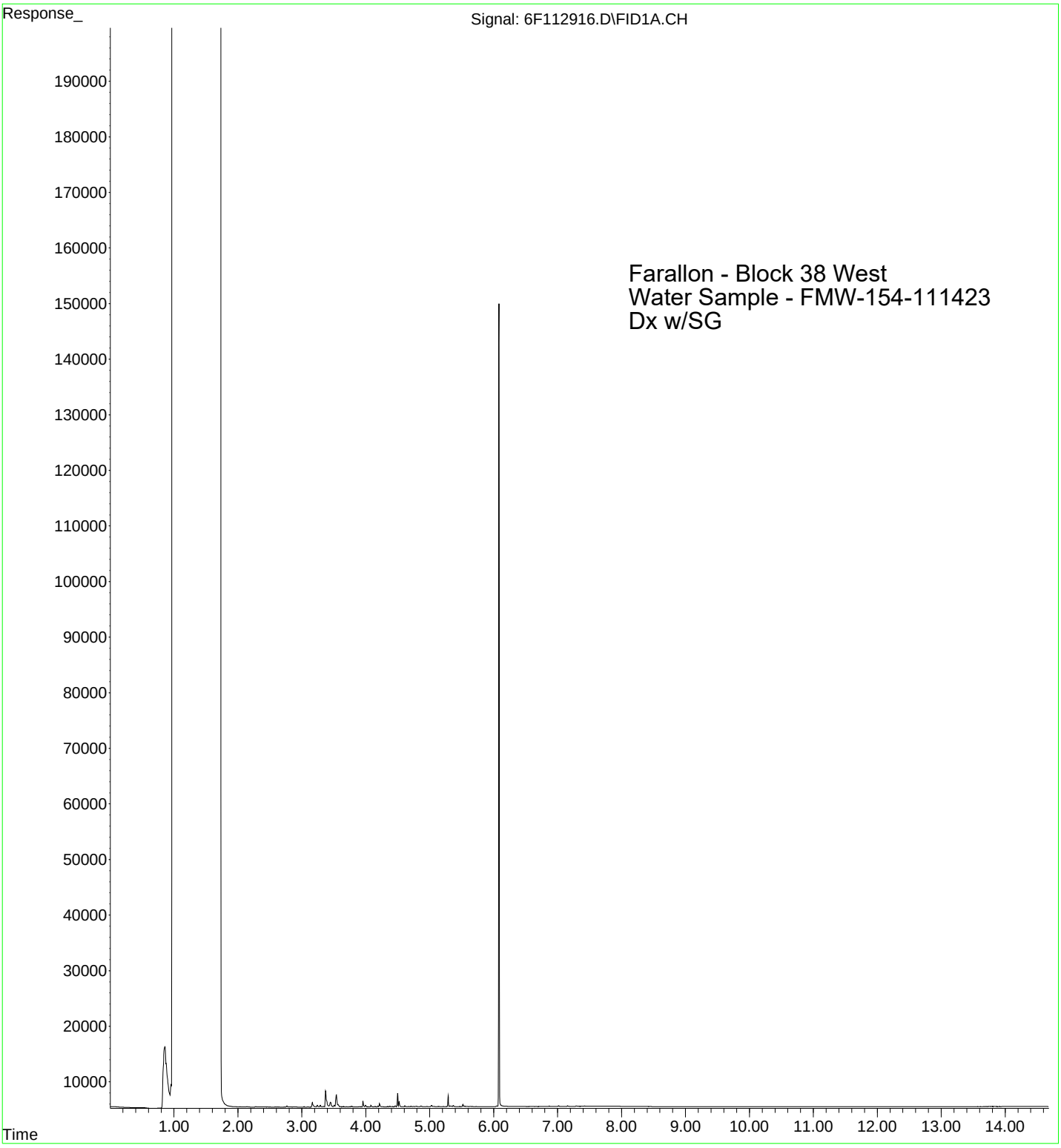
File   :C:\gcms\1\data\3K28001\1F112804.D
Operator   : BLL
Acquired   : 28 Nov 2023   6:50   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3K28001-CCV2
Misc Info :
Vial Number: 2



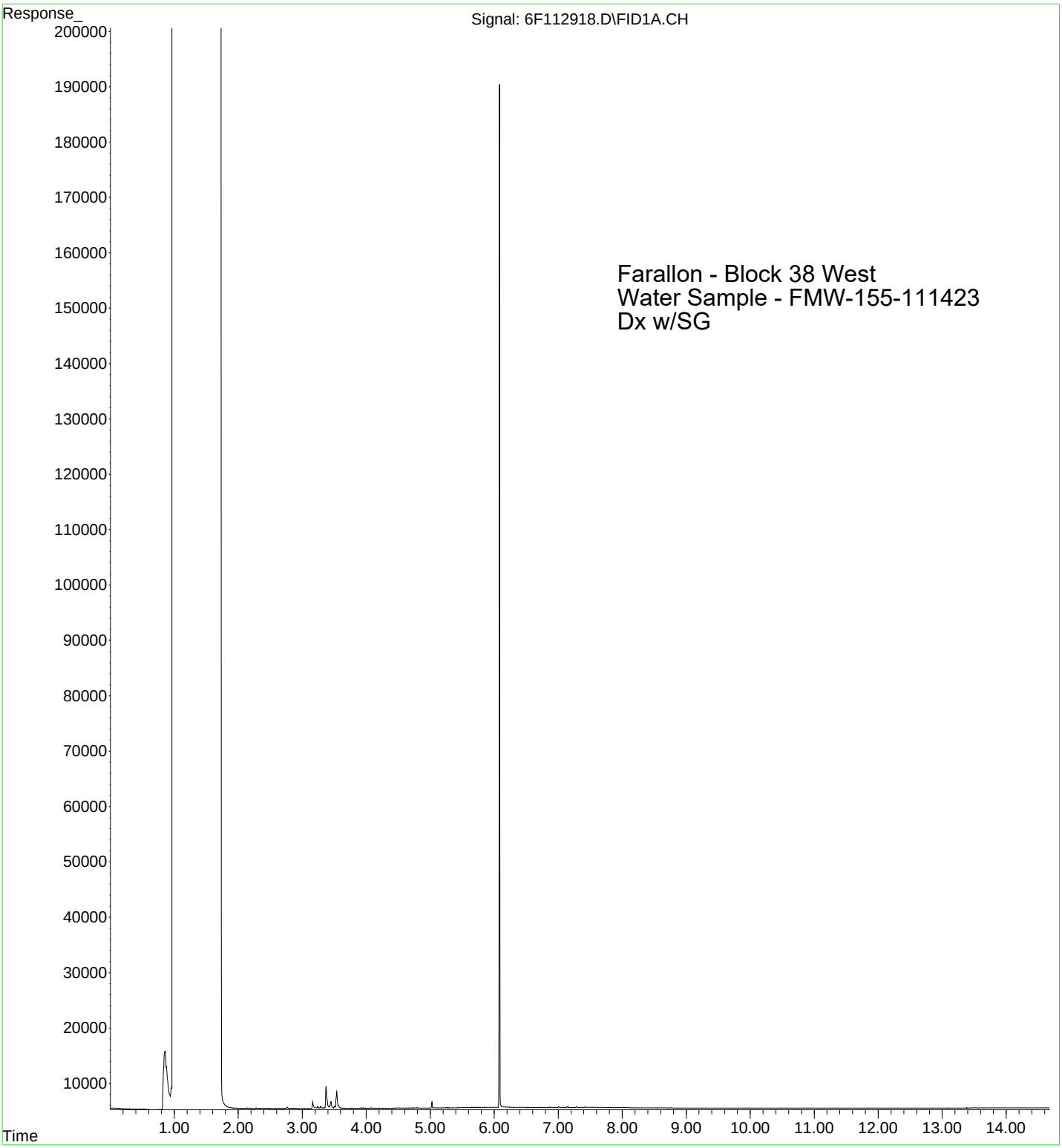
File :C:\gcms\1\data\3K29027\6F112914.D
Operator : BLL
Acquired : 29 Nov 2023 20:02 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: A3K1435-03
Misc Info :
Vial Number: 10



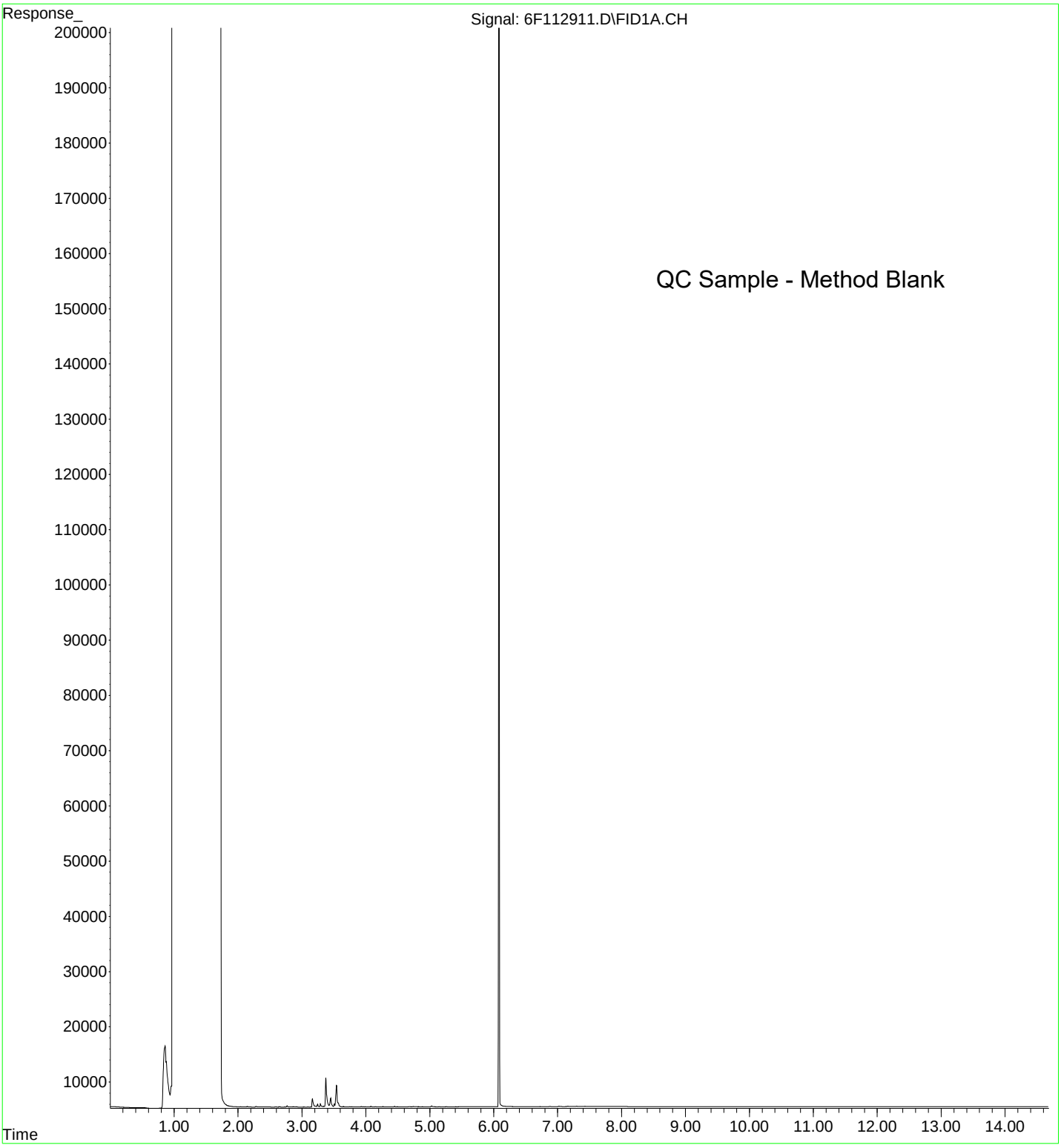
File   :C:\gcms\1\data\3K29027\6F112916.D
Operator   : BLL
Acquired   : 29 Nov 2023 20:42   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3K1435-16
Misc Info :
Vial Number: 11



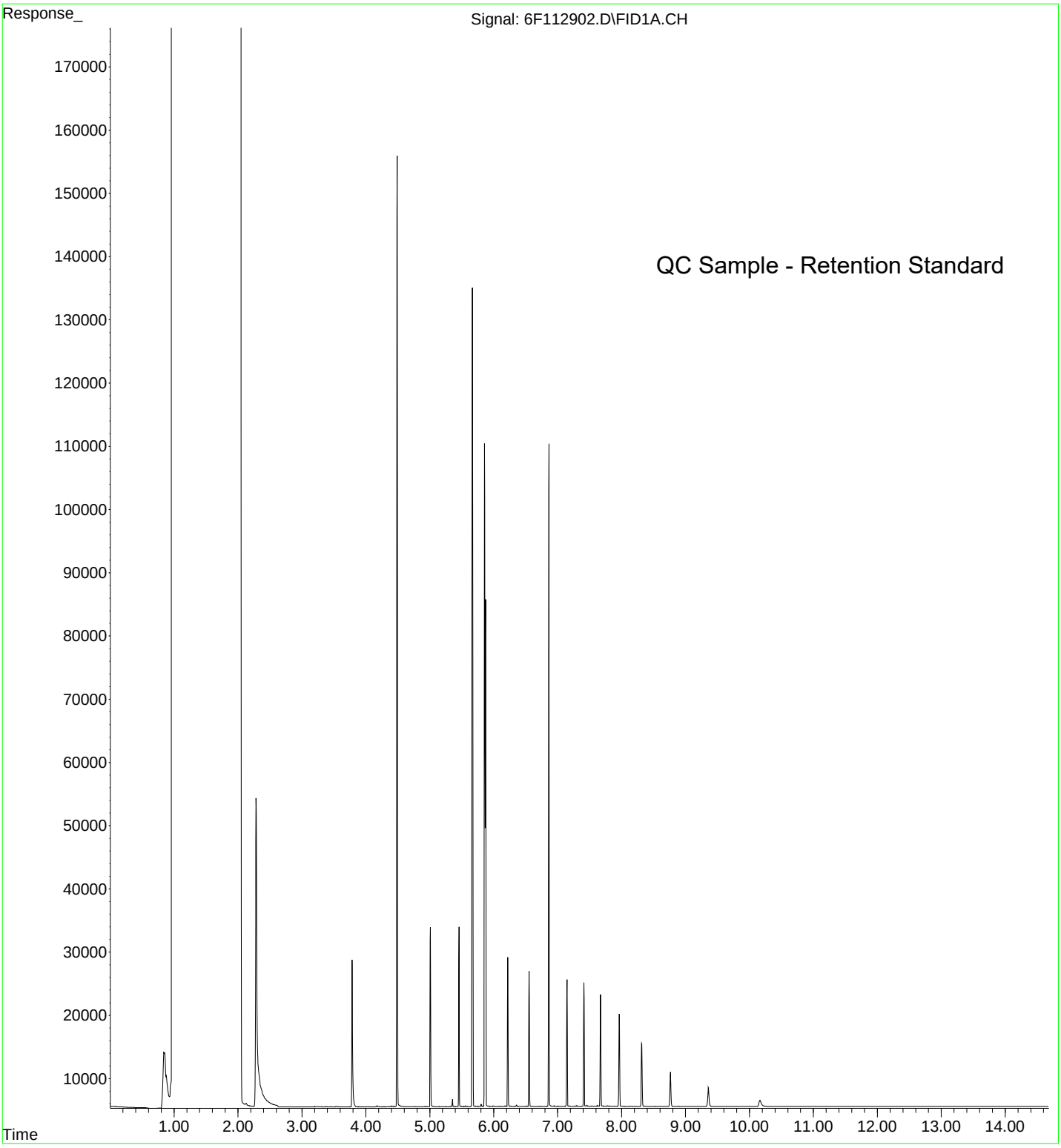
File   :C:\gcms\1\data\3K29027\6F112918.D
Operator   : BLL
Acquired   : 29 Nov 2023 21:23   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: A3K1435-17
Misc Info :
Vial Number: 12



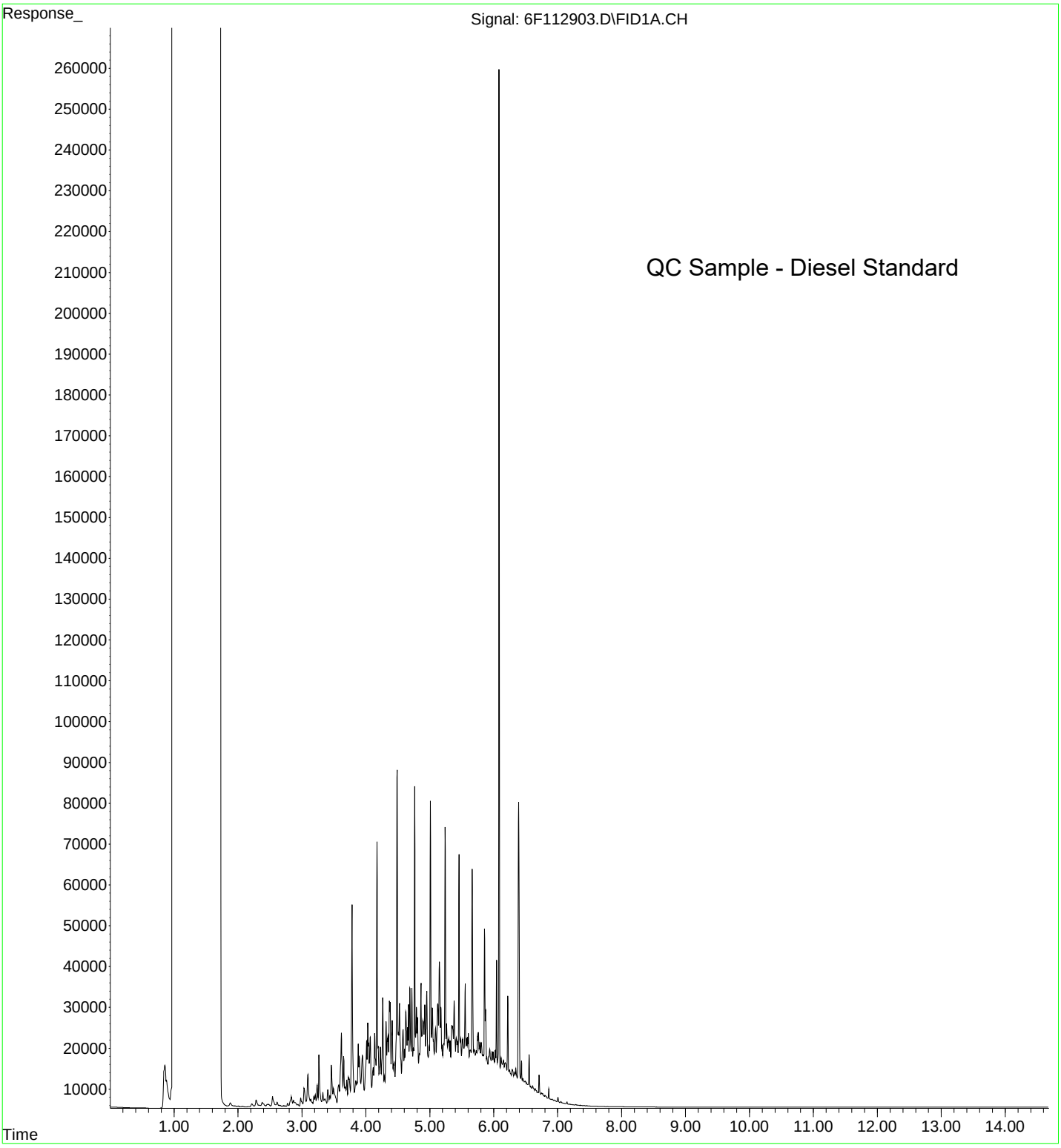
File :C:\gcms\1\data\3K29027\6F112911.D
Operator : BLL
Acquired : 29 Nov 2023 19:01 using AcqMethod 6F71215A.M
Instrument : HP G1530A
Sample Name: 23K1067-BLK1
Misc Info :
Vial Number: 7



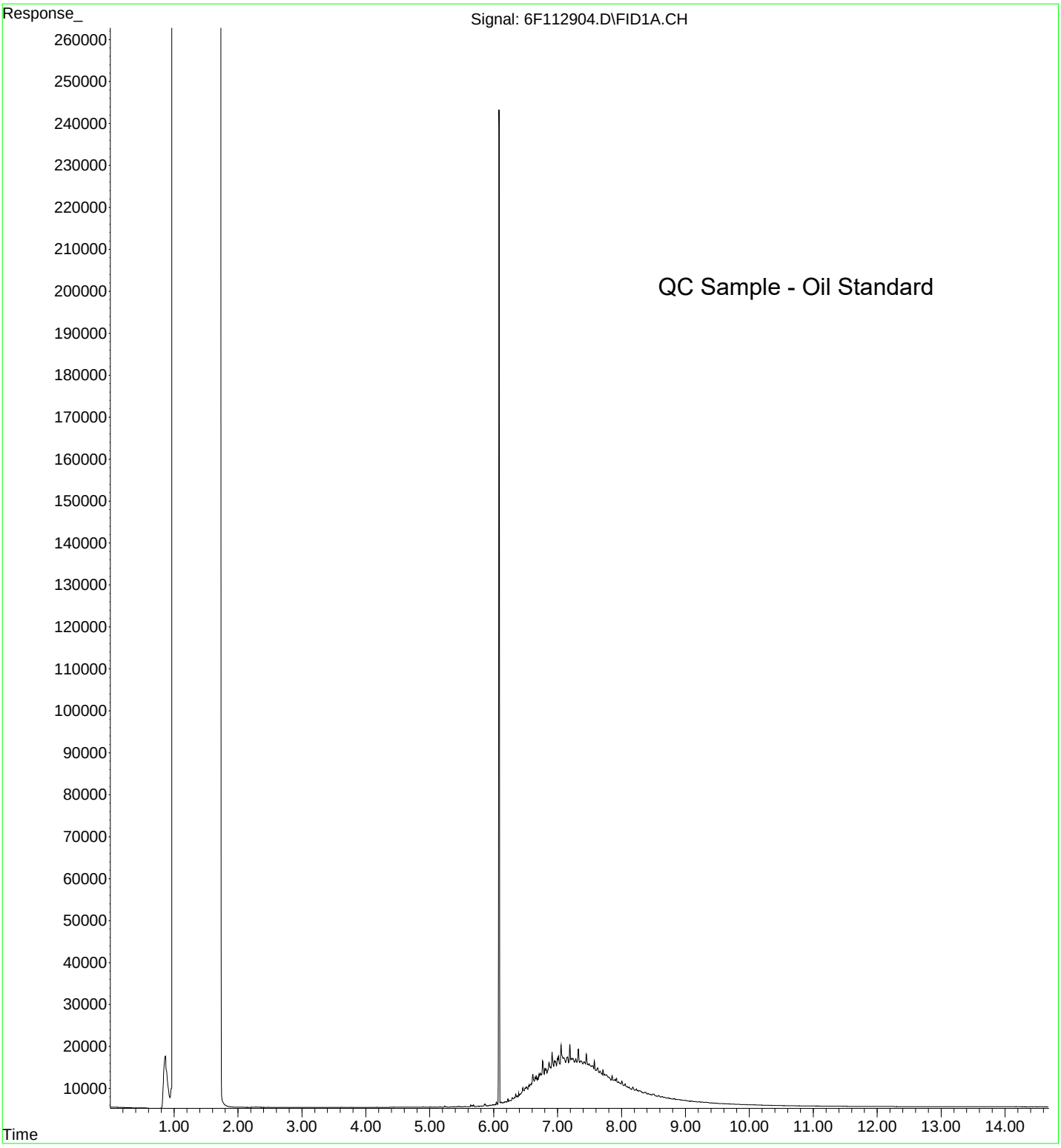
File   :C:\gcms\1\data\3K29027\6F112902.D
Operator   : BLL
Acquired   : 29 Nov 2023 14:14   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K29027-RES1
Misc Info :
Vial Number: 94



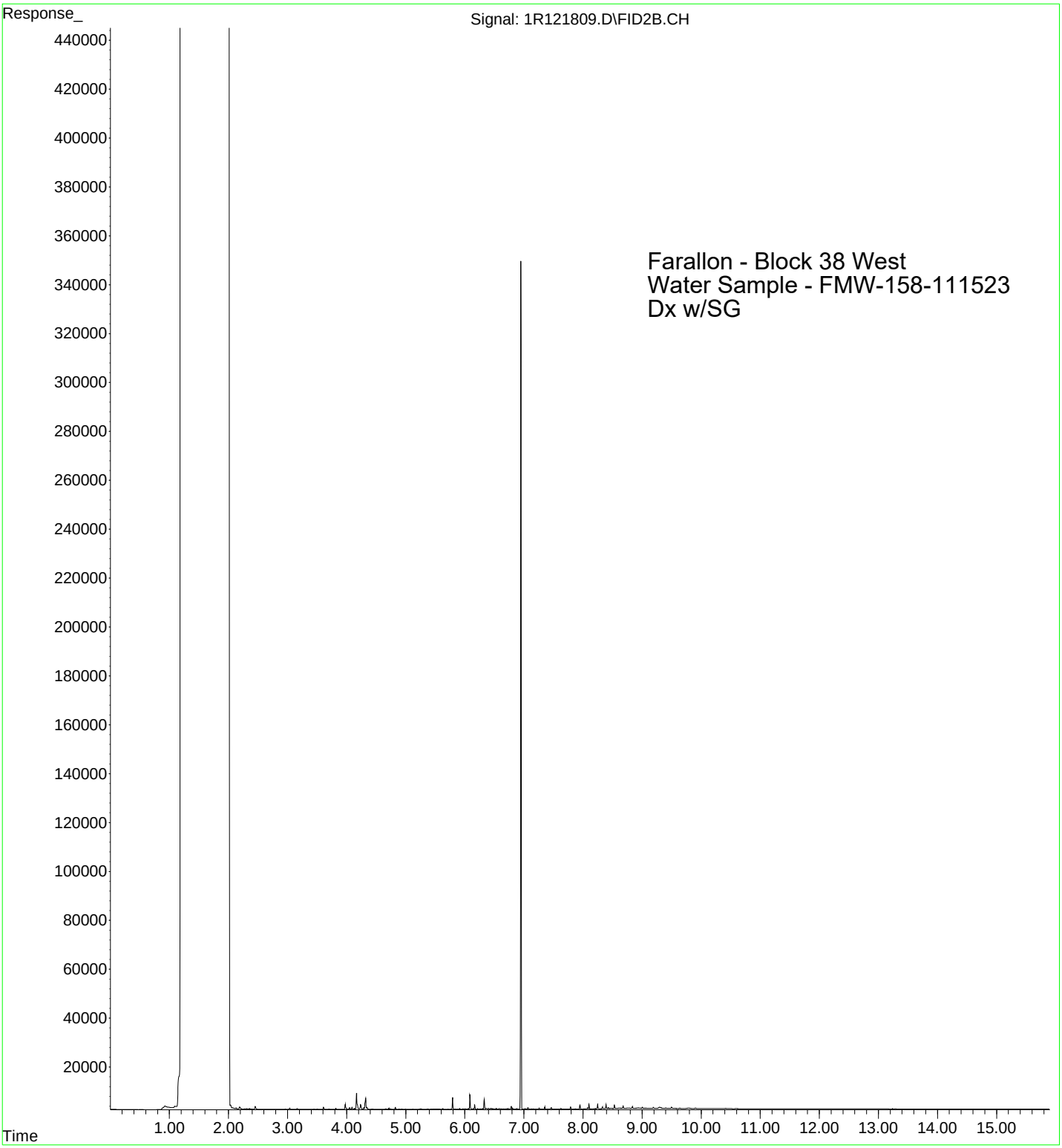
File   :C:\gcms\1\data\3K29027\6F112903.D
Operator   : BLL
Acquired   : 29 Nov 2023 14:35   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K29027-CCV1
Misc Info :
Vial Number: 1



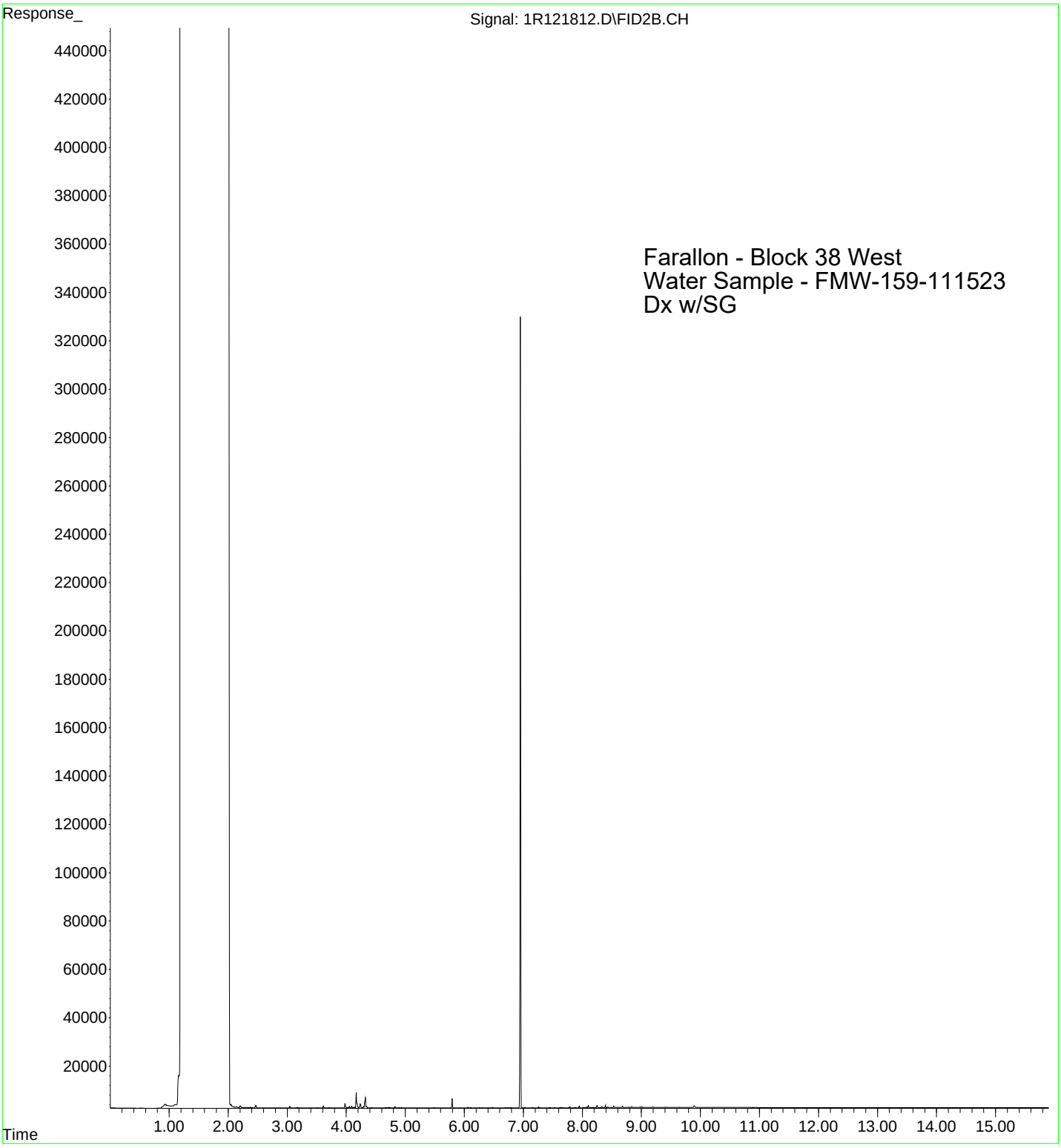
File   :C:\gcms\1\data\3K29027\6F112904.D
Operator   : BLL
Acquired   : 29 Nov 2023 14:55   using AcqMethod 6F71215A.M
Instrument :   HP G1530A
Sample Name: 3K29027-CCV2
Misc Info :
Vial Number: 2



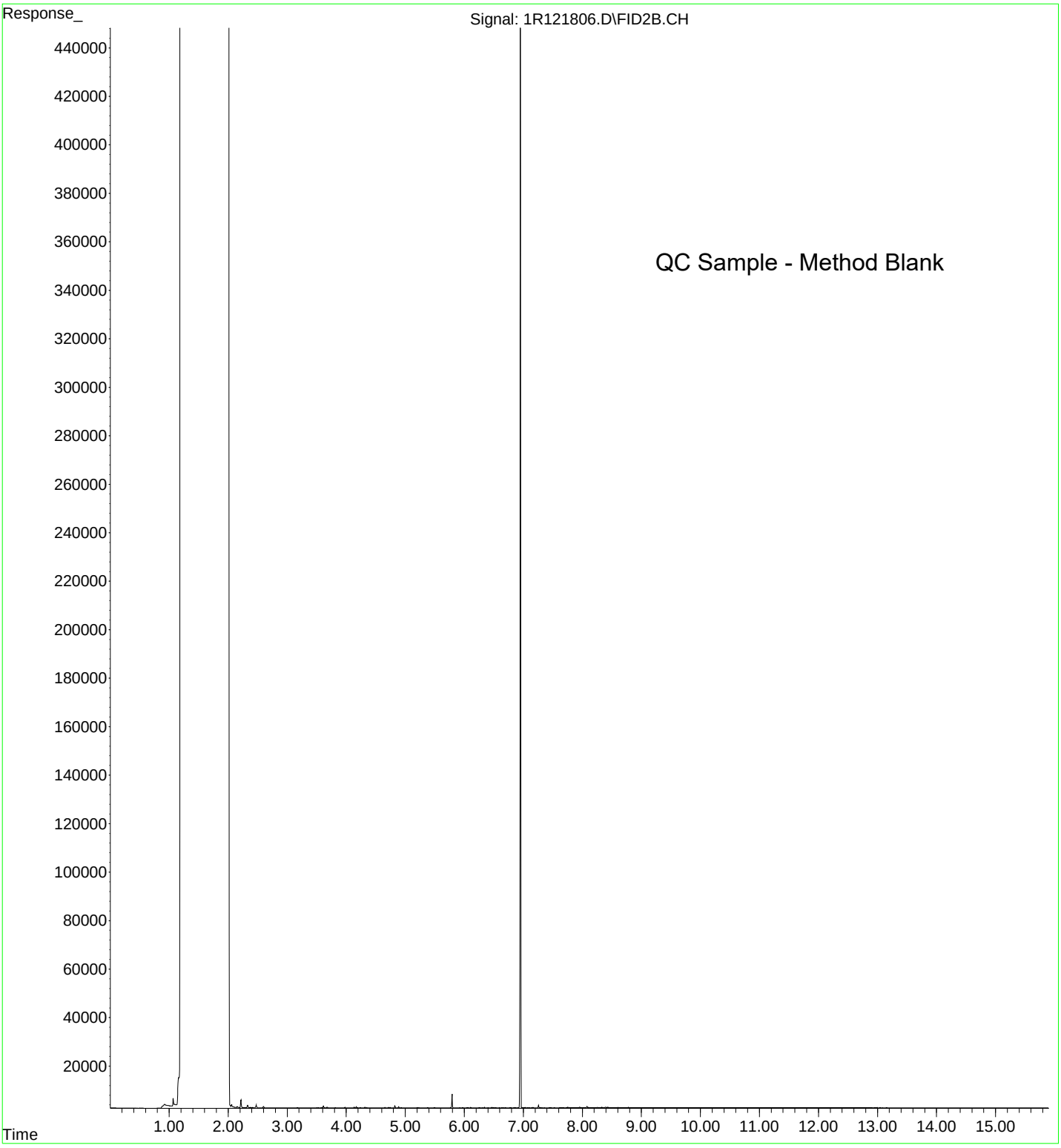
File   :C:\gcms\1\data\3L18070\1R121809.D
Operator   : BLL
Acquired   : 18 Dec 2023 19:44   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A3K1435-08
Misc Info :
Vial Number: 54



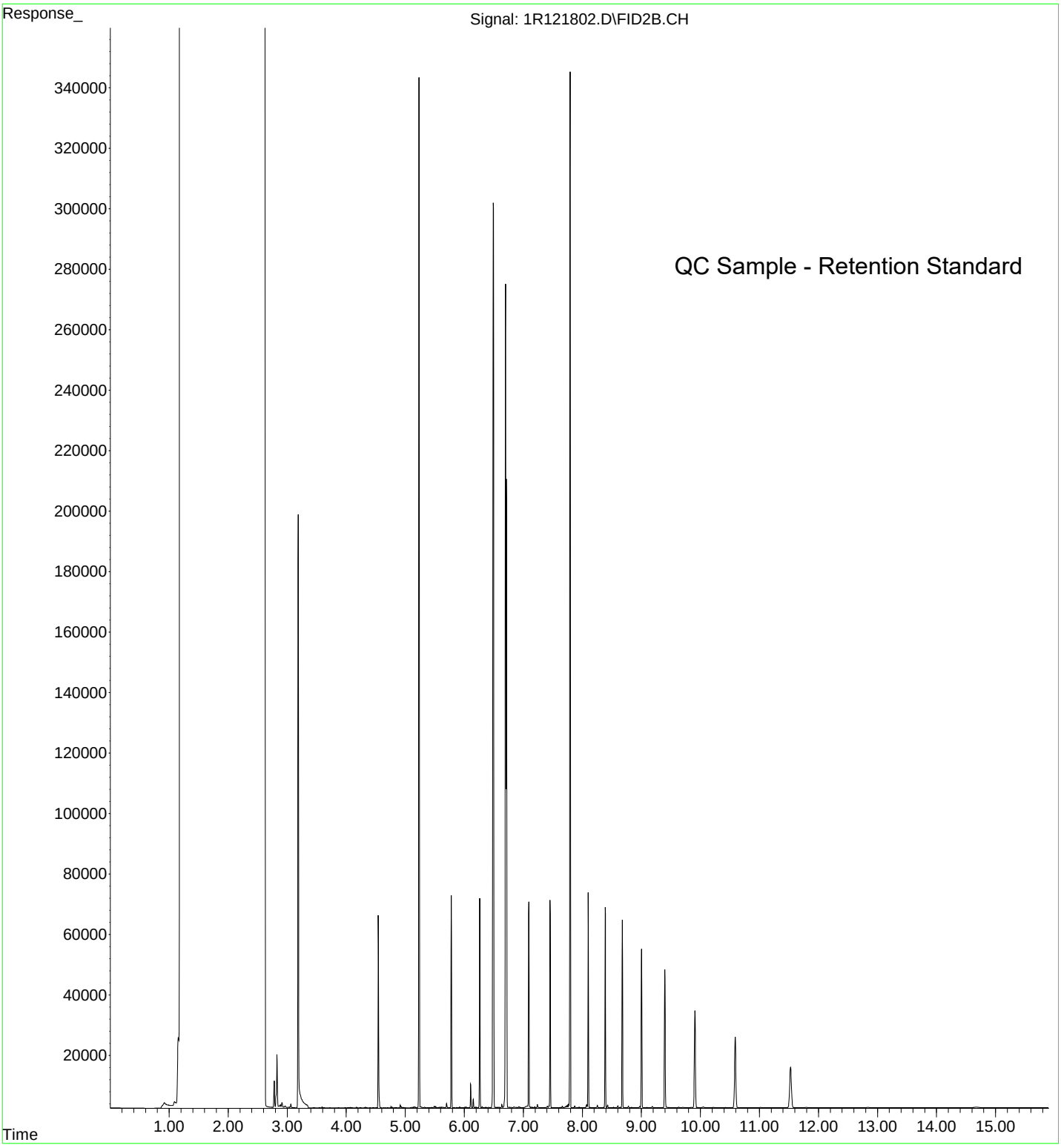
File :C:\gcms\1\data\3L18070\1R121812.D
Operator : BLL
Acquired : 18 Dec 2023 20:55 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A3K1435-09
Misc Info :
Vial Number: 55



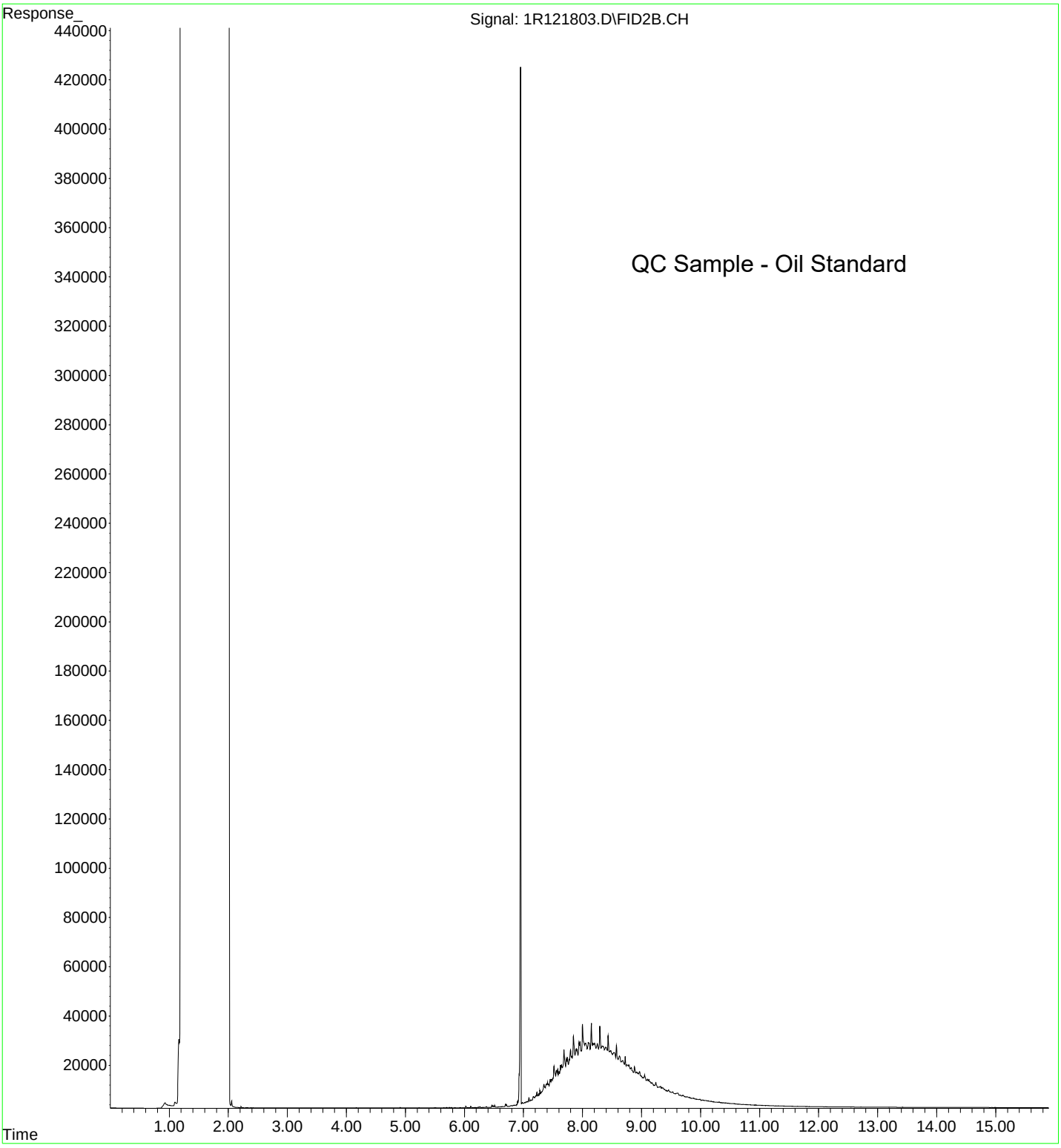
File :C:\gcms\1\data\3L18070\1R121806.D
Operator : BLL
Acquired : 18 Dec 2023 18:34 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 23L0687-BLK1
Misc Info :
Vial Number: 51



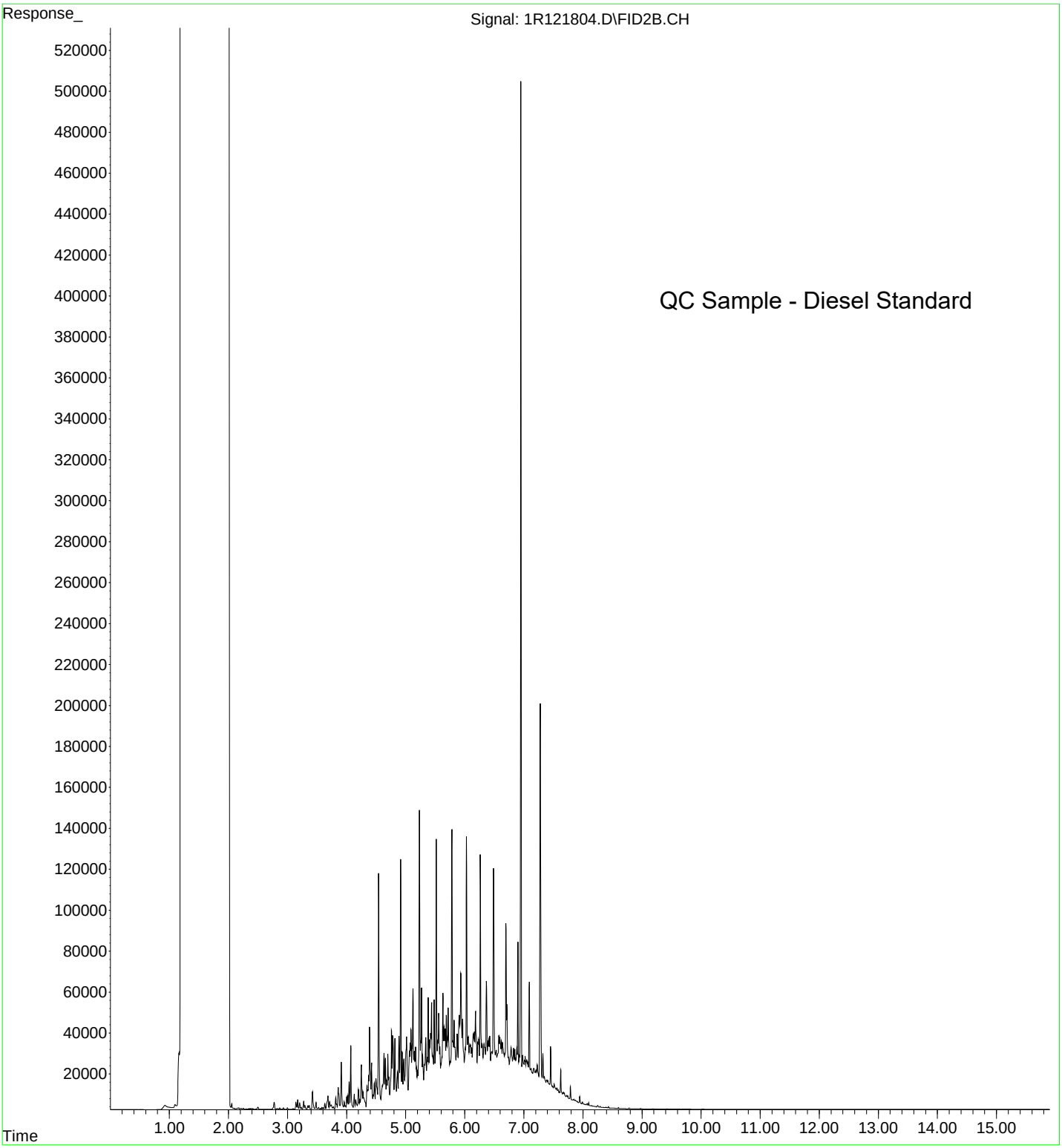
File :C:\gcms\1\data\3L18070\1R121802.D
Operator : BLL
Acquired : 18 Dec 2023 14:39 using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 3L18070-RES1
Misc Info :
Vial Number: 95



File   :C:\gcms\1\data\3L18070\1R121803.D
Operator   : BLL
Acquired   : 18 Dec 2023 15:03   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3L18070-CCV1
Misc Info :
Vial Number: 2



File   :C:\gcms\1\data\3L18070\1R121804.D
Operator   : BLL
Acquired   : 18 Dec 2023 15:26   using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 3L18070-CCV2
Misc Info :
Vial Number: 1



2024 LABORATORY REPORTS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Friday, March 29, 2024

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A4B1607 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4B1607, which was received by the laboratory on 2/28/2024 at 1:28:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 4.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

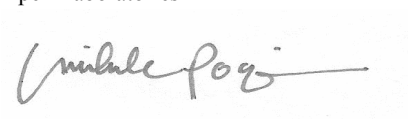
Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-158	A4B1607-01	Water	02/27/24 11:52	02/28/24 13:28

Apex Laboratories



Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1607 - 03 29 24 1656

ANALYTICAL CASE NARRATIVE

A4B1607 — **Apex Laboratories**

Amended Final Report #1 - This report supercedes all previous reports

Methylnaphthalenes and Naphthalene by EPA 8270E Note

The Laboratory Control Sample (LCS/LCSD) recoveries associated with the quantification of naphthalene and methylnaphthalenes by EPA Method 8270E were below acceptance criteria for the sample FMW-158 (A4B1607-01). This sample was re-extracted and re-analyzed with similar results. The investigation into these low LCS recoveries was unable to identify a specific root cause. Analysis of subsequent analytical batches for these analytes by EPA Method 8270E yielded LCS recoveries within acceptance limits. Due to insufficient remaining sample volume for this sample, additional testing for naphthalene and the methylnaphthalenes by EPA Method 8270E could not be completed. The EPA Method 8270E data for methylnaphthalenes was qualified accordingly. Naphthalene was reported by EPA Method 8260D.

Kurt Johnson
Director of Forensic Services
March 29, 2024

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158 (A4B1607-01)				**Matrix: Water**		**Batch: 24B1015**		
Gasoline Range Organics	ND	---	100	ug/L	1	02/29/24 16:59	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*105 %*	*Limits:* *50-150 %*	*1*	*02/29/24 16:59*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*113 %*	*50-150 %*	*1*	*02/29/24 16:59*	*NWTPH-Gx (MS)*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158 (A4B1607-01)				**Matrix: Water**		**Batch: 24B1015**		
Benzene	ND	---	0.200	ug/L	1	02/29/24 16:59	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	02/29/24 16:59	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	02/29/24 16:59	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	02/29/24 16:59	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*114 %*	*Limits: 80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158 (A4B1607-01)				**Matrix: Water**		**Batch: 24B1015**		
Naphthalene	ND	---	5.00	ug/L	1	02/29/24 16:59	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*114 %*	*Limits: 80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 16:59*	*EPA 8260D*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158 (A4B1607-01RE1)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 19:35	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 19:35	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*54 %*	*Limits: 44-120 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*48 %*	*44-120 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	
Phenol-d6 (Surr)			*21 %*	*10-133 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*61 %*	*50-134 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	
2-Fluorophenol (Surr)			*28 %*	*19-120 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*83 %*	*43-140 %*	*1*	*03/08/24 19:35*	*EPA 8270E*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158 (A4B1607-01)				**Matrix: Water**				
Batch: 24C0105								
Total Suspended Solids	**48.0**	---	5.00	mg/L	1	03/04/24 18:56	SM 2540 D	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Blank (24B1015-BLK1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 105 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*114 %*	*50-150 %*		*"*							
LCS (24B1015-BS2)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:43									
NWTPH-Gx (MS)												
Gasoline Range Organics	553	---	100	ug/L	1	500	---	111	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*106 %*	*50-150 %*		*"*							
Duplicate (24B1015-DUP1)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00									**T-02**
QC Source Sample: Non-SDG (A4B1606-01)												
Gasoline Range Organics	**28000**	---	5000	ug/L	50	---	29500	---	---	5	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*107 %*	*50-150 %*		*"*							
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Gasoline Range Organics	**39500**	---	5000	ug/L	50	---	39400	---	---	0.4	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*104 %*	*50-150 %*		*"*							

Apex Laboratories

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1607 - 03 29 24 1656

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Blank (24B1015-BLK1)				Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*113 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*			*"*				
LCS (24B1015-BS1)				Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:04								
EPA 8260D												
Benzene	21.3	---	0.200	ug/L	1	20.0	---	107	80-120%	---	---	
Toluene	18.5	---	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
Ethylbenzene	20.1	---	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Xylenes, total	57.3	---	1.50	ug/L	1	60.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Duplicate (24B1015-DUP1)				Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00								**T-02**
QC Source Sample: Non-SDG (A4B1606-01)												
Benzene	**805**	---	10.0	ug/L	50	---	846	---	---	5	30%	
Toluene	**310**	---	50.0	ug/L	50	---	322	---	---	4	30%	
Ethylbenzene	**476**	---	25.0	ug/L	50	---	496	---	---	4	30%	
Xylenes, total	**2570**	---	75.0	ug/L	50	---	2710	---	---	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*			*"*				
Duplicate (24B1015-DUP2)				Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27								**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Benzene	**2160**	---	10.0	ug/L	50	---	2190	---	---	1	30%	
Toluene	ND	---	50.0	ug/L	50	---	47.0	---	---	***	30%	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C							**Water**					
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Ethylbenzene	**1510**	---	25.0	ug/L	50	---	1520	---	---	0.3	30%	
Xylenes, total	**5030**	---	75.0	ug/L	50	---	5030	---	---	0.02	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*				*"*			
Matrix Spike (24B1015-MS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05									
QC Source Sample: Non-SDG (A4B1612-02)												
EPA 8260D												
Benzene	23.0	---	0.200	ug/L	1	20.0	ND	115	79-120%	---	---	
Toluene	19.9	---	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
Ethylbenzene	21.7	---	0.500	ug/L	1	20.0	ND	108	79-121%	---	---	
Xylenes, total	60.9	---	1.50	ug/L	1	60.0	ND	102	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 108 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*				*"*			

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1607 - 03 29 24 1656

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Blank (24B1015-BLK1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 113 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*"*							
LCS (24B1015-BS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:04									
EPA 8260D												
Naphthalene	16.0	---	5.00	ug/L	1	20.0	---	80	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*95 %*	*80-120 %*	*"*							
Duplicate (24B1015-DUP1)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00									**T-02**
QC Source Sample: Non-SDG (A4B1606-01)												
Naphthalene	ND	---	250	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*94 %*	*80-120 %*	*"*							
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Naphthalene	ND	---	250	ug/L	50	---	183	---	---	***	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 105 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*93 %*	*80-120 %*	*"*							
Matrix Spike (24B1015-MS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05									
QC Source Sample: Non-SDG (A4B1612-02)												
EPA 8260D												
Naphthalene	16.4	---	5.00	ug/L	1	20.0	ND	82	61-128%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Matrix Spike (24B1015-MS1)					Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05							
QC Source Sample: Non-SDG (A4B1612-02)												
Surr: Toluene-d8 (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*						*Dilution: 1x*	
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*						*"*	

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ANALYTICAL REPORT

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0110 - EPA 3510C (Acid Extraction)								**Water**				
Blank (24C0110-BLK1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:10									
EPA 8270E												
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*73 %*	*Limits:*	*44-120 %*		*Dilution:*	*1x*				
2-Fluorobiphenyl (Surr)			*61 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*26 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*77 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*39 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*85 %*		*43-140 %*			*"*				
LCS (24C0110-BS1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:44									
EPA 8270E												
1-Methylnaphthalene	0.817	---	0.160	ug/L	4	4.00	---	**20**	**41-120%**	---	---	Q-30
2-Methylnaphthalene	0.754	---	0.160	ug/L	4	4.00	---	**19**	**40-121%**	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*55 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*45 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*20 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*80 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*31 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*72 %*		*43-140 %*			*"*				
LCS Dup (24C0110-BSD1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 19:18									**Q-19**
EPA 8270E												
1-Methylnaphthalene	1.31	---	0.160	ug/L	4	4.00	---	**33**	**41-120%**	**47**	**30%**	Q-01, Q-30
2-Methylnaphthalene	1.22	---	0.160	ug/L	4	4.00	---	**30**	**40-121%**	**47**	**30%**	Q-01, Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*79 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*69 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*28 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*90 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*45 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*91 %*		*43-140 %*			*"*				

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1607 - 03 29 24 1656

QUALITY CONTROL (QC) SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0105 - Total Suspended Solids - 2022												**Water**
Blank (24C0105-BLK1)			Prepared: 03/04/24 18:56			Analyzed: 03/04/24 18:56						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Duplicate (24C0105-DUP1)			Prepared: 03/04/24 18:56			Analyzed: 03/04/24 18:56						
QC Source Sample: Non-SDG (A4B1541-01)												
Total Suspended Solids	**6.00**	---	5.00	mg/L	1	---	5.00	---	---	**18.2**	**10%**	Q-05, TSS
Duplicate (24C0105-DUP2)			Prepared: 03/04/24 18:56			Analyzed: 03/04/24 18:56						
QC Source Sample: Non-SDG (A4B1597-01)												
Total Suspended Solids	**25.0**	---	5.00	mg/L	1	---	23.0	---	---	8.33	10%	
Reference (24C0105-SRM1)			Prepared: 03/04/24 18:56			Analyzed: 03/04/24 18:56						
SM 2540 D												
Total Suspended Solids	947	---		mg/L	1	928		102	85-115%	---	---	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1607 - 03 29 24 1656

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1607-01	Water	NWTPH-Gx (MS)	02/27/24 11:52	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1607-01	Water	EPA 8260D	02/27/24 11:52	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00

BTEX+N Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1607-01	Water	EPA 8260D	02/27/24 11:52	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0110							
A4B1607-01RE1	Water	EPA 8270E	02/27/24 11:52	03/05/24 06:03	1060mL/1mL	1000mL/1mL	0.94

Solid and Moisture Determinations

Prep: Total Suspended Solids - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0105							
A4B1607-01	Water	SM 2540 D	02/27/24 11:52	03/04/24 18:56			NA

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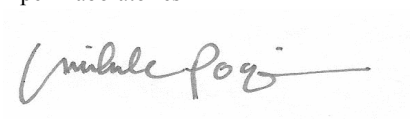

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
TSS	Dried residue was less than 2.5mg as specified in the method. Results meet regulatory requirements.

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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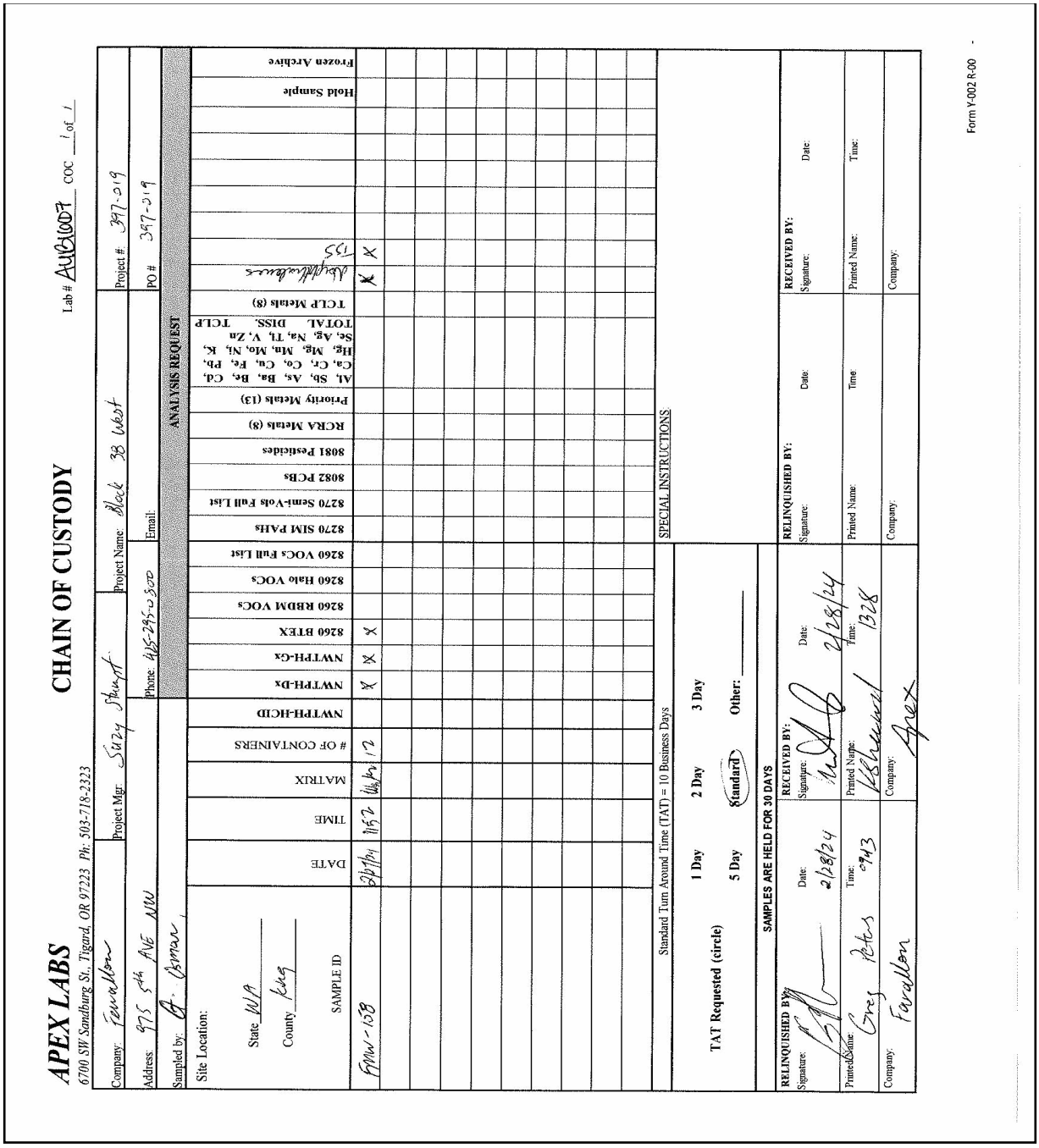
ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # AUG1607 COC 1 of 1

Company: Farallon — Project Mgr: Suzy Stumpf — Project Name: Block 38 West — Project # 397-019
Address: 975 5th AVE NW — Phone: 425-295-0800 — Email: — PO # 397-019
Sampled by: G. Lyman

Site Location: State WA County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive Review	Hold Sample	Frozen Archive
GMW-138	3/27/24	1152	Water	12		X	X	X												X	

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:	3/28/24		Signature:	3/28/24	
Printed Name: Greg Peters		0943	Printed Name:		1328
Company: Farallon			Company: Apex		

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature:			Signature:		
Printed Name:			Printed Name:		
Company:			Company:		

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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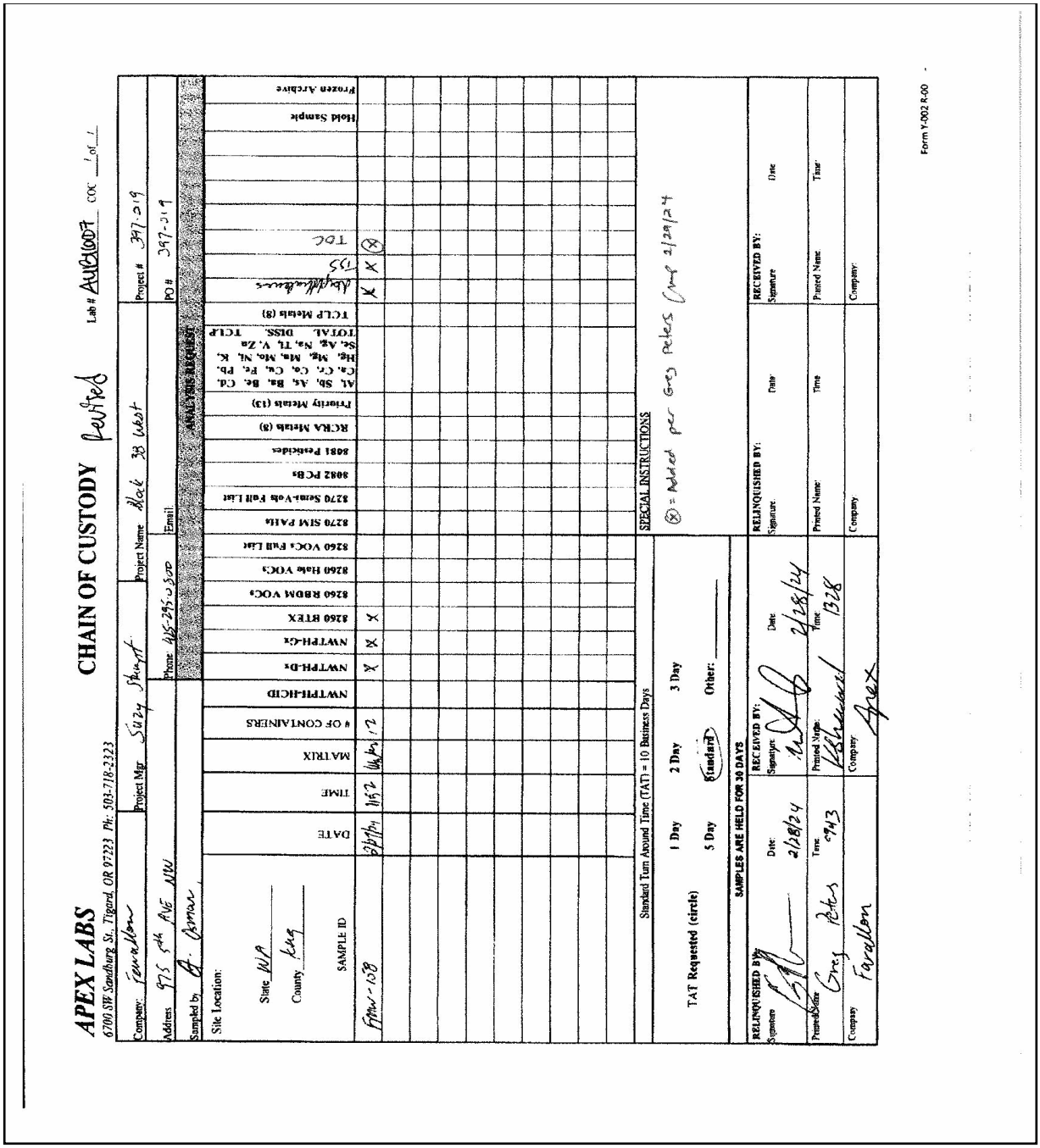
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph.: 503-718-2323

CHAIN OF CUSTODY Rushed Lab # AUB1607 COC 1 of 1

Company: Farallon Project Mgr. Suzy Stumpf Project Name Block 38 West Project # 397-019
Address 975 5th Ave NW Phone 425-295-0800 Email: PO # 397-019
Sampled by: A. Osman
Site Location: State WA County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, He, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive	TDC	Hold Sample	Frozen Archive
FBW-108	3/27/24	1152	Water	12		X	X	X												X	X		

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other:

SPECIAL INSTRUCTIONS
⊗ = Added per Greg Peters (Amy) 3/29/24

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 3/28/24	Date: 3/28/24	Date:	Date:
Time: 0943	Time: 1328	Time:	Time:
Printed Name: Greg Peters	Printed Name: Ashmead	Printed Name:	Printed Name:
Company: Farallon	Company: Apex	Company:	Company:

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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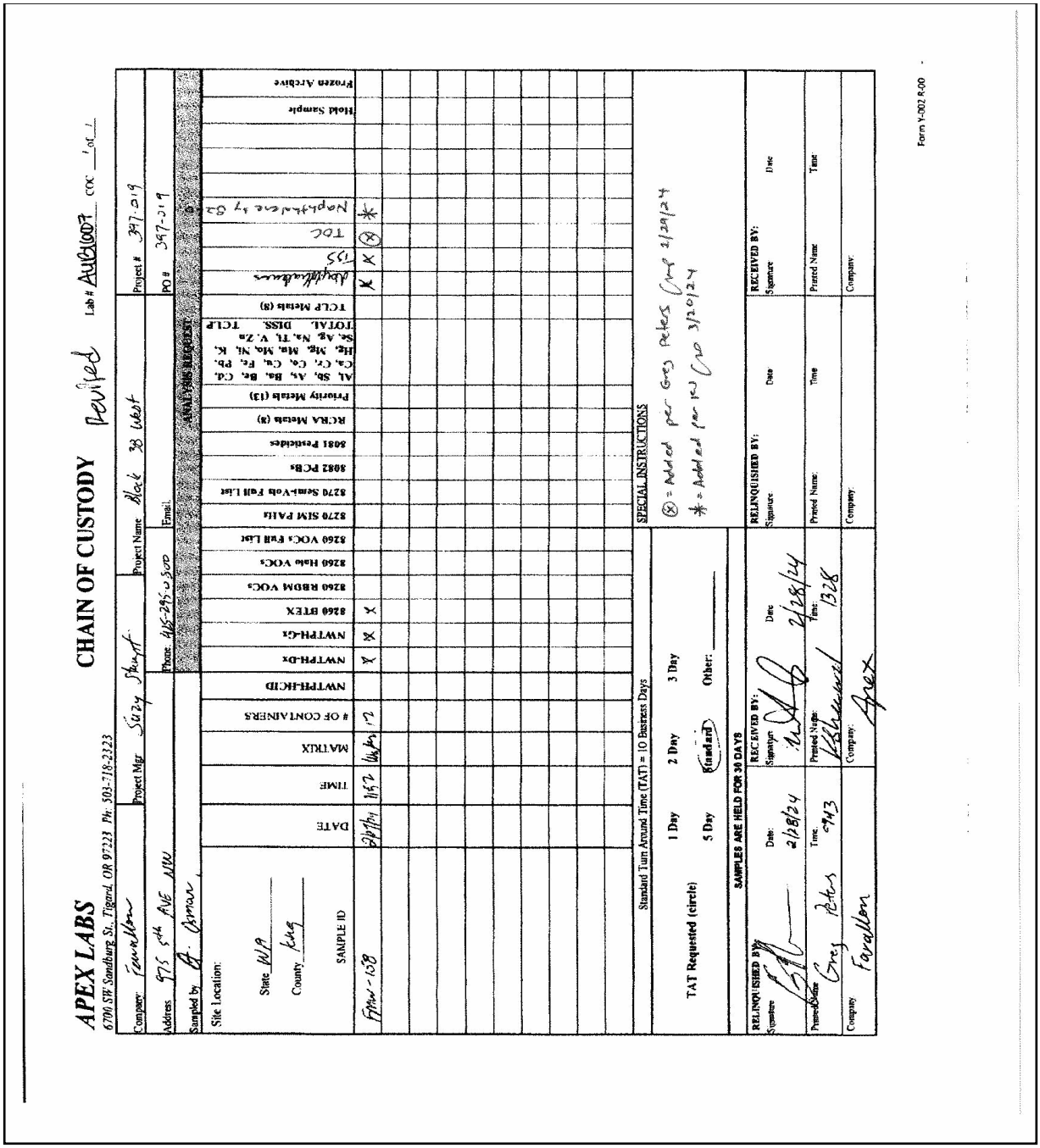
ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY Revised Lab # AUB1607 COC 1 of 1

Company: Farallon Project Mgr: Suzy Stumpf Project Name: Block 38 West Project #: 397-019
Address: 575 5th Ave NW Phone: 425-295-0500 Email: PO #: 397-019
Sampled by: A. Osmon
Site Location: State: WA County: King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, He, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Dissolved Solids	TOC	Naphthalene by 8260	Hold Sample	Frozen Archive
Farm-138	3/27/24	1152	Water	12		X	X	X												X	X	*		

SPECIAL INSTRUCTIONS
⊗ = Added per Grey Peters (me) 3/29/24
* = Added per KJ (me) 3/30/24

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature	Date: 3/28/24	RECEIVED BY: Signature	Date: 3/28/24
Printed Name: Grey Peters	Time: 1743	Printed Name: [illegible]	Time: 1328
Company: Farallon		Company: Apex	

RELINQUISHED BY: Signature	Date	RECEIVED BY: Signature	Date
Printed Name:	Time	Printed Name:	Time
Company:		Company:	

Form Y-002 R-00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1607 - 03 29 24 1656**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Element WO#: A4B1607

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 2/28/24 @ 1328 By: KMO

Delivered by: Apex__ Client__ ESS__ FedEx__ UPS__ Radio__ Morgan__ SDS__ Evergreen__ Other X

Cooler Inspection Date/time inspected: 2/28/24 @ 1328 By: KMO

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.9						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/~~N~~) Possible reason why: ____

Green dots applied to out of temperature samples? Yes/~~No~~

Out of temperature samples form initiated? Yes/~~No~~

Sample Inspection: Date/time inspected: 2/28/24 @ 1613 By: KAB

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes ___ No X Comments: All containers read FMW-158-022724

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments 6/6 Seal

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes X No___NA___ pH ID: A23I172

Comments: ____

Additional information: ____

Labeled by: KAB Witness: KAB Cooler Inspected by: KAB/MHM

Form Y-003 R-01

Apex Laboratories

Michele Poquiz

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ANALYTICAL REPORT

AMENDED REPORT

Friday, March 29, 2024

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A4B1613 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4B1613, which was received by the laboratory on 2/28/2024 at 1:28:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.					
(See Cooler Receipt Form for details)					
Cooler #1	4.9	degC	Cooler #2	1.8	degC
Cooler #3	2.9	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-160-022724	A4B1613-01	Water	02/27/24 12:00	02/28/24 13:28
FMW-161-022724	A4B1613-02	Water	02/27/24 13:45	02/28/24 13:28
FMW-163-022724	A4B1613-03	Water	02/27/24 15:30	02/28/24 13:28
FMW-156-022724	A4B1613-04	Water	02/27/24 14:02	02/28/24 13:28
FMW-155-022724	A4B1613-05	Water	02/27/24 15:37	02/28/24 13:28

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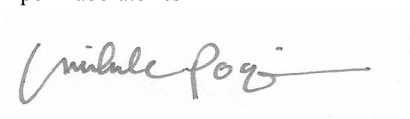

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1613 - 03 29 24 1713

ANALYTICAL CASE NARRATIVE

A4B1613 — **Apex Laboratories**

Amended Final Report #2 - This report supercedes all previous reports

Methylnaphthalenes and Naphthalene by EPA 8270E Note

The Laboratory Control Sample (LCS/LCSD) recoveries associated with the quantification of naphthalene and methylnaphthalenes by EPA Method 8270E were below acceptance criteria for the samples below. These samples were re-extracted and re-analyzed with similar results. The investigation into these low LCS recoveries was unable to identify a specific root cause. Analysis of subsequent analytical batches for these analytes by EPA Method 8270E yielded LCS recoveries within acceptance limits. Due to insufficient remaining sample volume for these samples, additional testing for naphthalene and the methylnaphthalenes by EPA Method 8270E could not be completed. The EPA Method 8270E data for methylnaphthalenes was qualified accordingly. Naphthalene was reported by EPA Method 8260D.

- FMW-160-022724 (A4B1613-01)
- FMW-161-022724 (A4B1613-02)
- FMW-163-022724 (A4B1613-03)
- FMW-156-022724 (A4B1613-04)
- FMW-155-022724 (A4B1613-05)

Kurt Johnson
Director of Forensic Services
March 29, 2024

Amended Final Report #1 - This report supersedes all previous reports.

NWTPH-Dx - WA Diesel Extended - Method Name Change

This report contains modified data for NWTPH-Dx (WA Ext) for all samples.

The reported Analytical Method Reference has changed from "**Washington Diesel Range Extended (C10-C40) by EPA 8015D Modified**" to "**Whole Product Diesel Testing (C10-C40) WDOE/NWTPH-Dx**", the Specific Method Reference has changed from "**8015DMod (WA_Ext)**" to "**NWTPH-Dx (WA Ext)**", and a Minimum Reporting Level has been set at 0.250mg/L.

The affected data is flagged in the report with the AMEND qualifier.

David Jack
Technical Manager

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL CASE NARRATIVE

A4B1613 — **Apex Laboratories**

March 20, 2024

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-022724 (A4B1613-01RE1)				**Matrix: Water**		**Batch: 24C0024**		**AMEND**
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 13:24	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*	*Limits: 50-150 %*		*1*	*03/07/24 13:24*	*NWTPH-DX (WA_Ext)*	
FMW-161-022724 (A4B1613-02RE1)				**Matrix: Water**		**Batch: 24C0024**		**AMEND**
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 13:47	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*	*Limits: 50-150 %*		*1*	*03/07/24 13:47*	*NWTPH-DX (WA_Ext)*	
FMW-163-022724 (A4B1613-03RE1)				**Matrix: Water**		**Batch: 24C0024**		**AMEND**
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 14:11	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*	*Limits: 50-150 %*		*1*	*03/07/24 14:11*	*NWTPH-DX (WA_Ext)*	
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24C0024**		**AMEND**
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/06/24 22:39	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*	*Limits: 50-150 %*		*1*	*03/06/24 22:39*	*NWTPH-DX (WA_Ext)*	
FMW-155-022724 (A4B1613-05)				**Matrix: Water**		**Batch: 24C0024**		**AMEND**
Diesel Range Organics (C10-C40)	**605**	---	250	ug/L	1	03/06/24 23:02	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*	*Limits: 50-150 %*		*1*	*03/06/24 23:02*	*NWTPH-DX (WA_Ext)*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-022724 (A4B1613-05)				**Matrix: Water**		**Batch: 24C0983**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/28/24 12:41	NWTPH-DX (WA_Ext) wSGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*		*Limits: 50-150 %*	*1*	*03/28/24 12:41*	*NWTPH-DX (WA_Ext) wSGC*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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APEX LABORATORIES

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-022724 (A4B1613-01)				**Matrix: Water**		**Batch: 24B1015**		
Gasoline Range Organics	ND	---	100	ug/L	1	02/29/24 17:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 106 %*	*Limits: 50-150 %*		*1*	*02/29/24 17:27*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*115 %*	*50-150 %*	*1*	*02/29/24 17:27*	*NWTPH-Gx (MS)*	
FMW-161-022724 (A4B1613-02)				**Matrix: Water**		**Batch: 24B1015**		
Gasoline Range Organics	ND	---	100	ug/L	1	02/29/24 17:54	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 106 %*	*Limits: 50-150 %*		*1*	*02/29/24 17:54*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*115 %*	*50-150 %*	*1*	*02/29/24 17:54*	*NWTPH-Gx (MS)*	
FMW-163-022724 (A4B1613-03)				**Matrix: Water**		**Batch: 24B1015**		
Gasoline Range Organics	ND	---	100	ug/L	1	02/29/24 18:22	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 109 %*	*Limits: 50-150 %*		*1*	*02/29/24 18:22*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*116 %*	*50-150 %*	*1*	*02/29/24 18:22*	*NWTPH-Gx (MS)*	
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24B1015**		
Gasoline Range Organics	ND	---	100	ug/L	1	02/29/24 18:49	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 107 %*	*Limits: 50-150 %*		*1*	*02/29/24 18:49*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*116 %*	*50-150 %*	*1*	*02/29/24 18:49*	*NWTPH-Gx (MS)*	
FMW-155-022724 (A4B1613-05RE1)				**Matrix: Water**		**Batch: 24C0043**		
Gasoline Range Organics	ND	---	100	ug/L	1	03/01/24 16:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*	*Limits: 50-150 %*		*1*	*03/01/24 16:42*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*	*1*	*03/01/24 16:42*	*NWTPH-Gx (MS)*	

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-022724 (A4B1613-01)				**Matrix: Water**		**Batch: 24B1015**		
Benzene	ND	---	0.200	ug/L	1	02/29/24 17:27	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	02/29/24 17:27	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	02/29/24 17:27	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	02/29/24 17:27	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
FMW-161-022724 (A4B1613-02)				**Matrix: Water**		**Batch: 24B1015**		
Benzene	ND	---	0.200	ug/L	1	02/29/24 17:54	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	02/29/24 17:54	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	02/29/24 17:54	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	02/29/24 17:54	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits: 80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
FMW-163-022724 (A4B1613-03)				**Matrix: Water**		**Batch: 24B1015**		
Benzene	**0.420**	---	0.200	ug/L	1	02/29/24 18:22	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	02/29/24 18:22	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	02/29/24 18:22	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	02/29/24 18:22	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24B1015**		
Benzene	ND	---	0.200	ug/L	1	02/29/24 18:49	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	02/29/24 18:49	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	02/29/24 18:49	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	02/29/24 18:49	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*113 %*	*Limits: 80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*94 %*	*80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-155-022724 (A4B1613-05RE1)				**Matrix: Water**		**Batch: 24C0043**		
Benzene	ND	---	0.200	ug/L	1	03/01/24 16:42	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	03/01/24 16:42	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	03/01/24 16:42	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	03/01/24 16:42	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits: 80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*93 %*	*80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1613 - 03 29 24 1713

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-022724 (A4B1613-01)				**Matrix: Water**		**Batch: 24B1015**		
Naphthalene	ND	---	5.00	ug/L	1	02/29/24 17:27	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 17:27*	*EPA 8260D*	
FMW-161-022724 (A4B1613-02)				**Matrix: Water**		**Batch: 24B1015**		
Naphthalene	ND	---	5.00	ug/L	1	02/29/24 17:54	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits: 80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*02/29/24 17:54*	*EPA 8260D*	
FMW-163-022724 (A4B1613-03)				**Matrix: Water**		**Batch: 24B1015**		
Naphthalene	ND	---	5.00	ug/L	1	02/29/24 18:22	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*02/29/24 18:22*	*EPA 8260D*	
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24B1015**		
Naphthalene	ND	---	5.00	ug/L	1	02/29/24 18:49	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*113 %*	*Limits: 80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*94 %*	*80-120 %*	*1*	*02/29/24 18:49*	*EPA 8260D*	
FMW-155-022724 (A4B1613-05RE1)				**Matrix: Water**		**Batch: 24C0043**		
Naphthalene	ND	---	5.00	ug/L	1	03/01/24 16:42	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits: 80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*93 %*	*80-120 %*	*1*	*03/01/24 16:42*	*EPA 8260D*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1613 - 03 29 24 1713

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-160-022724 (A4B1613-01)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	03/08/24 11:24	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	03/08/24 11:24	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*58 %*	*44-120 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
Phenol-d6 (Surr)			*26 %*	*10-133 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*65 %*	*50-134 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
2-Fluorophenol (Surr)			*37 %*	*19-120 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*105 %*	*43-140 %*	*1*	*03/08/24 11:24*	*EPA 8270E*	
FMW-161-022724 (A4B1613-02)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0430	ug/L	1	03/08/24 11:59	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0430	ug/L	1	03/08/24 11:59	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*56 %*	*Limits: 44-120 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*52 %*	*44-120 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
Phenol-d6 (Surr)			*23 %*	*10-133 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*64 %*	*50-134 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
2-Fluorophenol (Surr)			*32 %*	*19-120 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*90 %*	*43-140 %*	*1*	*03/08/24 11:59*	*EPA 8270E*	
FMW-163-022724 (A4B1613-03)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0417	ug/L	1	03/08/24 12:33	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0417	ug/L	1	03/08/24 12:33	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*64 %*	*Limits: 44-120 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*55 %*	*44-120 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
Phenol-d6 (Surr)			*24 %*	*10-133 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*67 %*	*50-134 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
2-Fluorophenol (Surr)			*34 %*	*19-120 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*98 %*	*43-140 %*	*1*	*03/08/24 12:33*	*EPA 8270E*	
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0381	ug/L	1	03/08/24 13:07	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0381	ug/L	1	03/08/24 13:07	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*96 %*	*Limits: 44-120 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*84 %*	*44-120 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	
Phenol-d6 (Surr)			*31 %*	*10-133 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-156-022724 (A4B1613-04)				**Matrix: Water**		**Batch: 24C0110**		
Surrogate: p-Terphenyl-d14 (Surr)			*Recovery: 121 %*	*Limits: 50-134 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	
2-Fluorophenol (Surr)			*52 %*	*19-120 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*166 %*	*43-140 %*	*1*	*03/08/24 13:07*	*EPA 8270E*	*S-06*
FMW-155-022724 (A4B1613-05)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 13:41	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 13:41	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 63 %*	*Limits: 44-120 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*57 %*	*44-120 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	
Phenol-d6 (Surr)			*24 %*	*10-133 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*52 %*	*50-134 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	
2-Fluorophenol (Surr)			*33 %*	*19-120 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*101 %*	*43-140 %*	*1*	*03/08/24 13:41*	*EPA 8270E*	

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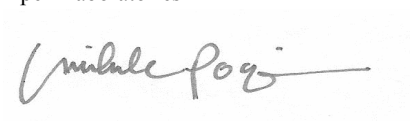

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0024 - EPA 3510C (Fuels/Acid Ext.)							**Water**					
Blank (24C0024-BLK1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 19:32							**AMEND**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	ND	---	200	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (24C0024-BS1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 19:55							**AMEND**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	269	---	200	ug/L	1	500	---	54	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 81 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (24C0024-BSD1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 20:19							**AMEND, Q-19**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	291	---	200	ug/L	1	500	---	58	38-132%	8	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0983 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (24C0983-BLK1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 11:31						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (24C0983-BS1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 11:54						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	296	---	250	ug/L	1	500	---	59	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (24C0983-BSD1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 12:18						**Q-19**
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	289	---	250	ug/L	1	500	---	58	38-132%	2	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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Tigard, OR 97223
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ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1613 - 03 29 24 1713

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C									Water			
Blank (24B1015-BLK1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 105 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*114 %*	*50-150 %*		*"*							
LCS (24B1015-BS2)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:43									
NWTPH-Gx (MS)												
Gasoline Range Organics	553	---	100	ug/L	1	500	---	111	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*106 %*	*50-150 %*		*"*							
Duplicate (24B1015-DUP1)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00									T-02
QC Source Sample: Non-SDG (A4B1606-01)												
Gasoline Range Organics	**28000**	---	5000	ug/L	50	---	29500	---	---	5	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*107 %*	*50-150 %*		*"*							
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									T-02
QC Source Sample: Non-SDG (A4B1606-03)												
Gasoline Range Organics	**39500**	---	5000	ug/L	50	---	39400	---	---	0.4	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*104 %*	*50-150 %*		*"*							

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0043 - EPA 5030C									Water			
Blank (24C0043-BLK1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 16:20									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*			*"*					
LCS (24C0043-BS2)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 15:59									
NWTPH-Gx (MS)												
Gasoline Range Organics	472	---	100	ug/L	1	500	---	94	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
Duplicate (24C0043-DUP1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 19:12									
QC Source Sample: Non-SDG (A4B1618-16RE1)												
Gasoline Range Organics	**68200**	---	5000	ug/L	50	---	67900	---	---	0.3	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*89 %*	*50-150 %*			*"*					
Duplicate (24C0043-DUP2)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 20:38									
QC Source Sample: Non-SDG (A4C0837-01)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1613 - 03 29 24 1713

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Blank (24B1015-BLK1)				Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 113 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*99 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*		*"*					
LCS (24B1015-BS1)				Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:04								
EPA 8260D												
Benzene	21.3	---	0.200	ug/L	1	20.0	---	107	80-120%	---	---	
Toluene	18.5	---	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
Ethylbenzene	20.1	---	0.500	ug/L	1	20.0	---	101	80-120%	---	---	
Xylenes, total	57.3	---	1.50	ug/L	1	60.0	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*95 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*		*"*					
Duplicate (24B1015-DUP1)				Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00								**T-02**
QC Source Sample: Non-SDG (A4B1606-01)												
Benzene	**805**	---	10.0	ug/L	50	---	846	---	---	5	30%	
Toluene	**310**	---	50.0	ug/L	50	---	322	---	---	4	30%	
Ethylbenzene	**476**	---	25.0	ug/L	50	---	496	---	---	4	30%	
Xylenes, total	**2570**	---	75.0	ug/L	50	---	2710	---	---	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*		*"*					
Duplicate (24B1015-DUP2)				Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27								**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Benzene	**2160**	---	10.0	ug/L	50	---	2190	---	---	1	30%	
Toluene	ND	---	50.0	ug/L	50	---	47.0	---	---	***	30%	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C							**Water**					
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Ethylbenzene	**1510**	---	25.0	ug/L	50	---	1520	---	---	0.3	30%	
Xylenes, total	**5030**	---	75.0	ug/L	50	---	5030	---	---	0.02	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*				*"*			
Matrix Spike (24B1015-MS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05									
QC Source Sample: Non-SDG (A4B1612-02)												
EPA 8260D												
Benzene	23.0	---	0.200	ug/L	1	20.0	ND	115	79-120%	---	---	
Toluene	19.9	---	1.00	ug/L	1	20.0	ND	100	80-121%	---	---	
Ethylbenzene	21.7	---	0.500	ug/L	1	20.0	ND	108	79-121%	---	---	
Xylenes, total	60.9	---	1.50	ug/L	1	60.0	ND	102	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 108 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*				*"*			

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0043 - EPA 5030C												**Water**
Blank (24C0043-BLK1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 16:20									
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*			*"*				
LCS (24C0043-BS1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 15:29									
EPA 8260D												
Benzene	20.1	---	0.200	ug/L	1	20.0	---	100	80-120%	---	---	
Toluene	18.9	---	1.00	ug/L	1	20.0	---	94	80-120%	---	---	
Ethylbenzene	19.7	---	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Xylenes, total	61.2	---	1.50	ug/L	1	60.0	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Duplicate (24C0043-DUP1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 19:12									
QC Source Sample: Non-SDG (A4B1618-16RE1)												
Benzene	**3680**	---	10.0	ug/L	50	---	3650	---	---	0.7	30%	
Toluene	**1230**	---	50.0	ug/L	50	---	1220	---	---	1	30%	
Ethylbenzene	**3830**	---	25.0	ug/L	50	---	3770	---	---	1	30%	
Xylenes, total	**10900**	---	75.0	ug/L	50	---	10800	---	---	0.7	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*			*"*				
Duplicate (24C0043-DUP2)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 20:38									
QC Source Sample: Non-SDG (A4C0837-01)												
Benzene	ND	---	0.200	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	---	1.00	ug/L	1	---	ND	---	---	---	30%	

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AMENDED REPORT

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0043 - EPA 5030C							**Water**					
Duplicate (24C0043-DUP2)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 20:38									
QC Source Sample: Non-SDG (A4C0837-01)												
Ethylbenzene	ND	---	0.500	ug/L	1	---	ND	---	---	---	30%	
Xylenes, total	ND	---	1.50	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Matrix Spike (24C0043-MS1)			Prepared: 03/01/24 14:12 Analyzed: 03/02/24 01:18									
QC Source Sample: Non-SDG (A4C0837-13)												
EPA 8260D												
Benzene	21.6	---	0.200	ug/L	1	20.0	ND	108	79-120%	---	---	
Toluene	20.7	---	1.00	ug/L	1	20.0	ND	103	80-121%	---	---	
Ethylbenzene	21.9	---	0.500	ug/L	1	20.0	ND	110	79-121%	---	---	
Xylenes, total	67.4	---	1.50	ug/L	1	60.0	ND	112	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4B1613 - 03 29 24 1713

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Blank (24B1015-BLK1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 15:10									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 113 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*"*							
LCS (24B1015-BS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 14:04									
EPA 8260D												
Naphthalene	16.0	---	5.00	ug/L	1	20.0	---	80	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*95 %*	*80-120 %*	*"*							
Duplicate (24B1015-DUP1)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:00									**T-02**
QC Source Sample: Non-SDG (A4B1606-01)												
Naphthalene	ND	---	250	ug/L	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*94 %*	*80-120 %*	*"*							
Duplicate (24B1015-DUP2)			Prepared: 02/29/24 12:22 Analyzed: 03/01/24 03:27									**T-02**
QC Source Sample: Non-SDG (A4B1606-03)												
Naphthalene	ND	---	250	ug/L	50	---	183	---	---	***	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 105 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*"*							
4-Bromofluorobenzene (Surr)			*93 %*	*80-120 %*	*"*							
Matrix Spike (24B1015-MS1)			Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05									
QC Source Sample: Non-SDG (A4B1612-02)												
EPA 8260D												
Naphthalene	16.4	---	5.00	ug/L	1	20.0	ND	82	61-128%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24B1015 - EPA 5030C												**Water**
Matrix Spike (24B1015-MS1)					Prepared: 02/29/24 12:22 Analyzed: 02/29/24 16:05							
QC Source Sample: Non-SDG (A4B1612-02)												
Surr: Toluene-d8 (Surr)			*Recovery: 95 %*		*Limits: 80-120 %*						*Dilution: 1x*	
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*						*"*	

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AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0043 - EPA 5030C							**Water**					
Blank (24C0043-BLK1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 16:20									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 106 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*101 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*94 %*	*80-120 %*		*"*							
LCS (24C0043-BS1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 15:29									
EPA 8260D												
Naphthalene	17.4	---	5.00	ug/L	1	20.0	---	87	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 107 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*99 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*95 %*	*80-120 %*		*"*							
Duplicate (24C0043-DUP1)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 19:12									
QC Source Sample: Non-SDG (A4B1618-16RE1)												
Naphthalene	**640**	---	250	ug/L	50	---	634	---	---	0.9	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 100 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*99 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*98 %*	*80-120 %*		*"*							
Duplicate (24C0043-DUP2)			Prepared: 03/01/24 14:12 Analyzed: 03/01/24 20:38									
QC Source Sample: Non-SDG (A4C0837-01)												
Naphthalene	ND	---	5.00	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 107 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*100 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*95 %*	*80-120 %*		*"*							
Matrix Spike (24C0043-MS1)			Prepared: 03/01/24 14:12 Analyzed: 03/02/24 01:18									
QC Source Sample: Non-SDG (A4C0837-13)												
EPA 8260D												
Naphthalene	18.7	---	5.00	ug/L	1	20.0	ND	94	61-128%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 107 %*	*Limits: 80-120 %*		*Dilution: 1x*							

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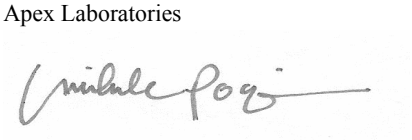

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0043 - EPA 5030C												**Water**
Matrix Spike (24C0043-MS1)					Prepared: 03/01/24 14:12 Analyzed: 03/02/24 01:18							
QC Source Sample: Non-SDG (A4C0837-13)												
Surr: Toluene-d8 (Surr)			*Recovery: 97 %*		*Limits: 80-120 %*							*Dilution: 1x*
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*							*"*

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ANALYTICAL REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0110 - EPA 3510C (Acid Extraction)									**Water**			
Blank (24C0110-BLK1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:10									
EPA 8270E												
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*73 %*	*Limits:*	*44-120 %*		*Dilution:*	*1x*				
2-Fluorobiphenyl (Surr)			*61 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*26 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*77 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*39 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*85 %*		*43-140 %*			*"*				
LCS (24C0110-BS1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:44									
EPA 8270E												
1-Methylnaphthalene	0.817	---	0.160	ug/L	4	4.00	---	**20**	**41-120%**	---	---	Q-30
2-Methylnaphthalene	0.754	---	0.160	ug/L	4	4.00	---	**19**	**40-121%**	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*55 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*45 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*20 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*80 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*31 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*72 %*		*43-140 %*			*"*				
LCS Dup (24C0110-BSD1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 19:18									**Q-19**
EPA 8270E												
1-Methylnaphthalene	1.31	---	0.160	ug/L	4	4.00	---	**33**	**41-120%**	**47**	**30%**	Q-01, Q-30
2-Methylnaphthalene	1.22	---	0.160	ug/L	4	4.00	---	**30**	**40-121%**	**47**	**30%**	Q-01, Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*79 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*69 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*28 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*90 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*45 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*91 %*		*43-140 %*			*"*				

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Tigard, OR 97223
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

SAMPLE PREPARATION INFORMATION

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0024							
A4B1613-01RE1	Water	NWTPH-DX (WA_Ext)	02/27/24 12:00	03/01/24 10:42	960mL/2mL	1000mL/2mL	1.04
A4B1613-02RE1	Water	NWTPH-DX (WA_Ext)	02/27/24 13:45	03/01/24 10:42	980mL/2mL	1000mL/2mL	1.02
A4B1613-03RE1	Water	NWTPH-DX (WA_Ext)	02/27/24 15:30	03/01/24 10:42	960mL/2mL	1000mL/2mL	1.04
A4B1613-04	Water	NWTPH-DX (WA_Ext)	02/27/24 14:02	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1613-05	Water	NWTPH-DX (WA_Ext)	02/27/24 15:37	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0983							
A4B1613-05	Water	NWTPH-DX (WA_Ext) wSGC	02/27/24 15:37	03/01/24 10:42	1040mL/2mL	1000mL/5mL	0.39

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1613-01	Water	NWTPH-Gx (MS)	02/27/24 12:00	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-02	Water	NWTPH-Gx (MS)	02/27/24 13:45	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-03	Water	NWTPH-Gx (MS)	02/27/24 15:30	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-04	Water	NWTPH-Gx (MS)	02/27/24 14:02	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
Batch: 24C0043							
A4B1613-05RE1	Water	NWTPH-Gx (MS)	02/27/24 15:37	03/01/24 14:19	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1613-01	Water	EPA 8260D	02/27/24 12:00	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00

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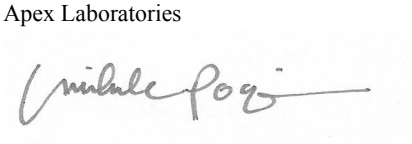

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ANALYTICAL REPORT

AMENDED REPORT

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

SAMPLE PREPARATION INFORMATION

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4B1613-02	Water	EPA 8260D	02/27/24 13:45	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-03	Water	EPA 8260D	02/27/24 15:30	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-04	Water	EPA 8260D	02/27/24 14:02	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
Batch: 24C0043							
A4B1613-05RE1	Water	EPA 8260D	02/27/24 15:37	03/01/24 14:19	5mL/5mL	5mL/5mL	1.00

BTEX+N Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24B1015							
A4B1613-01	Water	EPA 8260D	02/27/24 12:00	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-02	Water	EPA 8260D	02/27/24 13:45	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-03	Water	EPA 8260D	02/27/24 15:30	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
A4B1613-04	Water	EPA 8260D	02/27/24 14:02	02/29/24 12:22	5mL/5mL	5mL/5mL	1.00
Batch: 24C0043							
A4B1613-05RE1	Water	EPA 8260D	02/27/24 15:37	03/01/24 14:19	5mL/5mL	5mL/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0110							
A4B1613-01	Water	EPA 8270E	02/27/24 12:00	03/05/24 06:03	1000mL/1mL	1000mL/1mL	1.00
A4B1613-02	Water	EPA 8270E	02/27/24 13:45	03/05/24 06:03	930mL/1mL	1000mL/1mL	1.08
A4B1613-03	Water	EPA 8270E	02/27/24 15:30	03/05/24 06:03	960mL/1mL	1000mL/1mL	1.04
A4B1613-04	Water	EPA 8270E	02/27/24 14:02	03/05/24 06:03	1050mL/1mL	1000mL/1mL	0.95
A4B1613-05	Water	EPA 8270E	02/27/24 15:37	03/05/24 06:03	1060mL/1mL	1000mL/1mL	0.94

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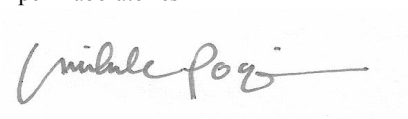

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ANALYTICAL REPORT

AMENDED REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

AMEND	The Result, Reporting Level, Recovery and/or RPD has changed. Note: Batch QC marked as AMENDED may or may not have been issued prior to the change. Case Narrative included if client data is affected.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
S-06	Surrogate recovery is outside of established control limits.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
Water	**NWTPH-DX (WA_Ext)**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	
Water	**NWTPH-DX (WA_Ext) wSGC**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

APEX LABS   **CHAIN OF CUSTODY**   Lab # A4B1613   COC 1 of 1

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019

Address: 975 5th Ave NW Issaquah WA | Phone: 425-295-0800 | Email: | PO # 397-019

Sampled by: A. Osman / M. Lee / J. Kim

Site Location: State WA, County King

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes TSS							Hold Sample	Frozen Archive
FMW-160-022724	2/27/24	1800	Water	11		X	X	X												X								
FMW-161-022724		1345				X	X	X												X								
FMW-163-022724		1530				X	X	X												X								
FMW-156-022724		1402				X	X	X												X								
FMW-155-022724		1537				X	X	X												X								

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day, 2 Day, 3 Day, 5 Day, Standard (circled), Other: ______

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS: Hold for TSS pending lab's analysis of the sample containers.

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date: 2/28/24	Signature: [signature] Date: 2/28/24	Signature: Date:	Signature: Date:
Printed Name: Greg Peters Time: 943	Printed Name: [illegible] Time: 1328	Printed Name: Time:	Printed Name: Time:
Company: Farallon	Company: Apex	Company:	Company:

Form Y-002 R-00

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A4B1613 *REVISED* COC 1 of 1

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW Issaquah WA | Phone: 425-295-0800 | Email: | PO # 397-019
Sampled by: P. Ostman / M. Lee / J. Kim

ANALYSIS REQUEST

Site Location: State WA County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalene	TSS	Naphthalene by 8260	NWTPH-Dx LL w/SGC				Hold Sample	Frozen Archive
FMW-160-022724	2/27/24	1800	Water	11		X	X	X												X		*						
FMW-161-022724		1345				X	X	X												X		*						
FMW-163-022724		1530				X	X	X												X		*						
FMW-156-022724		1402				X	X	X												X		*						
FMW-155-022724		1557				X	X	X												X		*	⊗					

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day **Standard** (circled) Other: ____

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:
Hold for TSS pending Lab's analysis of the sample container.
* = Added per KJ Cro 3/20/24
⊗ = Added per Greg Peters Cro 3/20/24

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date: 2/28/24	Signature: [signature] Date: 2/28/24	Signature: Date:	Signature: Date:
Printed Name: Greg Peters Time: 943	Printed Name: K. [illegible] Time: 1328	Printed Name: Time:	Printed Name: Time:
Company: Farallon	Company: Apex	Company:	Company:

Form Y-002 R-00

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Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1613 - 03 29 24 1713**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Element WO#: A4B1613

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 2/28/24 @ 1328 By: KRS

Delivered by: Apex__Client__ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen__Other X

Cooler Inspection Date/time inspected: 2/28/24 @ 1328 By: KRS

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	4.9	1.8	2.9				
Custody seals? (Y/N)	N	→	→				
Received on ice? (Y/N)	Y	→	→				
Temp. blanks? (Y/N)	Y	→	→				
Ice type: (Gel/Real/Other)	Real	→	→				
Condition (In/Out):	In	→	→				

Cooler out of temp? (Y/N) Possible reason why: ____

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 2/28/24 @ 1743 By: KAB

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments ____

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ___ pH ID: A23I172

Comments: ____

Additional information: ____

Labeled by: KAB Witness: [signature] Cooler Inspected by: KAB

Form Y-003 R-01

Apex Laboratories

Michele Poquiz

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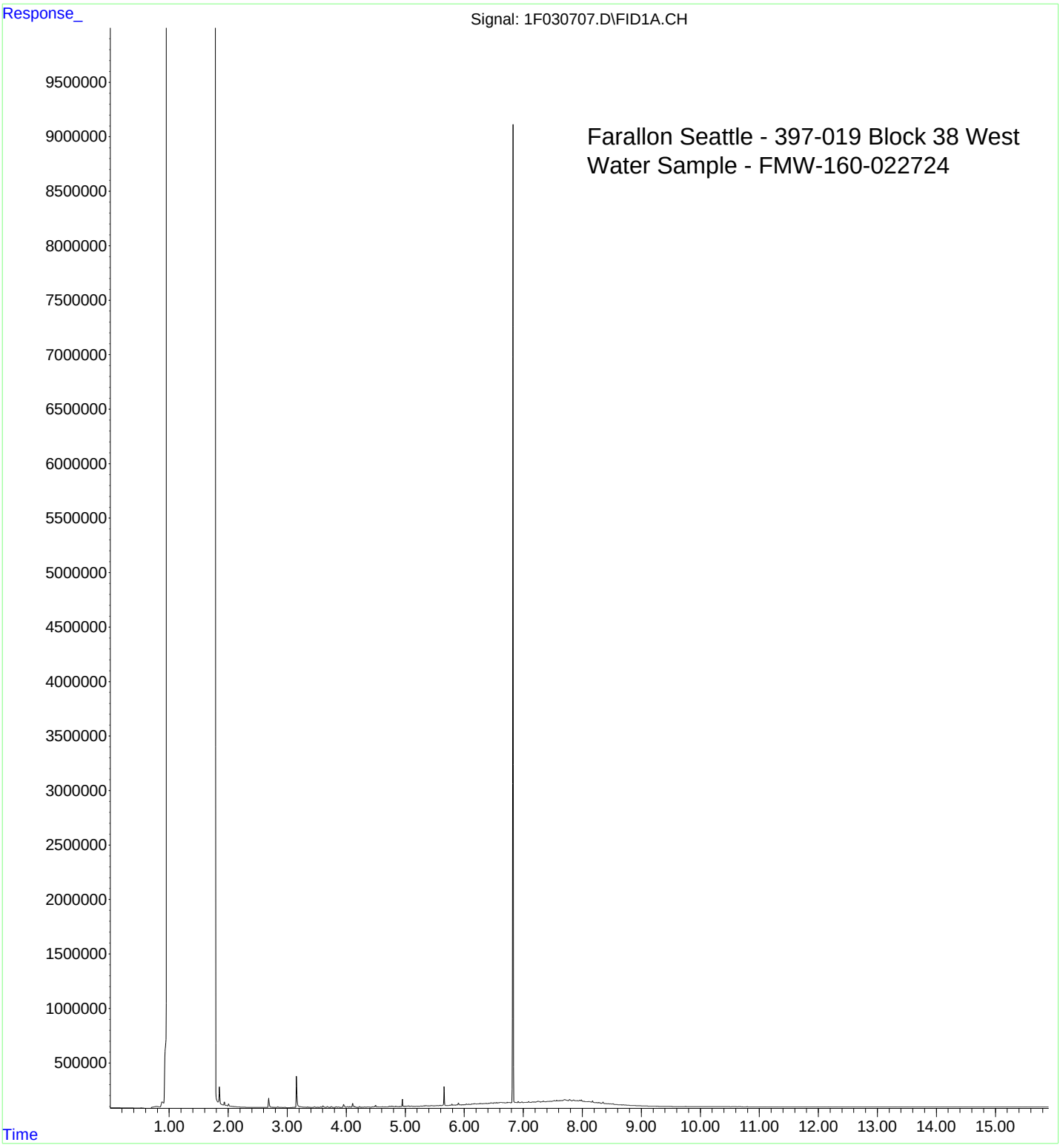
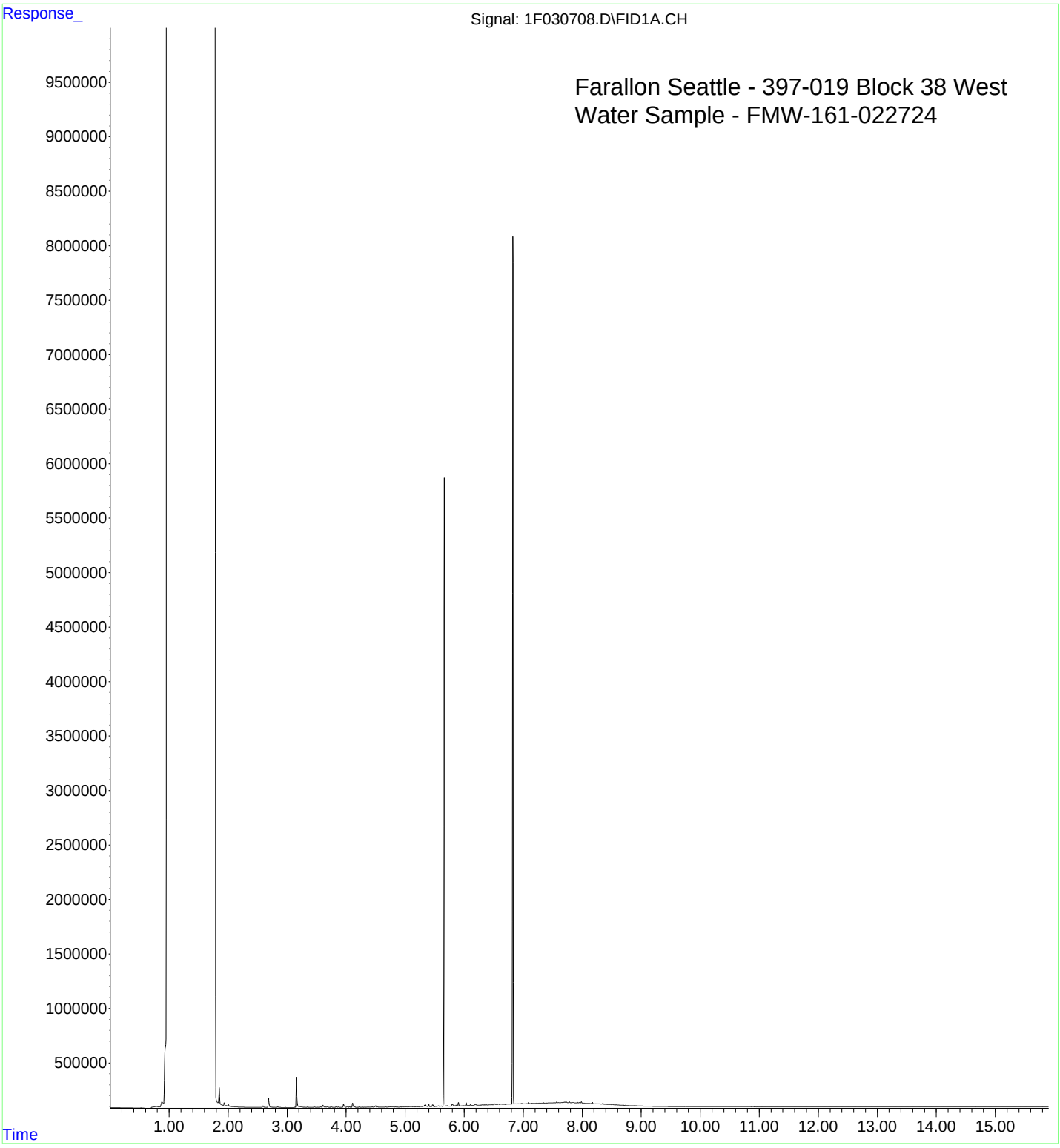
Michele Poquiz For Kurt Johnson, Senior Chemist

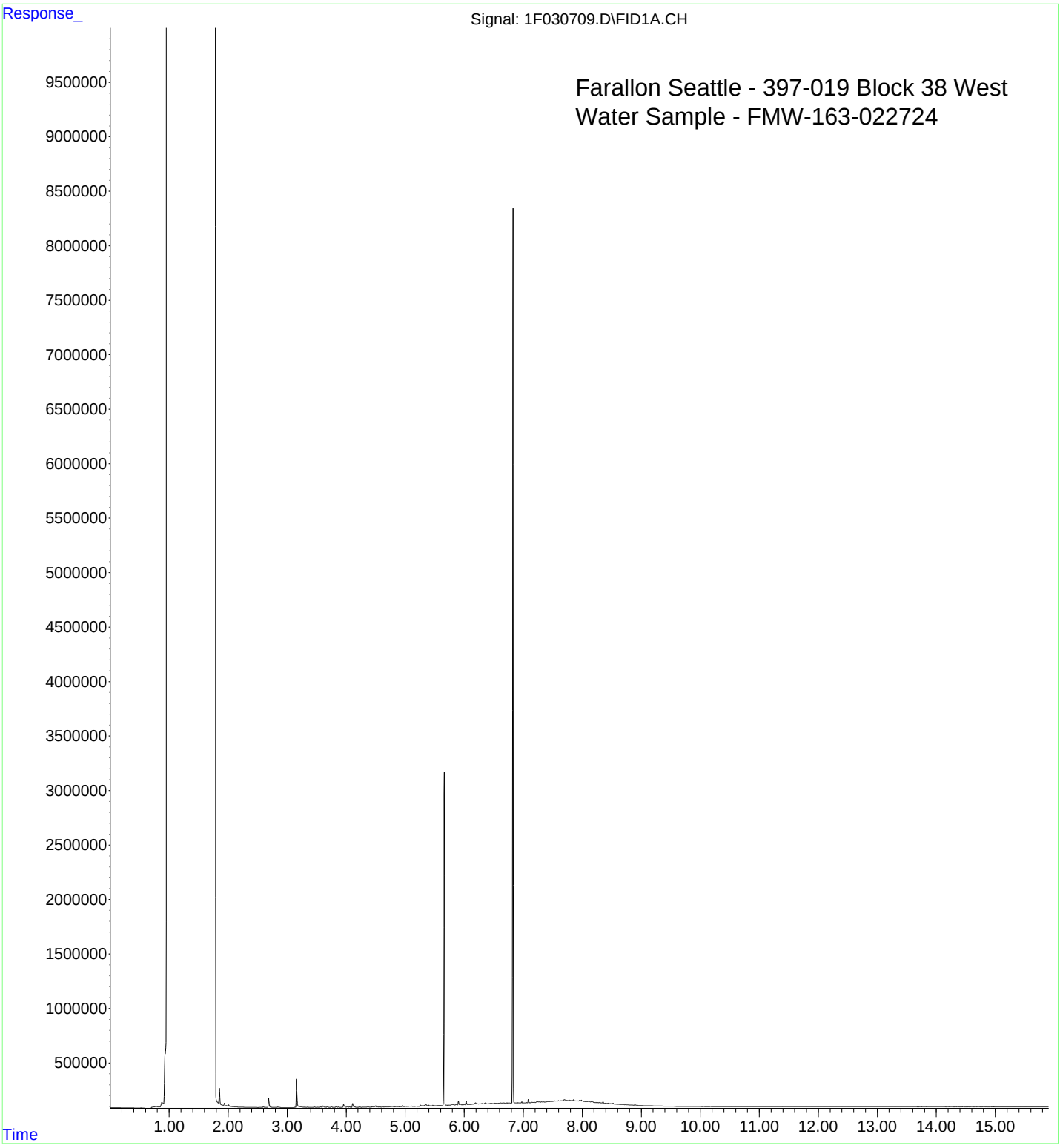
File :C:\msdchem\1\copied data\4C07040\1F030707.D
Operator : BLL
Acquired : 07 Mar 2024 1:24 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1613-01RE1
Misc Info :
Vial Number: 3



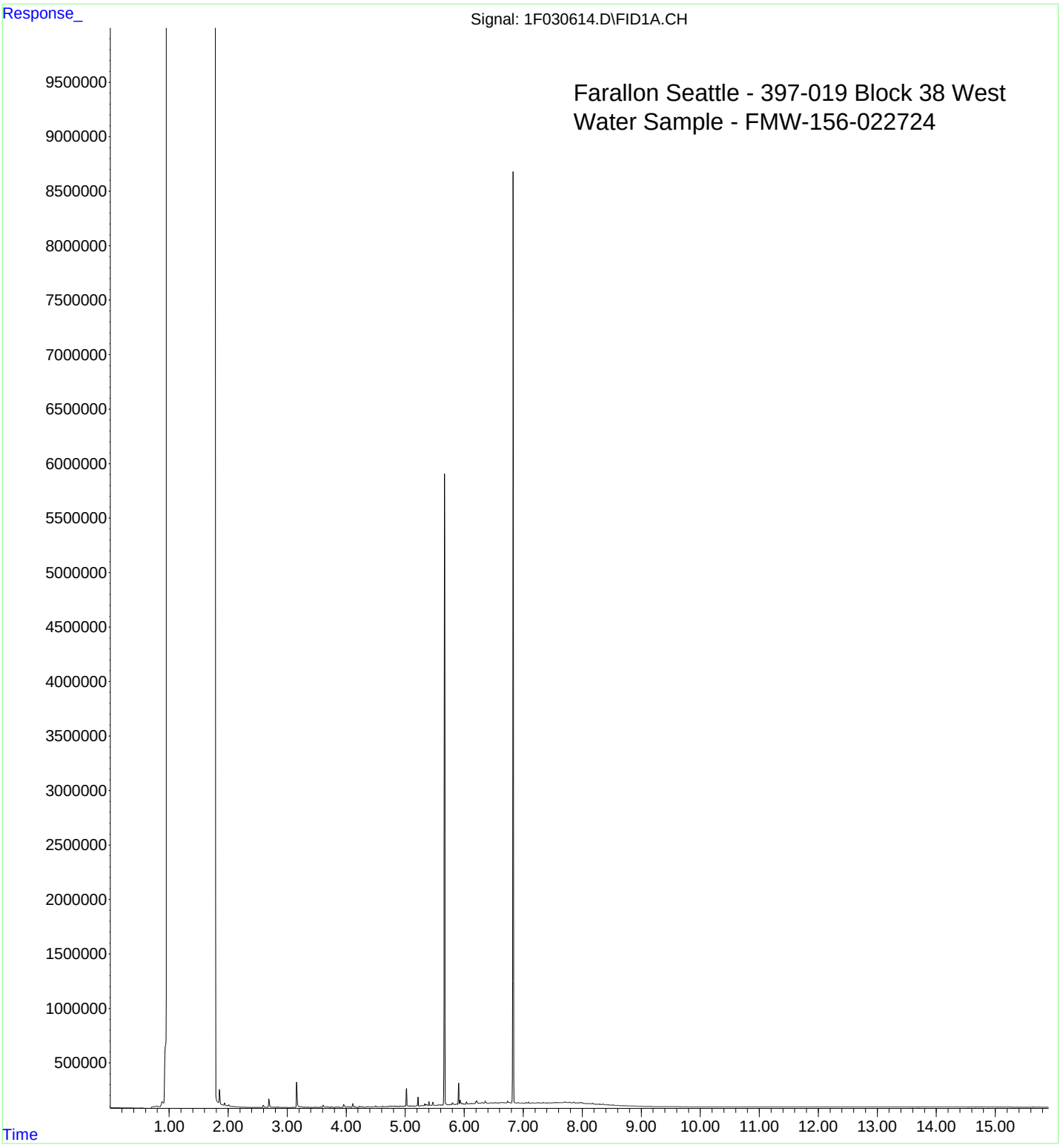
File   :C:\msdchem\1\copied data\4C07040\1F030708.D
Operator   : BLL
Acquired   : 07 Mar 2024   1:47 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4B1613-02RE1
Misc Info :
Vial Number: 4



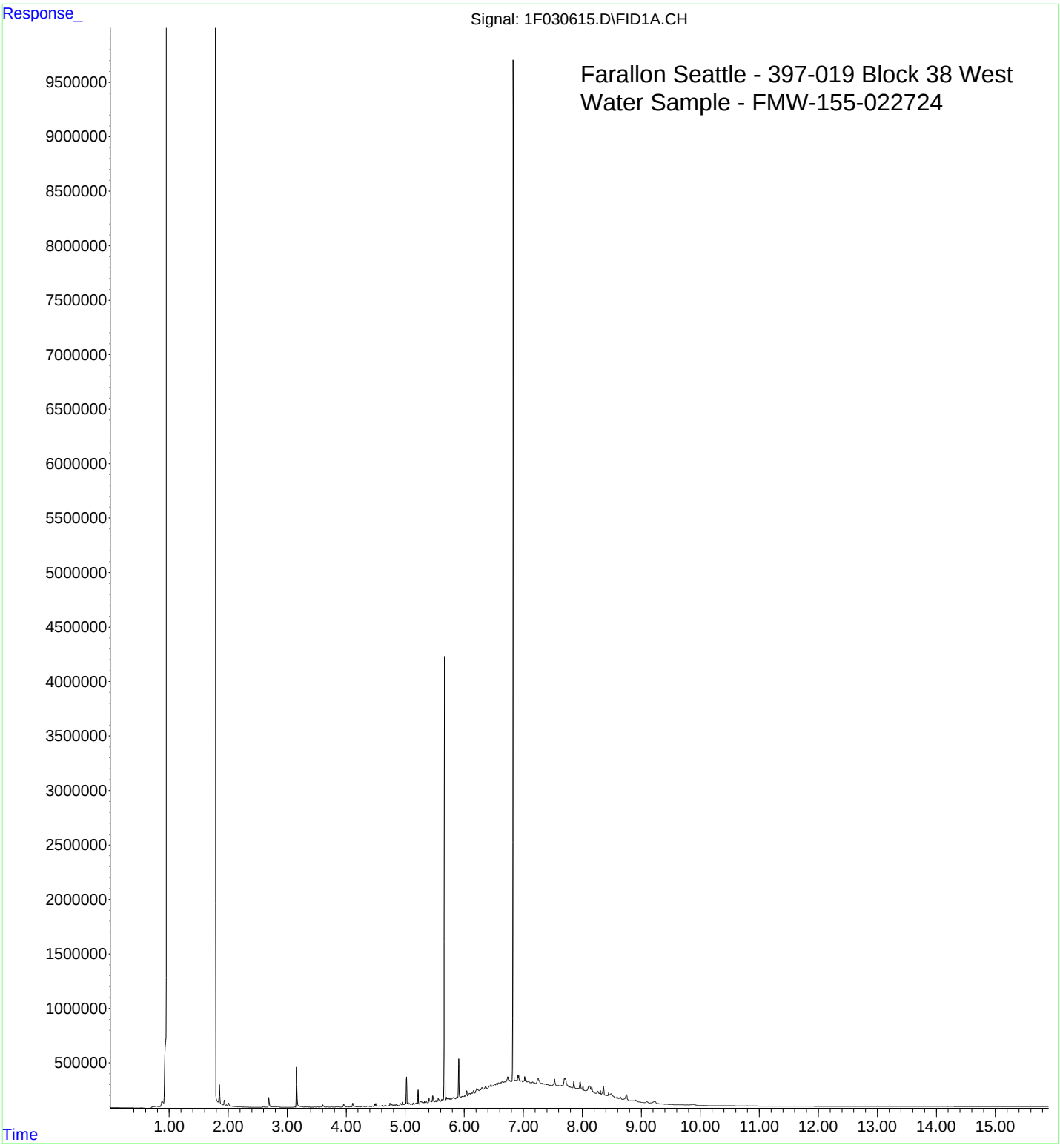
File   :C:\msdchem\1\copied data\4C07040\1F030709.D
Operator   : BLL
Acquired   : 07 Mar 2024   2:11 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4B1613-03RE1
Misc Info :
Vial Number: 5



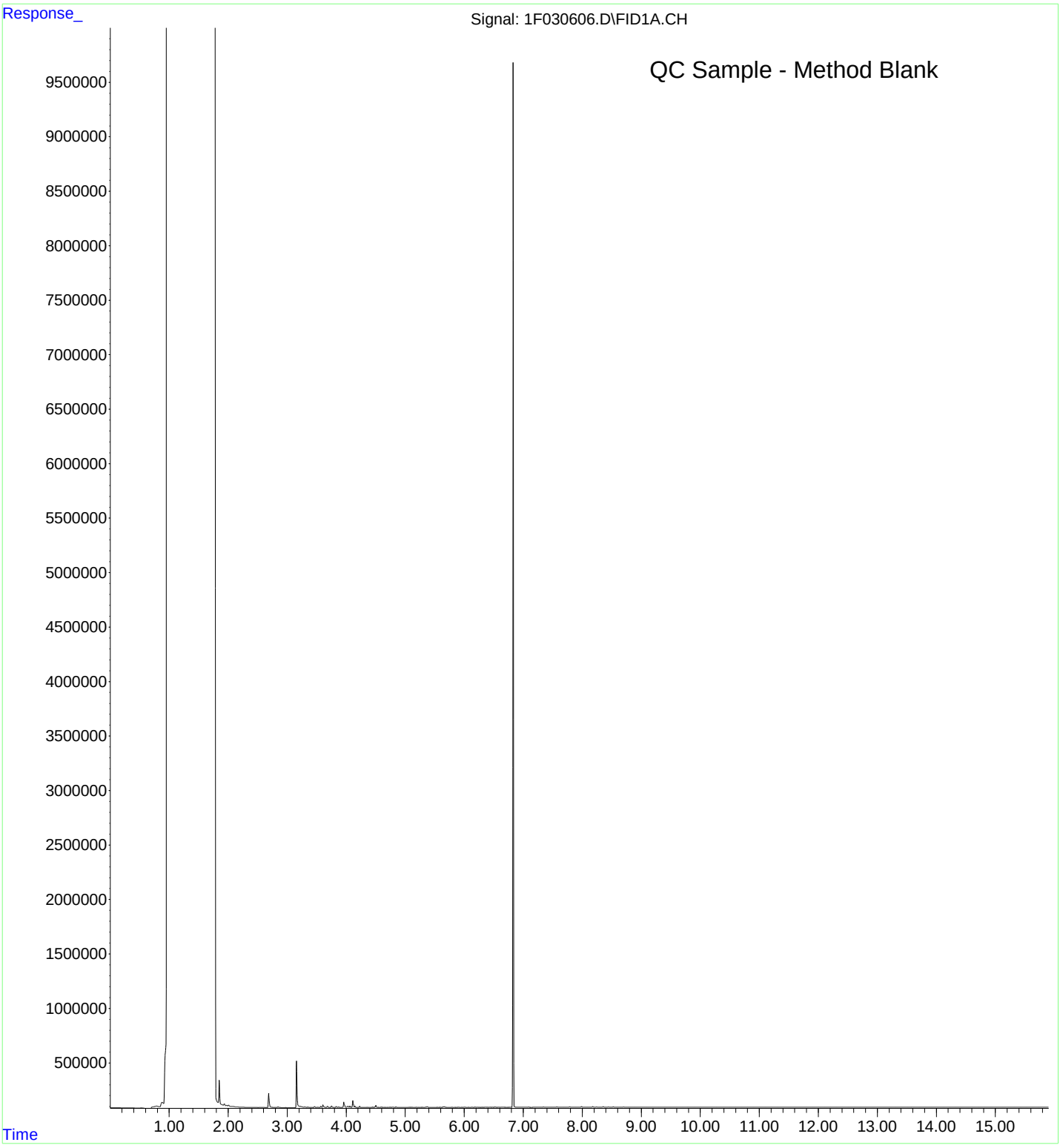
File   :C:\msdchem\1\copied data\4C06060\1F030614.D
Operator   : BLL
Acquired   : 06 Mar 2024 10:39 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4B1613-04
Misc Info :
Vial Number: 9



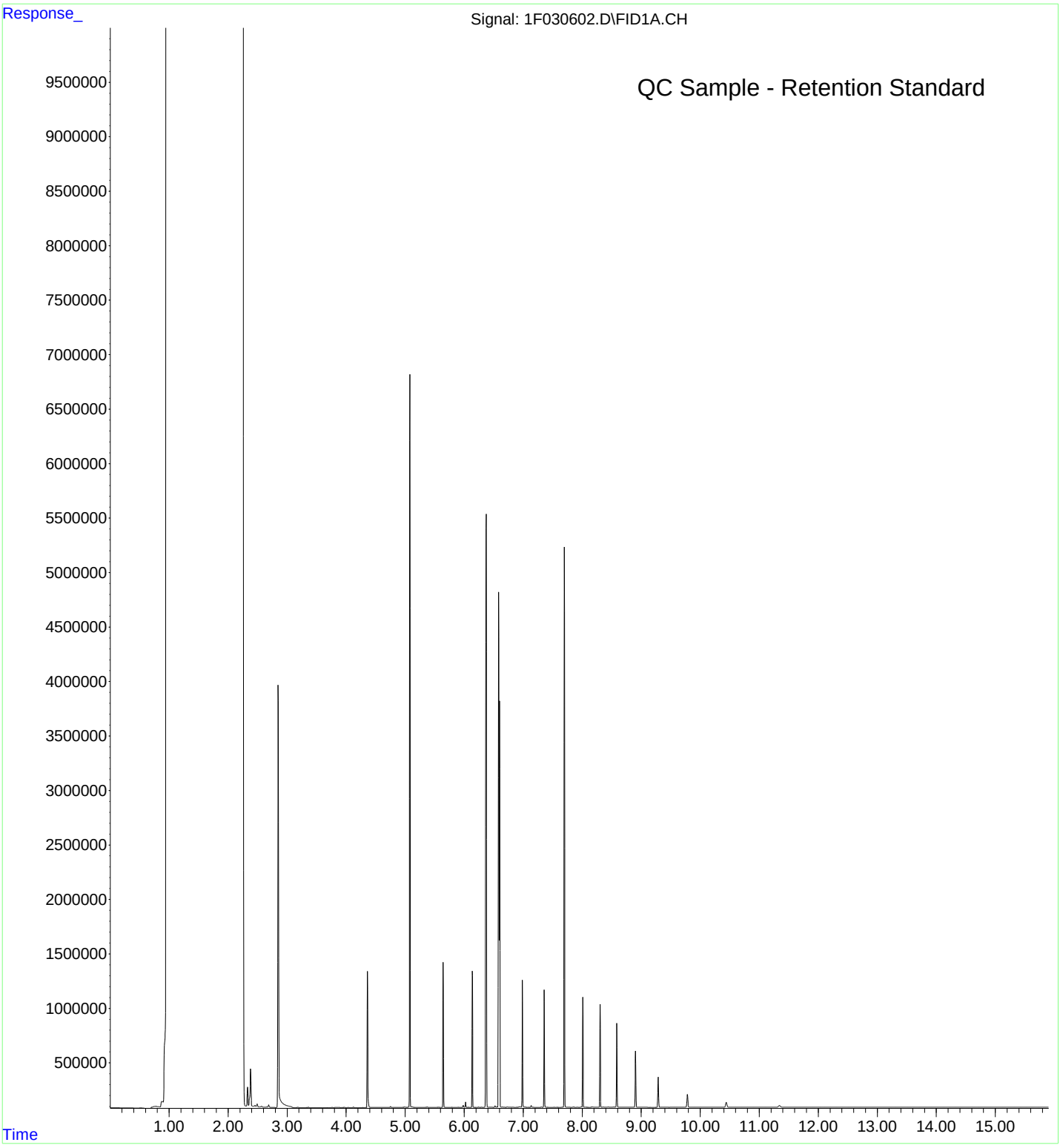
File   :C:\msdchem\1\copied data\4C06060\1F030615.D
Operator   : BLL
Acquired   : 06 Mar 2024 11:02 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4B1613-05
Misc Info :
Vial Number: 10



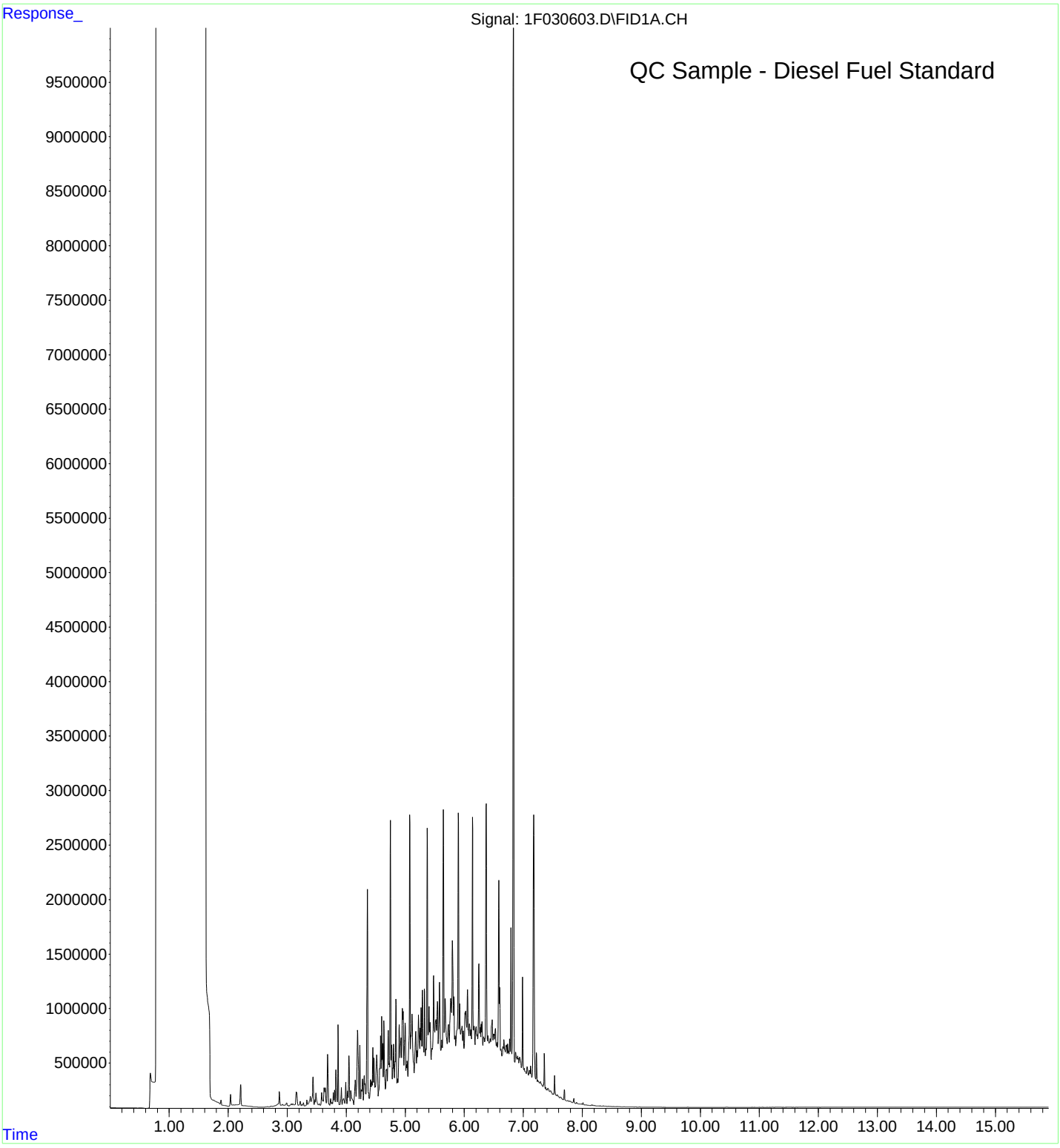
File   :C:\msdchem\1\copied data\4C06060\1F030606.D
Operator   : BLL
Acquired   : 06 Mar 2024   7:32 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 24C0024-BLK1
Misc Info :
Vial Number: 3



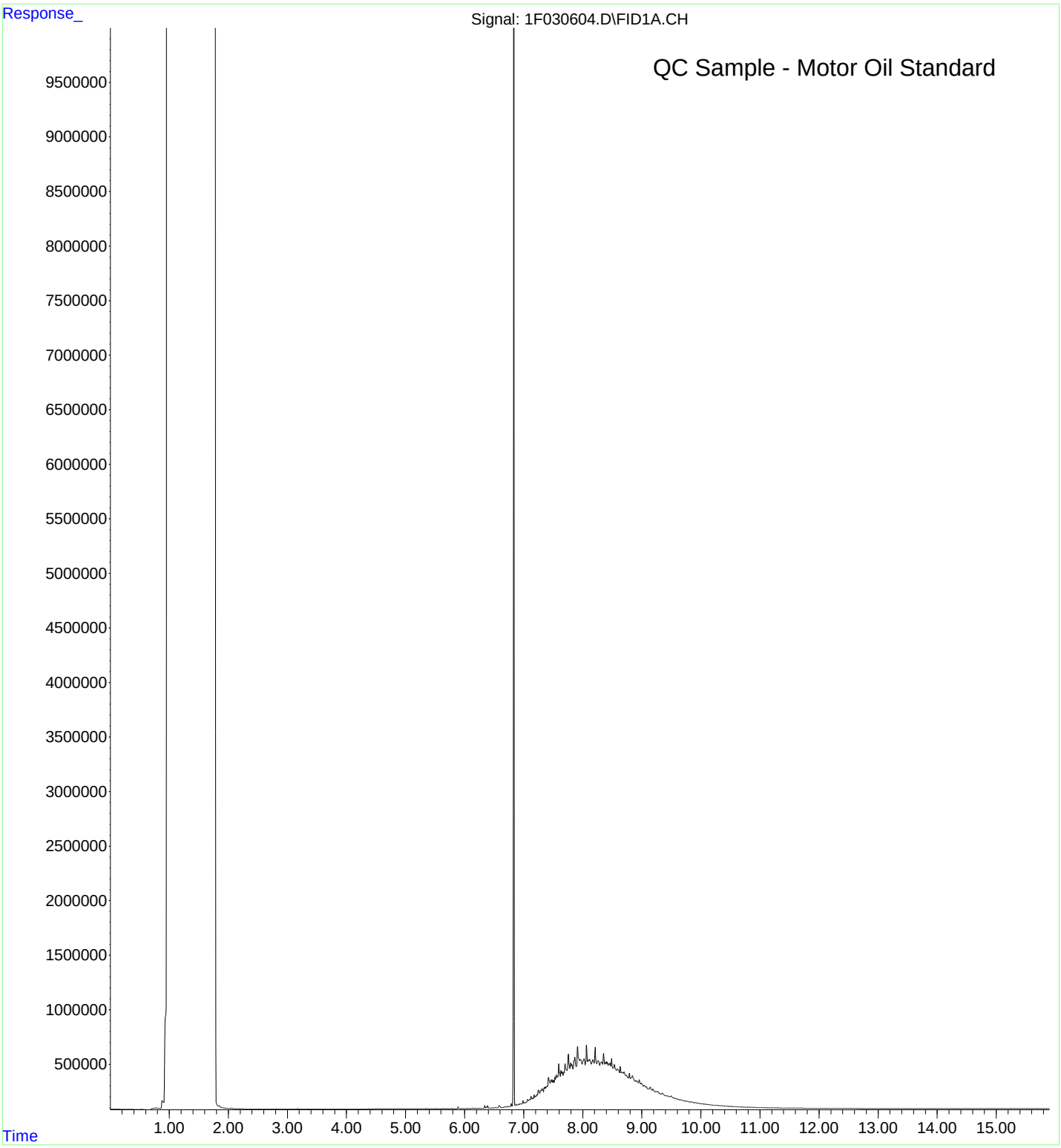
File   :C:\msdchem\1\copied data\4C06060\1F030602.D
Operator   : BLL
Acquired   : 06 Mar 2024   4:51 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C06060-RES1
Misc Info :
Vial Number: 94



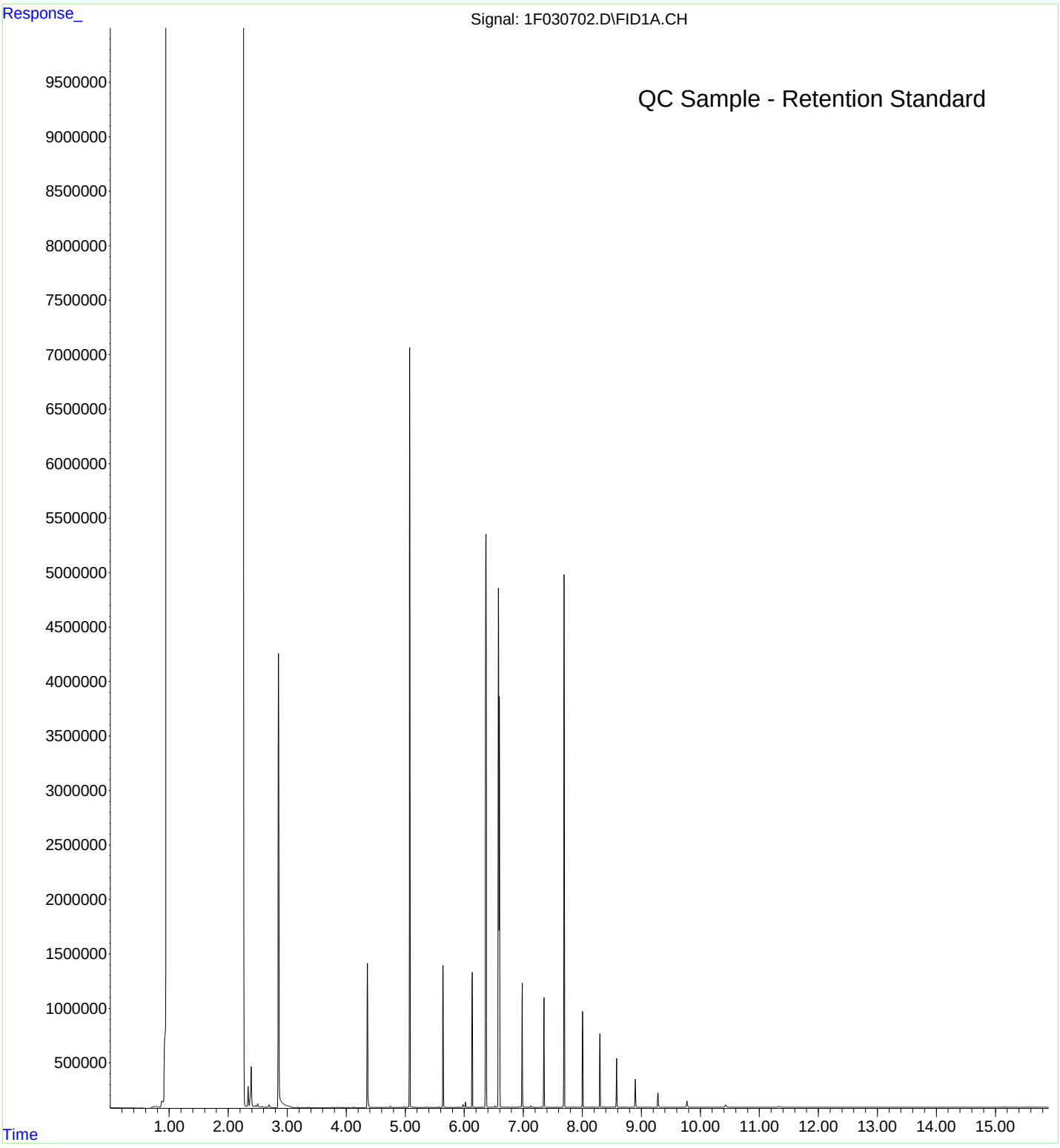
File :C:\msdchem\1\copied data\4C06060\1F030603.D
Operator : BLL
Acquired : 06 Mar 2024 5:14 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C06060-CCV1
Misc Info :
Vial Number: 1



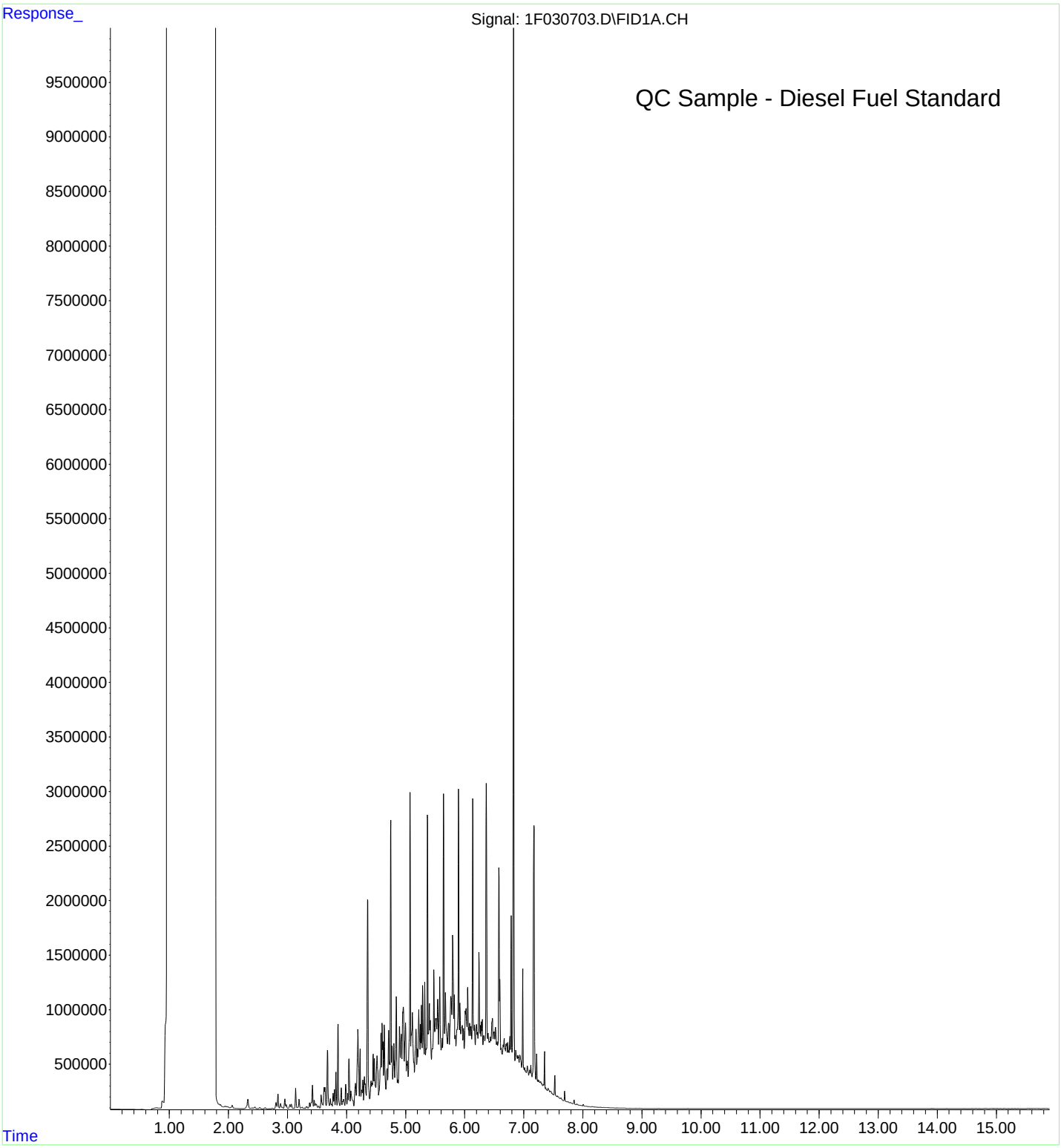
File   :C:\msdchem\1\copied data\4C06060\1F030604.D
Operator   : BLL
Acquired   : 06 Mar 2024   5:37 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C06060-CCV2
Misc Info :
Vial Number: 2



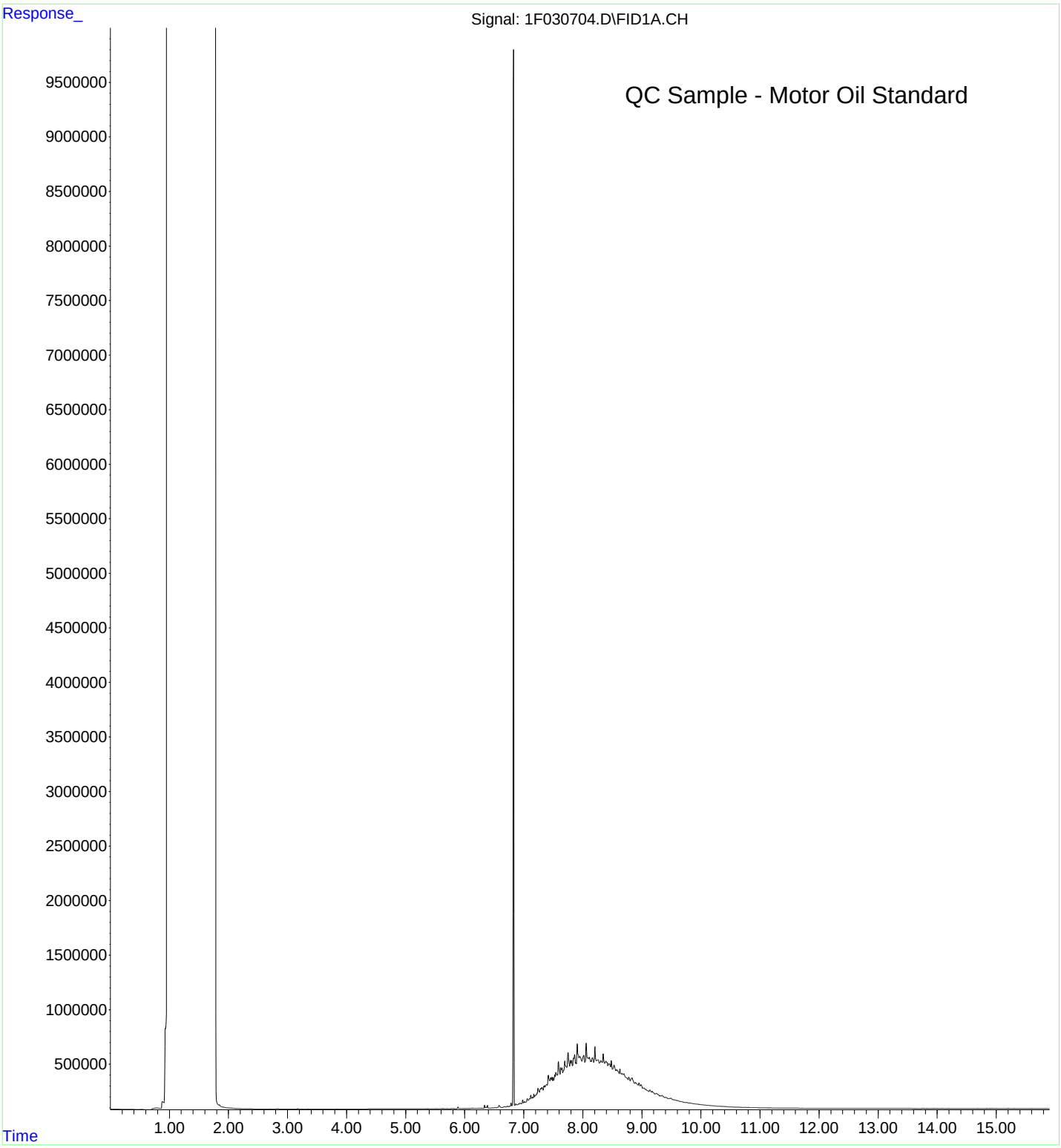
File   :C:\msdchem\1\copied data\4C07040\1F030702.D
Operator   : BLL
Acquired   : 07 Mar 2024 11:27 am using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C07040-RES1
Misc Info :
Vial Number: 94



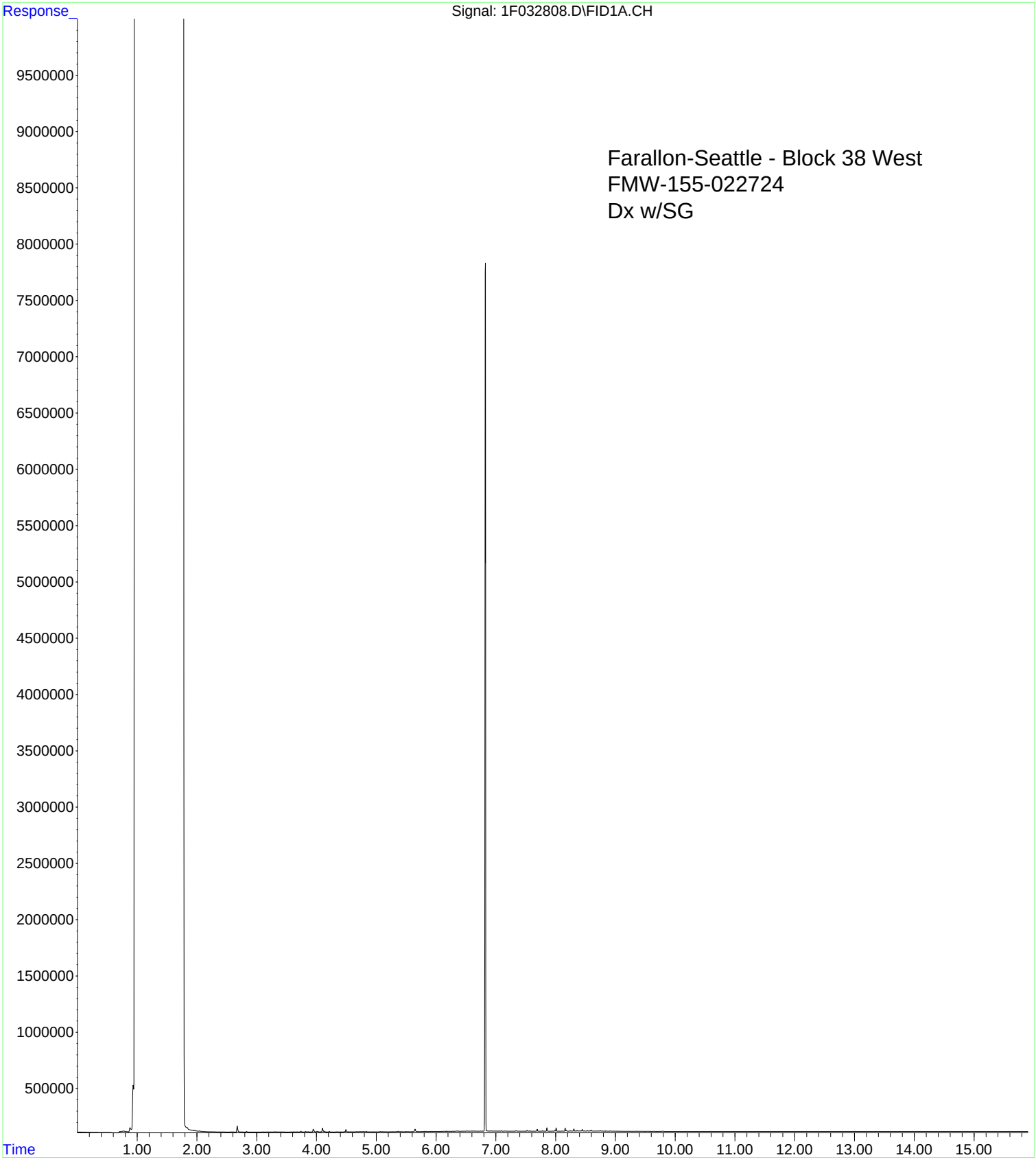
File   :C:\msdchem\1\copied data\4C07040\1F030703.D
Operator   : BLL
Acquired   : 07 Mar 2024 11:50 am using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C07040-CCV1
Misc Info :
Vial Number: 1



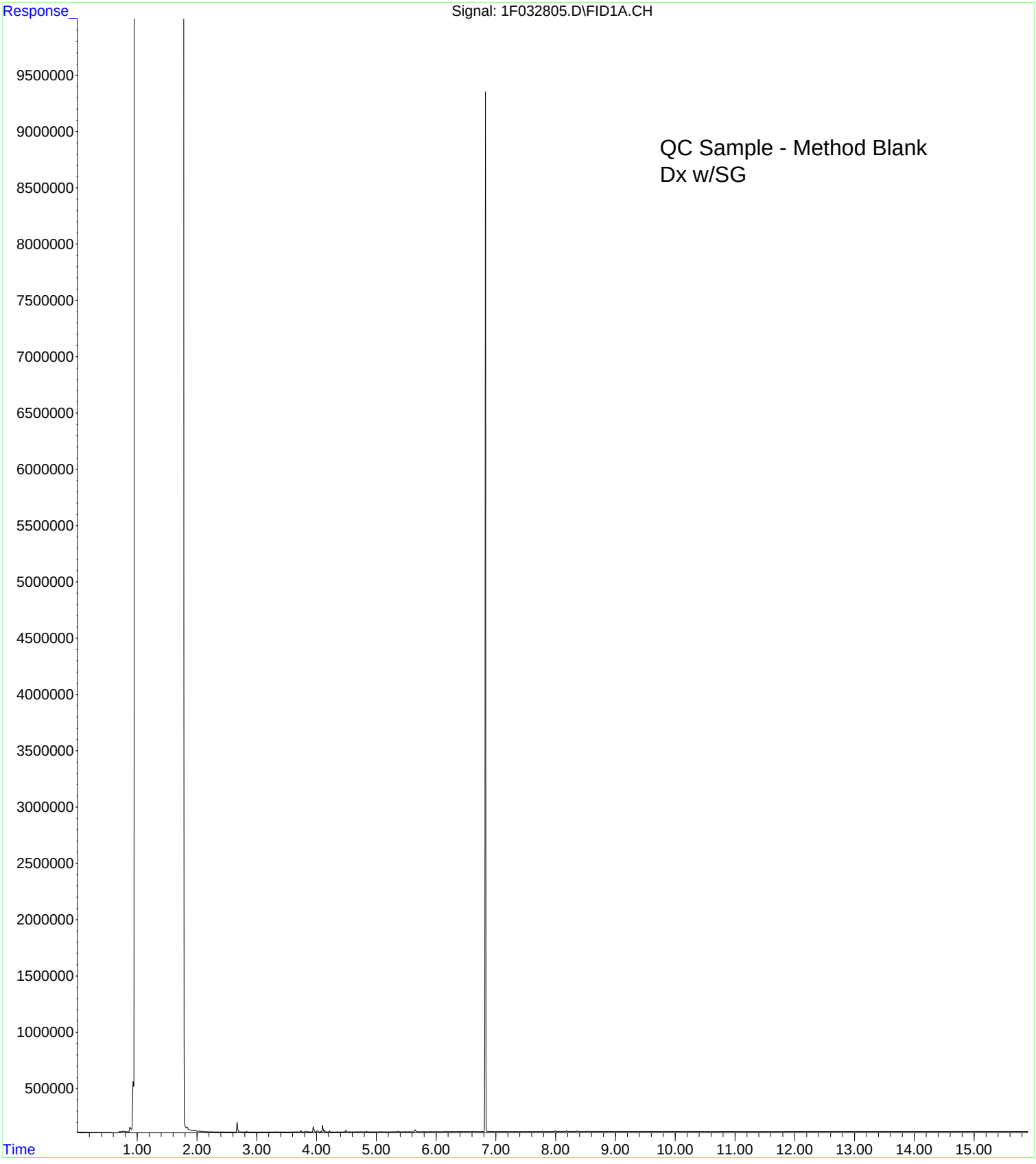
File   :C:\msdchem\1\copied data\4C07040\1F030704.D
Operator   : BLL
Acquired   : 07 Mar 2024 12:13 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C07040-CCV2
Misc Info :
Vial Number: 2



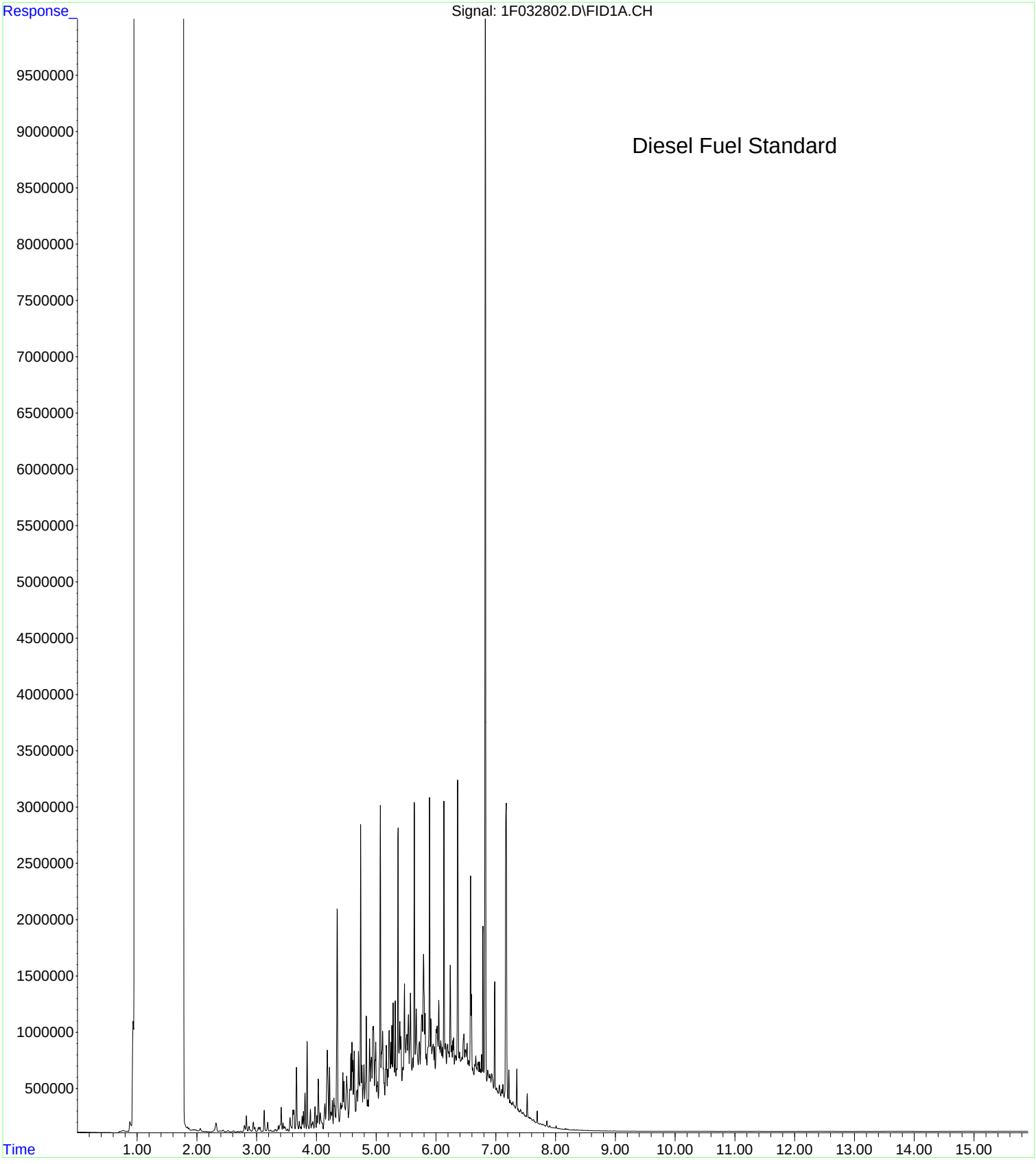
File :C:\msdchem\1\data\4C28038\1F032808.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 12:41 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1613-05
Misc Info :
Vial Number: 6



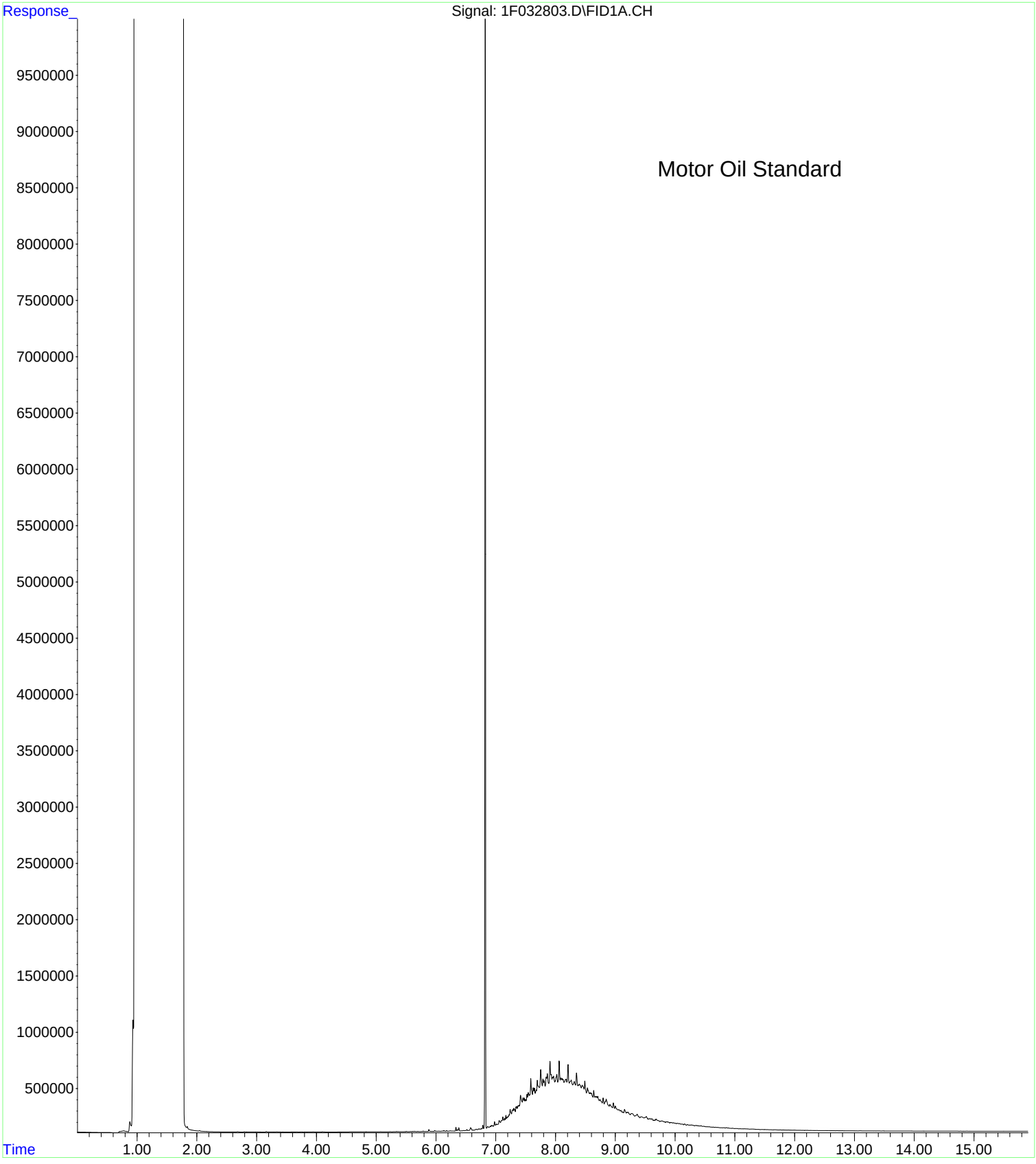
File :C:\msdchem\1\data\4C28038\1F032805.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 11:31 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 24C0983-BLK1
Misc Info :
Vial Number: 3



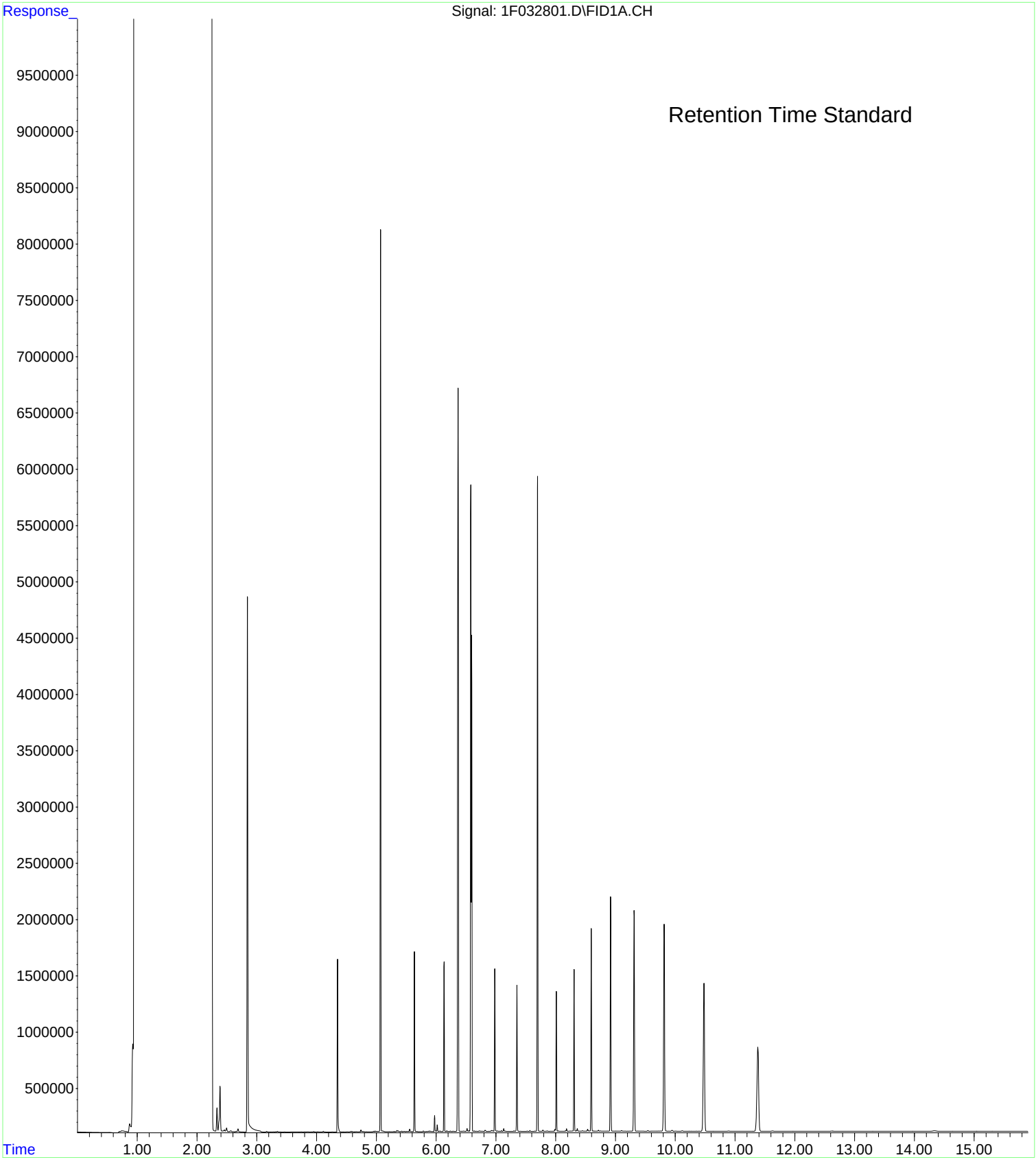
File :C:\msdchem\1\data\4C28038\1F032802.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:21 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV1
Misc Info :
Vial Number: 1



File :C:\msdchem\1\data\4C28038\1F032803.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:44 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV2
Misc Info :
Vial Number: 2



File :C:\msdchem\1\data\4C28038\1F032801.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 9:57 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-RES1
Misc Info :
Vial Number: 94



Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Friday, March 29, 2024

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A4B1637 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4B1637, which was received by the laboratory on 2/29/2024 at 1:40:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.					
(See Cooler Receipt Form for details)					
Cooler #1	2.6	degC	Cooler #2	1.3	degC
Cooler #3	1.9	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-154-022824	A4B1637-01	Water	02/28/24 09:50	02/29/24 13:40
FMW-157-022824	A4B1637-02	Water	02/28/24 14:17	02/29/24 13:40
FMW-162-022824	A4B1637-03	Water	02/28/24 15:49	02/29/24 13:40
FMW-159-022824	A4B1637-04	Water	02/28/24 15:25	02/29/24 13:40
OW-1-022824	A4B1637-05	Water	02/28/24 12:49	02/29/24 13:40
OW-2-022824	A4B1637-06	Water	02/28/24 11:09	02/29/24 13:40
OW-3-022824	A4B1637-07	Water	02/28/24 14:25	02/29/24 13:40

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL CASE NARRATIVE

A4B1637 **Apex Laboratories**

Amended Final Report #2 - This report supercedes all previous reports

Methylnaphthalenes and Naphthalene by EPA 8270E Note

The Laboratory Control Sample (LCS/LCSD) recoveries associated with the quantification of naphthalene and methylnaphthalenes by EPA Method 8270E were below acceptance criteria for the samples below. These samples were re-extracted and re-analyzed with similar results. The investigation into these low LCS recoveries was unable to identify a specific root cause. Analysis of subsequent analytical batches for these analytes by EPA Method 8270E yielded LCS recoveries within acceptance limits. Due to insufficient remaining sample volume for these samples, additional testing for naphthalene and the methylnaphthalenes by EPA Method 8270E could not be completed. The EPA Method 8270E data for methylnaphthalenes was qualified accordingly. Naphthalene was reported by EPA Method 8260D.

- FMW-154-022824 (A4B1637-01)
- FMW-157-022824 (A4B1637-02)
- FMW-162-022824 (A4B1637-03)
- FMW-159-022824 (A4B1637-04)
- OW-1-022824 (A4B1637-05)
- OW-2-022824 (A4B1637-06)
- OW-3-022824 (A4B1637-07)

Kurt Johnson
Director of Forensic Services
March 29, 2024

Amended Final Report #1 - This report supersedes all previous reports.

Subcontract

This report is not complete without the attached subcontract laboratory report for total organic carbon (TOC) from ALS.

Michele Poquiz
Forensics Project Manager
March 25, 2024

NWTPH-Dx - WA Diesel Extended - Method Name Change

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL CASE NARRATIVE

A4B1637 **Apex Laboratories**

This report contains modified data for NWTPH-Dx (WA Ext) for all samples.

The reported Analytical Method Reference has changed from "**Washington Diesel Range Extended (C10-C40) by EPA 8015D Modified**" to "**Whole Product Diesel Testing (C10-C40) WDOE/NWTPH-Dx**", the Specific Method Reference has changed from "**8015DMod (WA_Ext)**" to "**NWTPH-Dx (WA Ext)**", and a Minimum Reporting Level has been set at 0.250mg/L.

The affected data is flagged in the report with the AMEND qualifier.

David Jack
Technical Manager
March 22, 2024

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-022824 (A4B1637-01)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	**435**	---	250	ug/L	1	03/06/24 23:49	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*	*Limits: 50-150 %*		*1*	*03/06/24 23:49*	*NWTPH-DX (WA_Ext)*	
FMW-157-022824 (A4B1637-02)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 00:35	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*03/07/24 00:35*	*NWTPH-DX (WA_Ext)*	
FMW-162-022824 (A4B1637-03RE1)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 14:34	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 73 %*	*Limits: 50-150 %*		*1*	*03/07/24 14:34*	*NWTPH-DX (WA_Ext)*	
FMW-159-022824 (A4B1637-04)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 01:45	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*1*	*03/07/24 01:45*	*NWTPH-DX (WA_Ext)*	
OW-1-022824 (A4B1637-05RE1)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	**391**	---	250	ug/L	1	03/07/24 14:58	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*	*Limits: 50-150 %*		*1*	*03/07/24 14:58*	*NWTPH-DX (WA_Ext)*	
OW-2-022824 (A4B1637-06)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 02:55	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 107 %*	*Limits: 50-150 %*		*1*	*03/07/24 02:55*	*NWTPH-DX (WA_Ext)*	
OW-3-022824 (A4B1637-07RE1)				**Matrix: Water**		**Batch: 24C0024**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 15:21	NWTPH-DX (WA_Ext)	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW-3-022824 (A4B1637-07RE1)				**Matrix: Water**		**Batch: 24C0024**		
Surrogate: o-Terphenyl (Surr)		*Recovery: 67 %*	*Limits: 50-150 %*		*1*	*03/07/24 15:21*	*NWTPH-DX (WA_Ext)*	

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ANALYTICAL REPORT

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Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-159-022824 (A4B1637-04)				**Matrix: Water**		**Batch: 24C0983**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/28/24 13:04	NWTPH-DX (WA_Ext) wSGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 64 %*		*Limits: 50-150 %*	*1*	*03/28/24 13:04*	*NWTPH-DX (WA_Ext) wSGC*	

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-022824 (A4B1637-01)				**Matrix: Water**		**Batch: 24C0013**		
Gasoline Range Organics	ND	---	100	ug/L	1	03/01/24 12:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*108 %*	*Limits:* *50-150 %*	*1*	*03/01/24 12:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*117 %*	*50-150 %*	*1*	*03/01/24 12:19*	*NWTPH-Gx (MS)*	

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ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-022824 (A4B1637-01)				**Matrix: Water**		**Batch: 24C0013**		
Benzene	ND	---	0.200	ug/L	1	03/01/24 12:19	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	03/01/24 12:19	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	03/01/24 12:19	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	03/01/24 12:19	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits: 80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*95 %*	*80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
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Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-022824 (A4B1637-01)				**Matrix: Water**		**Batch: 24C0013**		
Naphthalene	ND	---	5.00	ug/L	1	03/01/24 12:19	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits: 80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*95 %*	*80-120 %*	*1*	*03/01/24 12:19*	*EPA 8260D*	
FMW-157-022824 (A4B1637-02)				**Matrix: Water**		**Batch: 24C0338**		
Naphthalene	ND	---	5.00	ug/L	1	03/11/24 12:46	EPA 8260D	Q-54a
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*03/11/24 12:46*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/11/24 12:46*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*03/11/24 12:46*	*EPA 8260D*	
FMW-162-022824 (A4B1637-03)				**Matrix: Water**		**Batch: 24C0338**		
Naphthalene	ND	---	5.00	ug/L	1	03/11/24 13:14	EPA 8260D	Q-54a
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits: 80-120 %*	*1*	*03/11/24 13:14*	*EPA 8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*03/11/24 13:14*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*03/11/24 13:14*	*EPA 8260D*	
OW-1-022824 (A4B1637-05RE1)				**Matrix: Water**		**Batch: 24C0407**		**V-13**
Naphthalene	ND	---	25.0	ug/L	5	03/12/24 17:13	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*119 %*	*Limits: 80-120 %*	*1*	*03/12/24 17:13*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/12/24 17:13*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*03/12/24 17:13*	*EPA 8260D*	
OW-2-022824 (A4B1637-06)				**Matrix: Water**		**Batch: 24C0338**		
Naphthalene	ND	---	5.00	ug/L	1	03/11/24 13:41	EPA 8260D	Q-54a
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*116 %*	*Limits: 80-120 %*	*1*	*03/11/24 13:41*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/11/24 13:41*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*	*1*	*03/11/24 13:41*	*EPA 8260D*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-154-022824 (A4B1637-01)				**Matrix: Water**		**Batch: 24C0110**		**R-04**
1-Methylnaphthalene	ND	---	0.151	ug/L	4	03/08/24 14:15	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.151	ug/L	4	03/08/24 14:15	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*69 %*	*Limits: 44-120 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*64 %*	*44-120 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
Phenol-d6 (Surr)			*19 %*	*10-133 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*72 %*	*50-134 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
2-Fluorophenol (Surr)			*33 %*	*19-120 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*118 %*	*43-140 %*	*4*	*03/08/24 14:15*	*EPA 8270E*	
FMW-157-022824 (A4B1637-02)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 14:49	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 14:49	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*48 %*	*Limits: 44-120 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*45 %*	*44-120 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
Phenol-d6 (Surr)			*13 %*	*10-133 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*64 %*	*50-134 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
2-Fluorophenol (Surr)			*25 %*	*19-120 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*90 %*	*43-140 %*	*1*	*03/08/24 14:49*	*EPA 8270E*	
FMW-162-022824 (A4B1637-03)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 15:22	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 15:22	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*61 %*	*Limits: 44-120 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*51 %*	*44-120 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
Phenol-d6 (Surr)			*16 %*	*10-133 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*64 %*	*50-134 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
2-Fluorophenol (Surr)			*29 %*	*19-120 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*83 %*	*43-140 %*	*1*	*03/08/24 15:22*	*EPA 8270E*	
FMW-159-022824 (A4B1637-04)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	03/08/24 15:56	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	03/08/24 15:56	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*58 %*	*Limits: 44-120 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*54 %*	*44-120 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	
Phenol-d6 (Surr)			*17 %*	*10-133 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-159-022824 (A4B1637-04)				**Matrix: Water**		**Batch: 24C0110**		
Surrogate: p-Terphenyl-d14 (Surr)			*Recovery: 62 %*	*Limits: 50-134 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	
2-Fluorophenol (Surr)			*29 %*	*19-120 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*102 %*	*43-140 %*	*1*	*03/08/24 15:56*	*EPA 8270E*	
OW-1-022824 (A4B1637-05)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 16:31	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 16:31	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 51 %*	*Limits: 44-120 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*54 %*	*44-120 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	
Phenol-d6 (Surr)			*8 %*	*10-133 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	*S-06*
p-Terphenyl-d14 (Surr)			*59 %*	*50-134 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	
2-Fluorophenol (Surr)			*27 %*	*19-120 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*108 %*	*43-140 %*	*1*	*03/08/24 16:31*	*EPA 8270E*	
OW-2-022824 (A4B1637-06)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 17:05	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 17:05	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 53 %*	*Limits: 44-120 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*52 %*	*44-120 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
Phenol-d6 (Surr)			*15 %*	*10-133 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*59 %*	*50-134 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
2-Fluorophenol (Surr)			*25 %*	*19-120 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*103 %*	*43-140 %*	*1*	*03/08/24 17:05*	*EPA 8270E*	
OW-3-022824 (A4B1637-07)				**Matrix: Water**		**Batch: 24C0110**		
1-Methylnaphthalene	ND	---	0.0417	ug/L	1	03/08/24 17:39	EPA 8270E	Q-30
2-Methylnaphthalene	ND	---	0.0417	ug/L	1	03/08/24 17:39	EPA 8270E	Q-30
Surrogate: Nitrobenzene-d5 (Surr)			*Recovery: 59 %*	*Limits: 44-120 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*50 %*	*44-120 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	
Phenol-d6 (Surr)			*18 %*	*10-133 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*69 %*	*50-134 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	
2-Fluorophenol (Surr)			*31 %*	*19-120 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*93 %*	*43-140 %*	*1*	*03/08/24 17:39*	*EPA 8270E*	

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Tigard, OR 97223
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0024 - EPA 3510C (Fuels/Acid Ext.)							**Water**					
Blank (24C0024-BLK1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 19:32							**AMEND**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	ND	---	200	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS (24C0024-BS1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 19:55							**AMEND**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	269	---	200	ug/L	1	500	---	54	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 81 %*	*Limits: 50-150 %*		*Dilution: 1x*							
LCS Dup (24C0024-BSD1)			Prepared: 03/01/24 10:42		Analyzed: 03/06/24 20:19							**AMEND, Q-19**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	291	---	200	ug/L	1	500	---	58	38-132%	8	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*	*Limits: 50-150 %*		*Dilution: 1x*							

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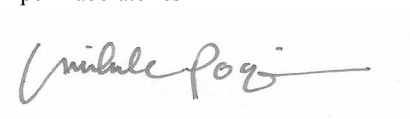

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QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0983 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (24C0983-BLK1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 11:31						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (24C0983-BS1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 11:54						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	296	---	250	ug/L	1	500	---	59	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (24C0983-BSD1)				Prepared: 03/01/24 10:42		Analyzed: 03/28/24 12:18						**Q-19**
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	289	---	250	ug/L	1	500	---	58	38-132%	2	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0013 - EPA 5030C									Water			
Blank (24C0013-BLK1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 11:25									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*106 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*118 %*		*50-150 %*			*"*				
LCS (24C0013-BS2)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 10:57									
NWTPH-Gx (MS)												
Gasoline Range Organics	471	---	100	ug/L	1	500	---	94	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*101 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*107 %*		*50-150 %*			*"*				
Duplicate (24C0013-DUP1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 16:53									
QC Source Sample: Non-SDG (A4B1651-04)												
Gasoline Range Organics	**955**	---	100	ug/L	1	---	995	---	---	4	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery:*	*106 %*	*Limits:*	*50-150 %*		*Dilution:*	*1x*				
1,4-Difluorobenzene (Sur)			*114 %*		*50-150 %*			*"*				

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Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0013 - EPA 5030C												**Water**
Blank (24C0013-BLK1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 11:25									
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*117 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
LCS (24C0013-BS1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 09:58									
EPA 8260D												
Benzene	20.7	---	0.200	ug/L	1	20.0	---	104	80-120%	---	---	
Toluene	18.4	---	1.00	ug/L	1	20.0	---	92	80-120%	---	---	
Ethylbenzene	19.8	---	0.500	ug/L	1	20.0	---	99	80-120%	---	---	
Xylenes, total	55.3	---	1.50	ug/L	1	60.0	---	92	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*96 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Duplicate (24C0013-DUP1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 16:53									
QC Source Sample: Non-SDG (A4B1651-04)												
Benzene	ND	---	0.200	ug/L	1	---	ND	---	---	---	30%	
Toluene	ND	---	1.00	ug/L	1	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.500	ug/L	1	---	ND	---	---	---	30%	
Xylenes, total	ND	---	1.50	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*114 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				
Matrix Spike (24C0013-MS1)			Prepared: 03/01/24 07:48 Analyzed: 03/02/24 00:37									**T-02**
QC Source Sample: Non-SDG (A4B1620-07)												
EPA 8260D												
Benzene	58.5	---	0.500	ug/L	2.5	50.0	0.325	116	79-120%	---	---	

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Tigard, OR 97223
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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0013 - EPA 5030C							**Water**					
Matrix Spike (24C0013-MS1)			Prepared: 03/01/24 07:48 Analyzed: 03/02/24 00:37									**T-02**
QC Source Sample: Non-SDG (A4B1620-07)												
Toluene	50.2	---	2.50	ug/L	2.5	50.0	ND	100	80-121%	---	---	
Ethylbenzene	53.8	---	1.25	ug/L	2.5	50.0	ND	108	79-121%	---	---	
Xylenes, total	149	---	3.75	ug/L	2.5	150	ND	99	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*95 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*				*"*			

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0013 - EPA 5030C												**Water**
Blank (24C0013-BLK1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 11:25									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*117 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
LCS (24C0013-BS1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 09:58									
EPA 8260D												
Naphthalene	14.3	---	5.00	ug/L	1	20.0	---	**72**	**80-120%**	---	---	Q-55
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*108 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*96 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Duplicate (24C0013-DUP1)			Prepared: 03/01/24 07:48 Analyzed: 03/01/24 16:53									
QC Source Sample: Non-SDG (A4B1651-04)												
Naphthalene	ND	---	5.00	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*114 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				
Matrix Spike (24C0013-MS1)			Prepared: 03/01/24 07:48 Analyzed: 03/02/24 00:37									**T-02**
QC Source Sample: Non-SDG (A4B1620-07)												
EPA 8260D												
Naphthalene	38.6	---	12.5	ug/L	2.5	50.0	ND	77	61-128%	---	---	Q-54b
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*111 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*			*"*				

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0338 - EPA 5030C									**Water**			
Blank (24C0338-BLK1)			Prepared: 03/11/24 10:00 Analyzed: 03/11/24 12:19									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	Q-54a
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*			*"*				
LCS (24C0338-BS1)			Prepared: 03/11/24 09:30 Analyzed: 03/11/24 11:08									
EPA 8260D												
Naphthalene	12.9	---	5.00	ug/L	1	20.0	---	**65**	**80-120%**	---	---	Q-54a
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*			*"*				
Duplicate (24C0338-DUP1)			Prepared: 03/11/24 14:00 Analyzed: 03/11/24 20:03									
QC Source Sample: Non-SDG (A4C1027-01RE1)												
Naphthalene	ND	---	100	ug/L	20	---	ND	---	---	---	30%	Q-54a
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*119 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Matrix Spike (24C0338-MS1)			Prepared: 03/11/24 12:00 Analyzed: 03/11/24 21:52									
QC Source Sample: FMW-157-022824 (A4B1637-02)												
EPA 8260D												
Naphthalene	14.0	---	5.00	ug/L	1	20.0	ND	70	61-128%	---	---	Q-54a
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*			*"*				

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0407 - EPA 5030C												**Water**
Blank (24C0407-BLK1)			Prepared: 03/12/24 14:07 Analyzed: 03/12/24 15:24									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 116 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*100 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*99 %*	*80-120 %*		*"*							
LCS (24C0407-BS1)			Prepared: 03/12/24 14:07 Analyzed: 03/12/24 14:20									
EPA 8260D												
Naphthalene	13.7	---	5.00	ug/L	1	20.0	---	**69**	**80-120%**	---	---	Q-55
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*96 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*94 %*	*80-120 %*		*"*							
Duplicate (24C0407-DUP1)			Prepared: 03/12/24 14:07 Analyzed: 03/12/24 22:40									
QC Source Sample: Non-SDG (A4C1074-06)												
Naphthalene	ND	---	12.5	ug/L	2.5	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 123 %*	*Limits: 80-120 %*		*Dilution: 1x*							*S-06*
Toluene-d8 (Surr)		*98 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*97 %*	*80-120 %*		*"*							
Matrix Spike (24C0407-MS1)			Prepared: 03/12/24 14:07 Analyzed: 03/13/24 02:45									**T-02**
QC Source Sample: Non-SDG (A4C1120-06)												
EPA 8260D												
Naphthalene	140	---	50.0	ug/L	10	200	ND	70	61-128%	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 108 %*	*Limits: 80-120 %*		*Dilution: 1x*							
Toluene-d8 (Surr)		*95 %*	*80-120 %*		*"*							
4-Bromofluorobenzene (Surr)		*94 %*	*80-120 %*		*"*							

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0110 - EPA 3510C (Acid Extraction)									**Water**			
Blank (24C0110-BLK1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:10									
EPA 8270E												
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*73 %*	*Limits:*	*44-120 %*		*Dilution:*	*1x*				
2-Fluorobiphenyl (Surr)			*61 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*26 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*77 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*39 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*85 %*		*43-140 %*			*"*				
LCS (24C0110-BS1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 18:44									
EPA 8270E												
1-Methylnaphthalene	0.817	---	0.160	ug/L	4	4.00	---	**20**	**41-120%**	---	---	Q-30
2-Methylnaphthalene	0.754	---	0.160	ug/L	4	4.00	---	**19**	**40-121%**	---	---	Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*55 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*45 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*20 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*80 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*31 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*72 %*		*43-140 %*			*"*				
LCS Dup (24C0110-BSD1)			Prepared: 03/05/24 06:03 Analyzed: 03/07/24 19:18									**Q-19**
EPA 8270E												
1-Methylnaphthalene	1.31	---	0.160	ug/L	4	4.00	---	**33**	**41-120%**	**47**	**30%**	Q-01, Q-30
2-Methylnaphthalene	1.22	---	0.160	ug/L	4	4.00	---	**30**	**40-121%**	**47**	**30%**	Q-01, Q-30
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*79 %*	*Limits:*	*44-120 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*69 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*28 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*90 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*45 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*91 %*		*43-140 %*			*"*				

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

SAMPLE PREPARATION INFORMATION

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0024							
A4B1637-01	Water	NWTPH-DX (WA_Ext)	02/28/24 09:50	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1637-02	Water	NWTPH-DX (WA_Ext)	02/28/24 14:17	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1637-03RE1	Water	NWTPH-DX (WA_Ext)	02/28/24 15:49	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1637-04	Water	NWTPH-DX (WA_Ext)	02/28/24 15:25	03/01/24 10:42	980mL/2mL	1000mL/2mL	1.02
A4B1637-05RE1	Water	NWTPH-DX (WA_Ext)	02/28/24 12:49	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1637-06	Water	NWTPH-DX (WA_Ext)	02/28/24 11:09	03/01/24 10:42	1040mL/2mL	1000mL/2mL	0.96
A4B1637-07RE1	Water	NWTPH-DX (WA_Ext)	02/28/24 14:25	03/01/24 10:42	980mL/2mL	1000mL/2mL	1.02

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0983							
A4B1637-04	Water	NWTPH-DX (WA_Ext) wSGC	02/28/24 15:25	03/01/24 10:42	980mL/2mL	1000mL/5mL	0.41

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0013							
A4B1637-01	Water	NWTPH-Gx (MS)	02/28/24 09:50	03/01/24 07:48	5mL/5mL	5mL/5mL	1.00

BTEX Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0013							
A4B1637-01	Water	EPA 8260D	02/28/24 09:50	03/01/24 07:48	5mL/5mL	5mL/5mL	1.00

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Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4B1637 - 03 29 24 1739

SAMPLE PREPARATION INFORMATION

BTEX+N Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0013							
A4B1637-01	Water	EPA 8260D	02/28/24 09:50	03/01/24 07:48	5mL/5mL	5mL/5mL	1.00
Batch: 24C0338							
A4B1637-02	Water	EPA 8260D	02/28/24 14:17	03/11/24 12:00	5mL/5mL	5mL/5mL	1.00
A4B1637-03	Water	EPA 8260D	02/28/24 15:49	03/11/24 12:00	5mL/5mL	5mL/5mL	1.00
A4B1637-06	Water	EPA 8260D	02/28/24 11:09	03/11/24 12:00	5mL/5mL	5mL/5mL	1.00
Batch: 24C0407							
A4B1637-05RE1	Water	EPA 8260D	02/28/24 12:49	03/12/24 14:07	5mL/5mL	5mL/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0110							
A4B1637-01	Water	EPA 8270E	02/28/24 09:50	03/05/24 11:43	1060mL/1mL	1000mL/1mL	0.94
A4B1637-02	Water	EPA 8270E	02/28/24 14:17	03/05/24 11:43	1060mL/1mL	1000mL/1mL	0.94
A4B1637-03	Water	EPA 8270E	02/28/24 15:49	03/05/24 11:43	1060mL/1mL	1000mL/1mL	0.94
A4B1637-04	Water	EPA 8270E	02/28/24 15:25	03/05/24 11:43	1000mL/1mL	1000mL/1mL	1.00
A4B1637-05	Water	EPA 8270E	02/28/24 12:49	03/05/24 11:43	1060mL/1mL	1000mL/1mL	0.94
A4B1637-06	Water	EPA 8270E	02/28/24 11:09	03/05/24 11:43	1060mL/1mL	1000mL/1mL	0.94
A4B1637-07	Water	EPA 8270E	02/28/24 14:25	03/05/24 11:43	960mL/1mL	1000mL/1mL	1.04

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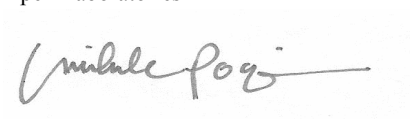

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

AMEND	The Result, Reporting Level, Recovery and/or RPD has changed. Note: Batch QC marked as AMENDED may or may not have been issued prior to the change. Case Narrative included if client data is affected.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -11%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -15%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -8%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
S-06	Surrogate recovery is outside of established control limits.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
V-13	Reporting levels raised due to dilution necessary for analysis due to sample foaming in sparge vessel.

Apex Laboratories

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

Apex Laboratories

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
Water	**NWTPH-DX (WA_Ext)**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	
Water	**NWTPH-DX (WA_Ext) wSGC**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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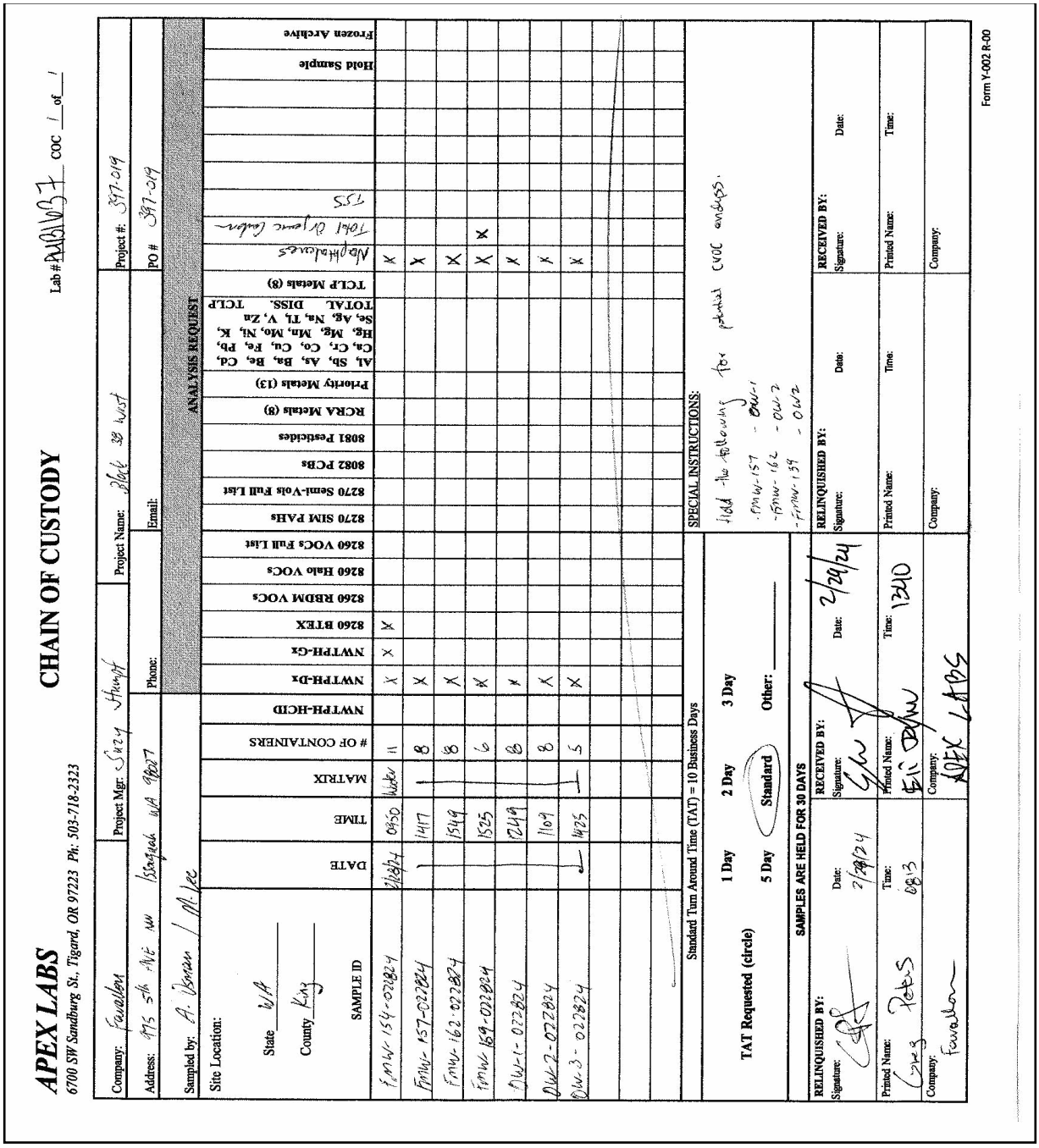
ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A4B1637 COC 1 of 1

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 1809 7th Ave ste 1111 Seattle WA 98007 | Phone: | Email: | PO # 397-019
Sampled by: A. Johnson / M. Lee

ANALYSIS REQUEST

Site Location: State WA County King	SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes	Total Arsenic TCLP	755	Hold Sample	Frozen Archive
	Farallon-157-022824	2/28/24	0950	Water	11		X	X	X											X					
	Farallon-162-022824	"	1417	"	8		X		X											X					
	Farallon-159-022824	"	1549	"	8		X		X											X					
	Farallon-139-022824	"	1525	"	6		X		X											X	X				
	DW-1-022824	"	1249	"	8		X		X											X					
	DW-2-022824	"	1109	"	8		X		X											X					
	DW-3-022824	"	1425	"	5		X		X											X					

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SPECIAL INSTRUCTIONS:
Hold for additional VOC analysis.
- Farallon-157 - DW-1
- Farallon-162 - DW-2
- Farallon-139 - DW-3

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:	2/29/24	Signature:	2/29/24	Signature:		Signature:	
Printed Name:	Time: 0813	Printed Name: Eric Dahlen	Time: 1240	Printed Name:	Time:	Printed Name:	Time:
Company: Farallon		Company: APEX LABS		Company:		Company:	

Form Y-002 R-00

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A4B1637 COC 1 of 1
REVISED

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW Issaquah WA 98027 | Phone: | Email: | PO # 397-019
Sampled by: A. Dinan / M. Lee
Site Location: State WA County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	TOTAL DISS. TCLP (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn)	TCLP Metals (8)	Naphthalenes	Total Organic Carbon	TSS	Naphthalene by 8260	NWTPH-Dx/SGC	Hold Sample	Frozen Archive
FMW-154-022824	2/28/24	0950	Water	11		X	X	X												X			*			
FMW-157-022824	↓	1417	↓	8		X				(X)										X			*			
FMW-162-022824		1549		8		X				(X)										X			*			
FMW-159-022824		1525		6		X														X	X			(*)		
OW-1-022824		1249		8		X				(X)										X			*			
OW-2-022824		1109		8		X				(X)										X			*			
OW-3-022824	↓	1425	↓	5		X														X						

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day (Standard) Other: ____
SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:
Hold the following: FMW-157 - OW-1, FMW-162 - OW-2, FMW-159 - OW-2
(*) = Added per Greg Peters (AP 3/20/24) for potential CVOC analysis.
(X) = Added per KJ. Analyze but hold reporting (AP 3/8/24)
* = added per KJ (AP 3/20/24)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date: 2/28/24	Signature: [signature] Date: 2/28/24	Signature: Date:	Signature: Date:
Printed Name: Greg Peters Time: 0813	Printed Name: Eli B... Time: 1310	Printed Name: Time:	Printed Name: Time:
Company: Farallon	Company: APEX LABS	Company:	Company:

Form Y-002 R-00

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4B1637 - 03 29 24 1739**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Element WO#: A4 B1637

Project/Project #: Block 38 west 397-019

Delivery Info:

Date/time received: 2/29/24 @ 1340 By: EST

Delivered by: Apex__Client__ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen__Other X

Cooler Inspection Date/time inspected: 2/29/24 @ 1340 By: EST

Chain of Custody included? Yes X No _____

Signed/dated by client? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.0	1.3	1.9				
Custody seals? (Y/N)	N	N	N				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	Y	Y	Y				
Ice type: (Gel/Real/Other)	Real	Real	Real				
Condition (In/Out):	In	In	In				

Cooler out of temp? (Y/N) Possible reason why: _____

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 2/29/24 @ 1415 By: MS

All samples intact? Yes X No ___ Comments: _____

Bottle labels/COCs agree? Yes X No ___ Comments: No T on 250 unp poly for PW 3/29 FMW-102

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments _____

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ____ pH ID: A251172

Comments: _____

Additional information: _____

Labeled by: Witness: Cooler Inspected by: AAW

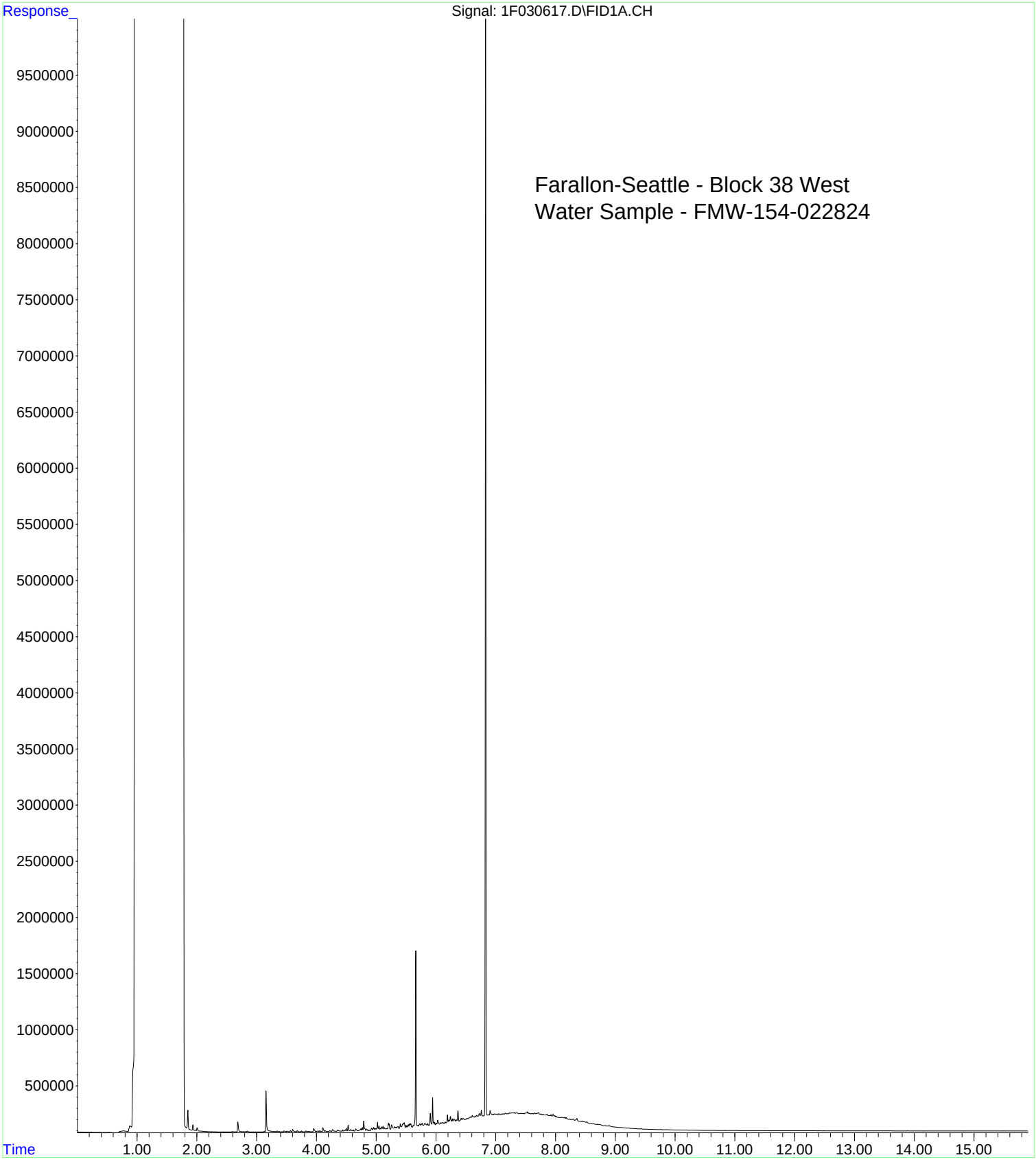
Form Y-003 R-01

Apex Laboratories

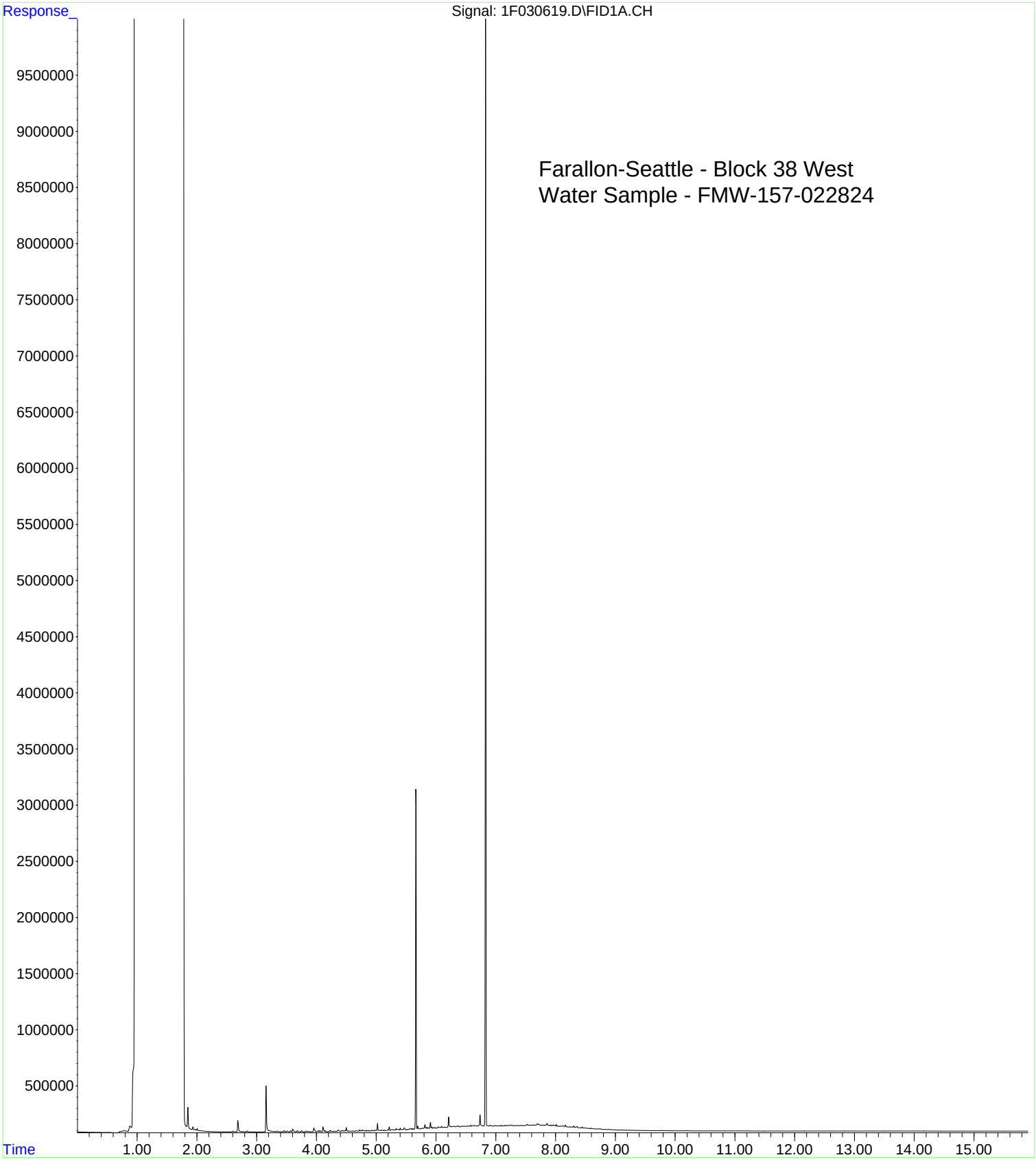
The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.

Michele Poquiz For Kurt Johnson, Senior Chemist

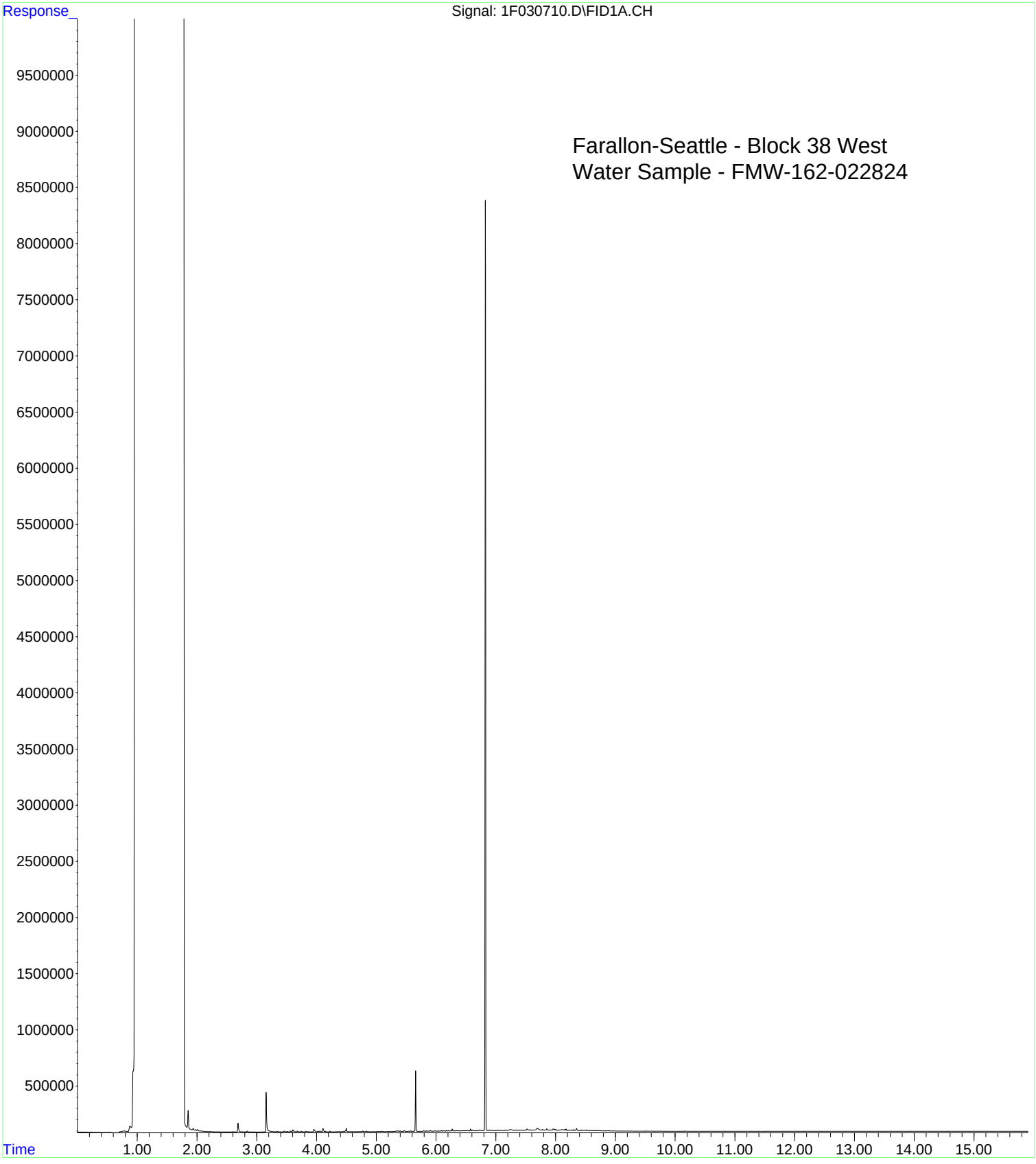
File :C:\msdchem\1\data\4C06060\1F030617.D
Operator : BLL
Acquired : 06 Mar 2024 11:49 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-01
Misc Info :
Vial Number: 11



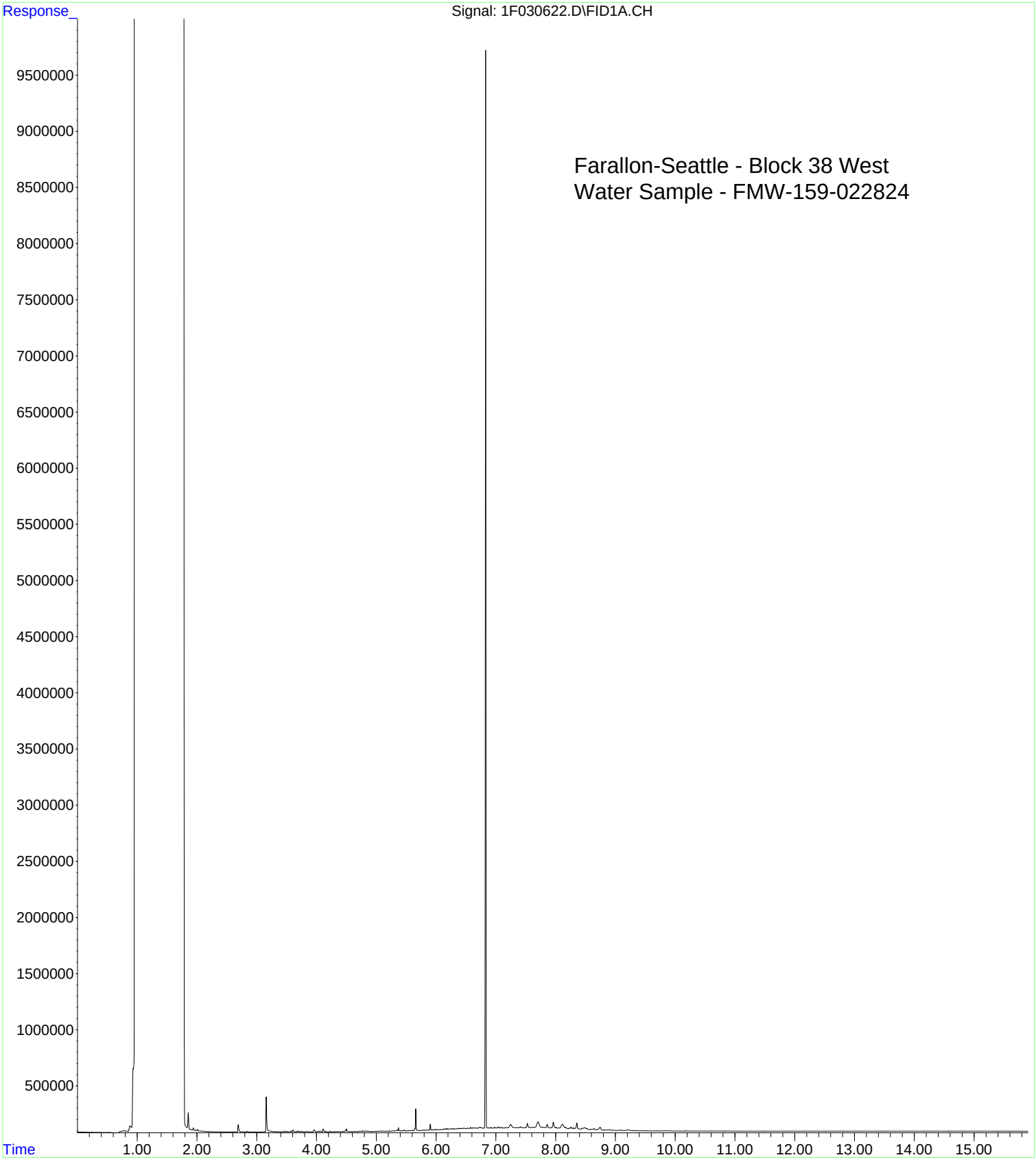
File :C:\msdchem\1\data\4C06060\1F030619.D
Operator : BLL
Acquired : 07 Mar 2024 12:35 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-02
Misc Info :
Vial Number: 12



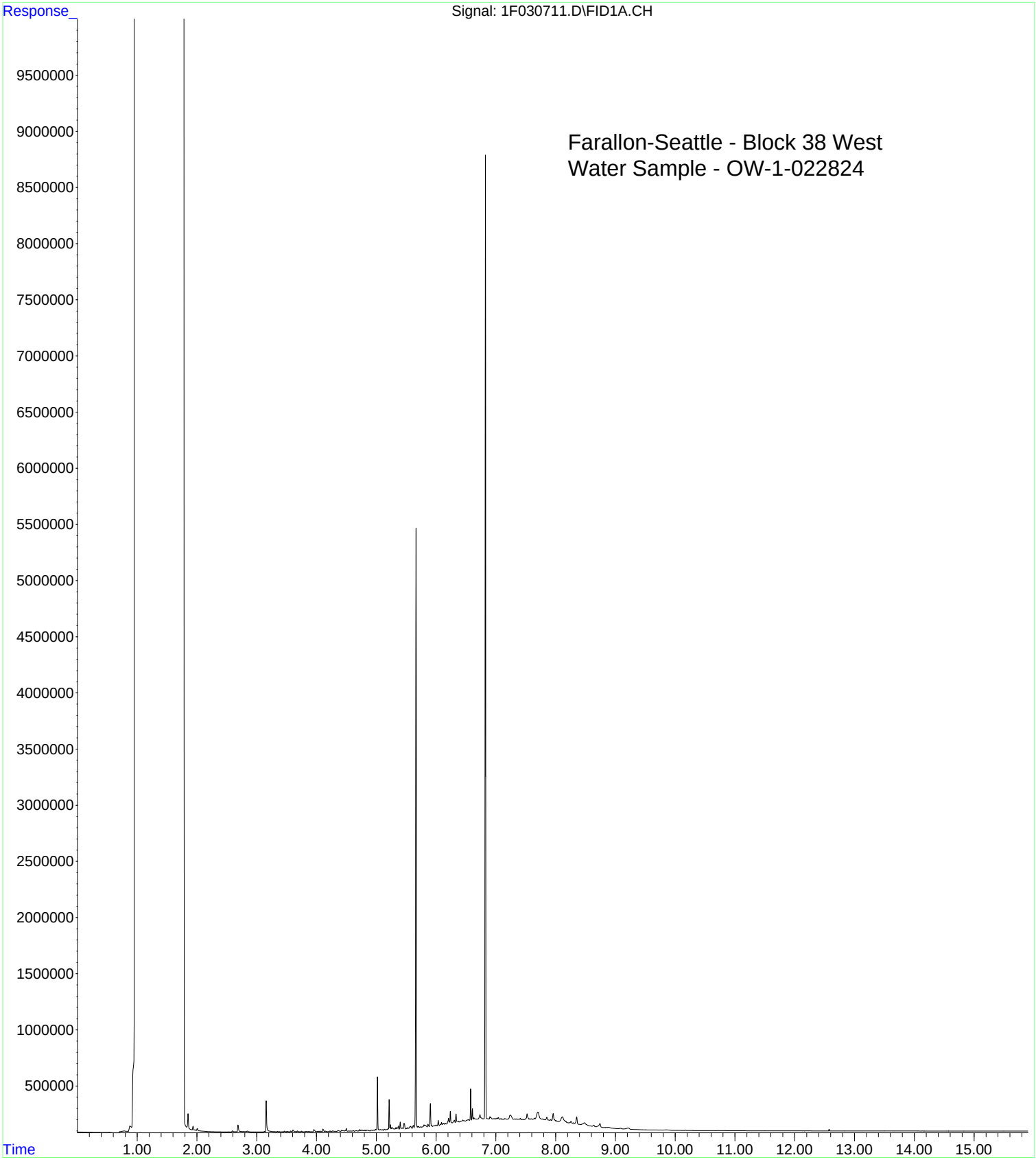
File :C:\msdchem\1\data\4C07040\1F030710.D
Operator : BLL
Acquired : 07 Mar 2024 2:34 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-03RE1
Misc Info :
Vial Number: 6



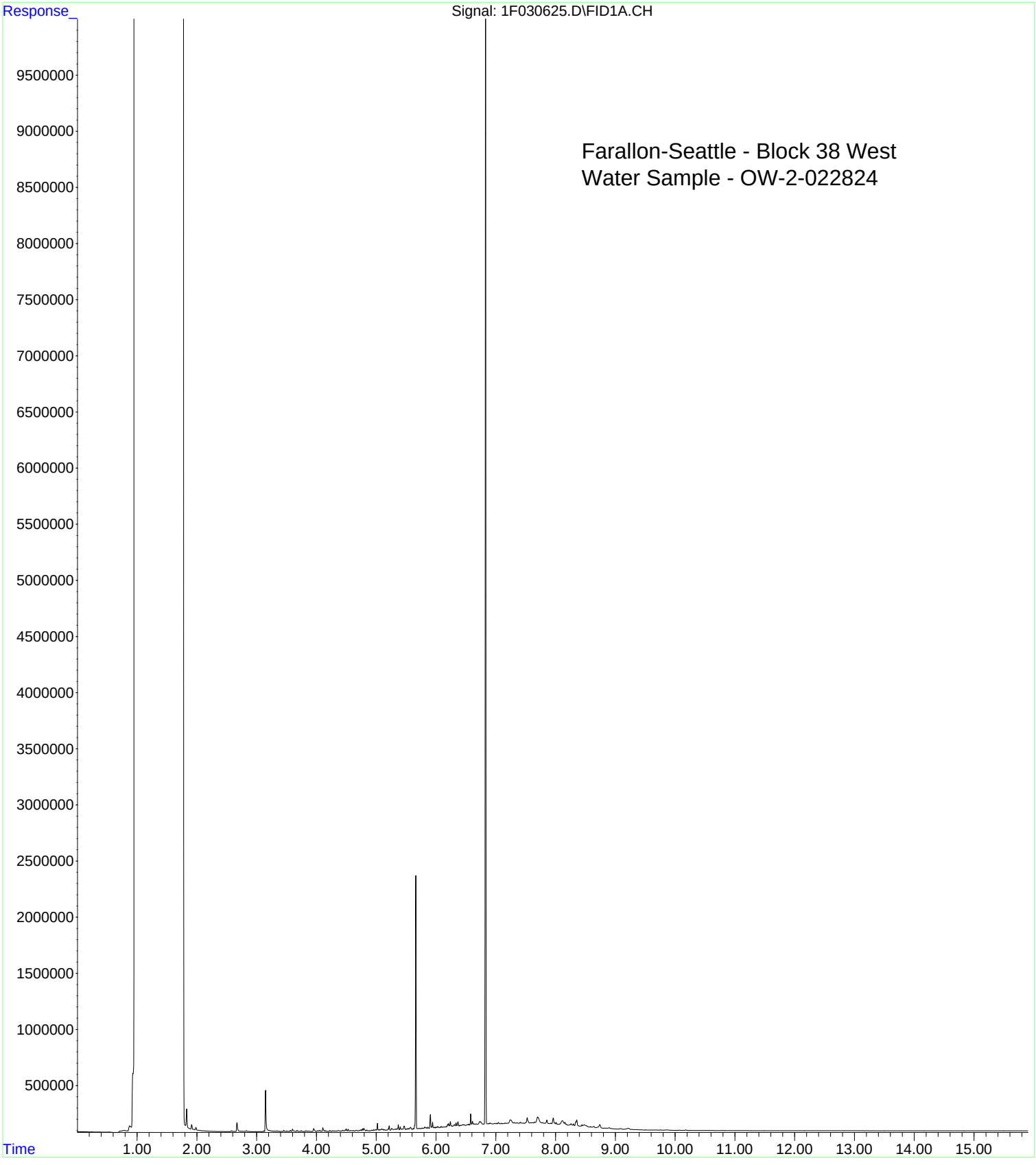
File :C:\msdchem\1\data\4C06060\1F030622.D
Operator : BLL
Acquired : 07 Mar 2024 1:45 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-04
Misc Info :
Vial Number: 14



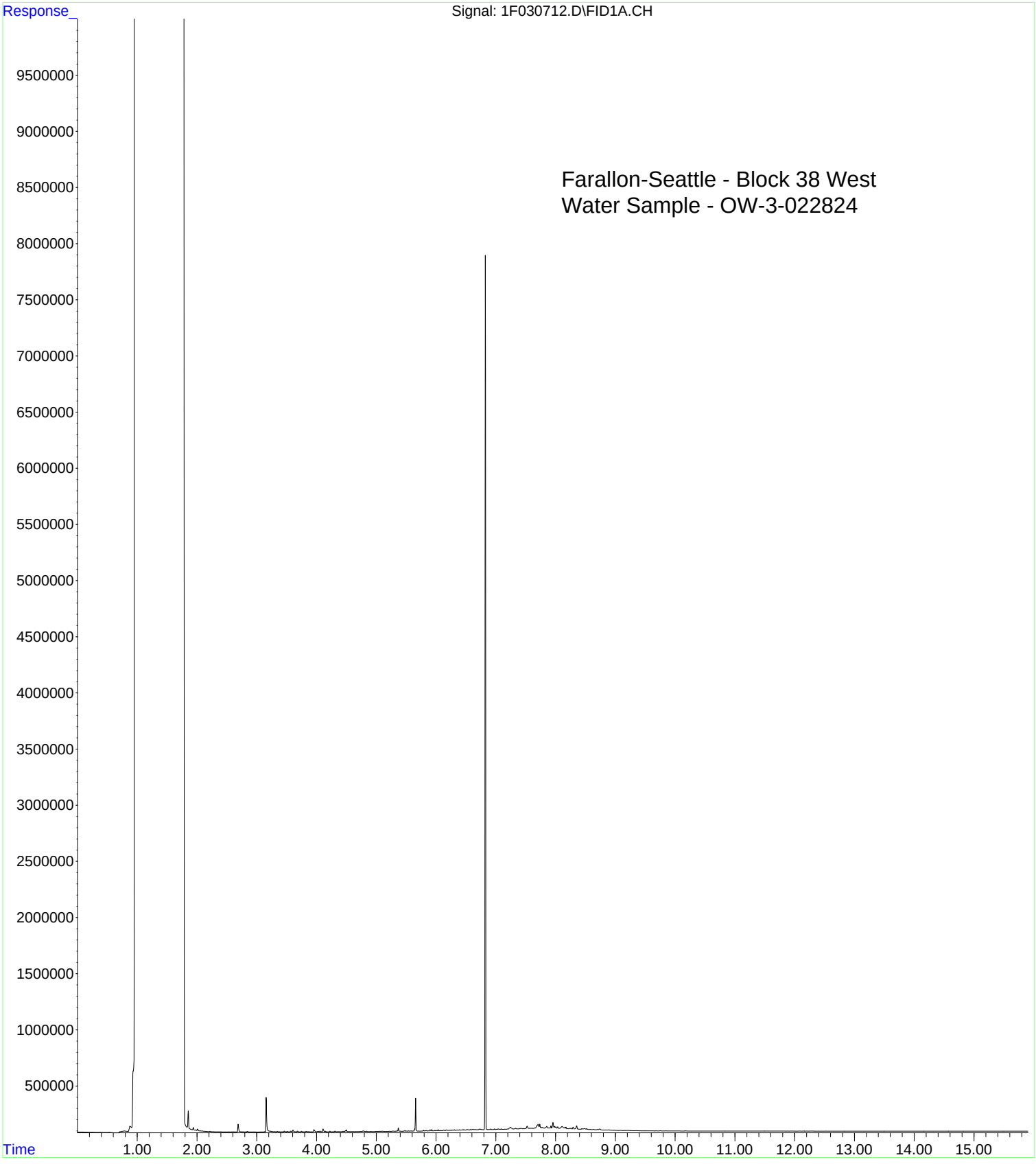
File :C:\msdchem\1\data\4C07040\1F030711.D
Operator : BLL
Acquired : 07 Mar 2024 2:58 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-05RE1
Misc Info :
Vial Number: 7



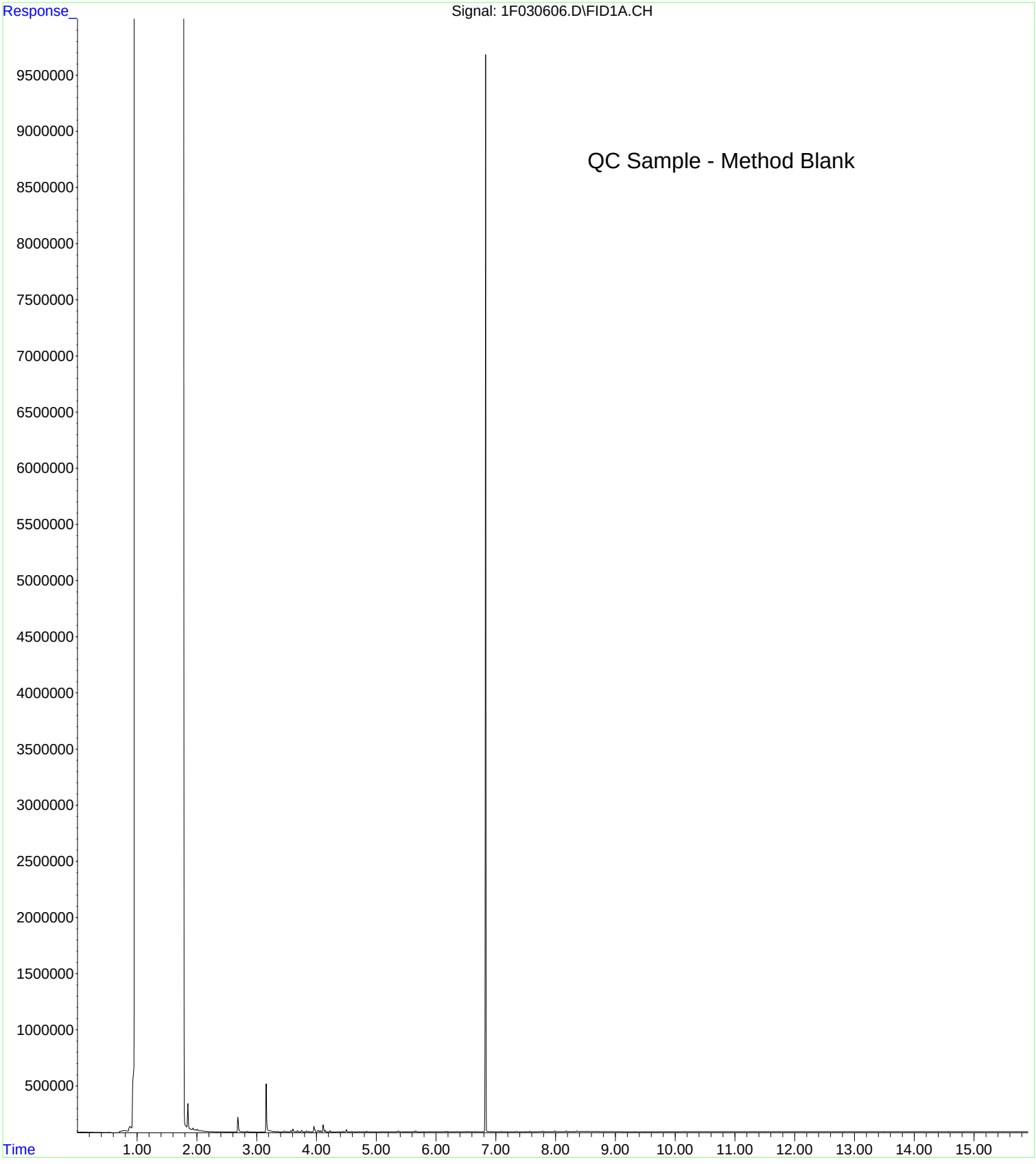
File :C:\msdchem\1\data\4C06060\1F030625.D
Operator : BLL
Acquired : 07 Mar 2024 2:55 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-06
Misc Info :
Vial Number: 16



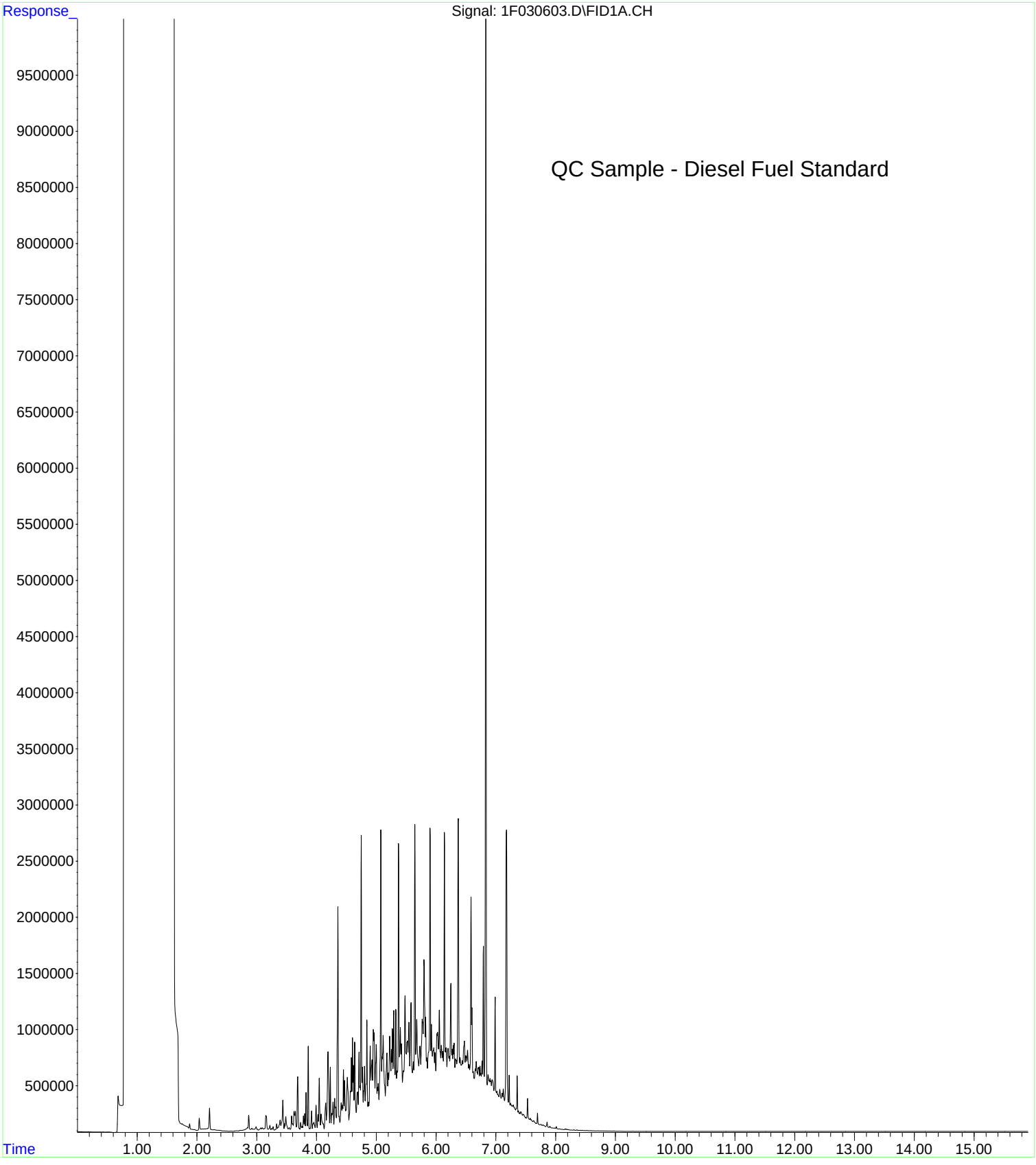
File :C:\msdchem\1\data\4C07040\1F030712.D
Operator : BLL
Acquired : 07 Mar 2024 3:21 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-07RE1
Misc Info :
Vial Number: 8



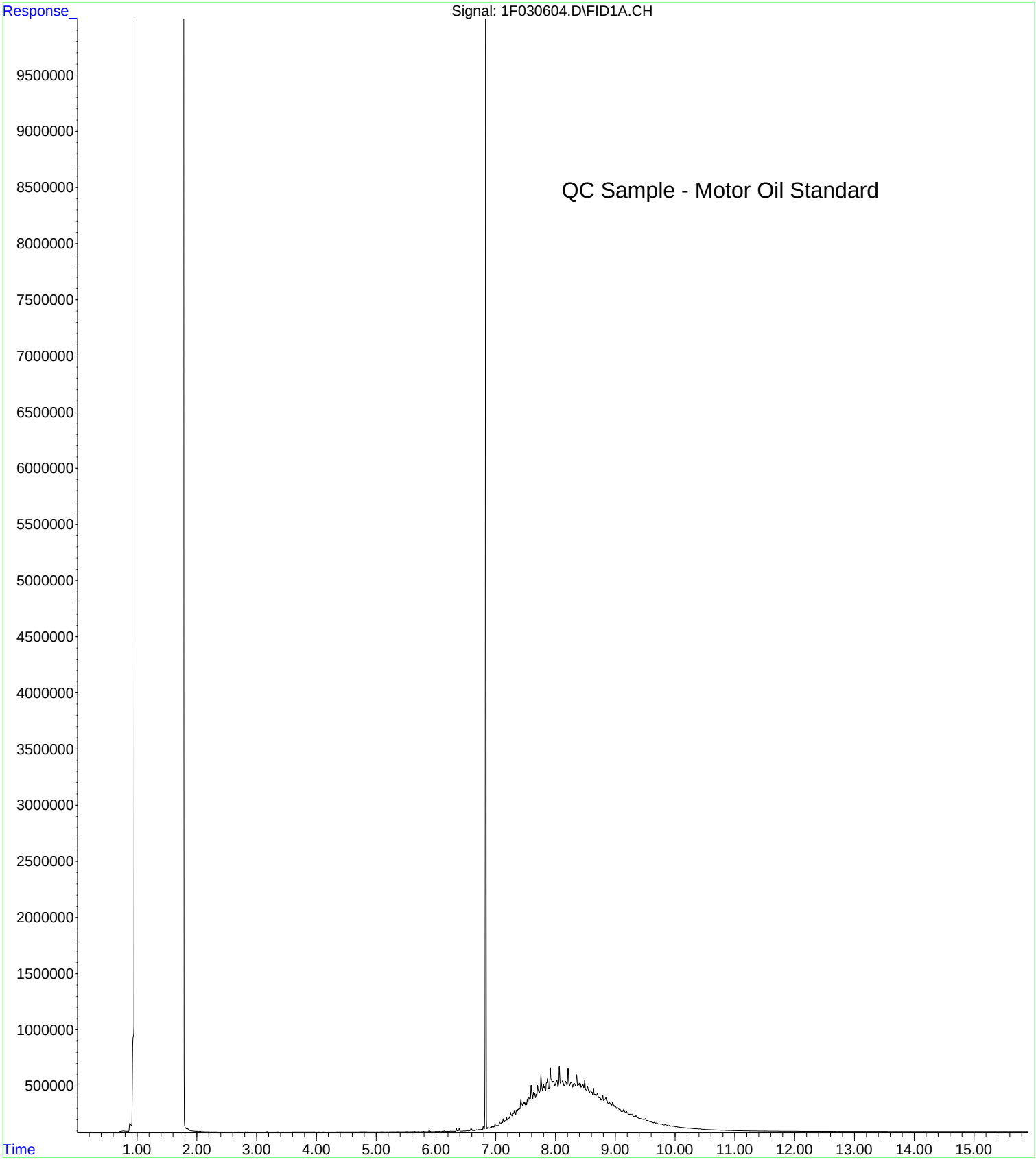
File :C:\msdchem\1\data\4C06060\1F030606.D
Operator : BLL
Acquired : 06 Mar 2024 7:32 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 24C0024-BLK1
Misc Info :
Vial Number: 3



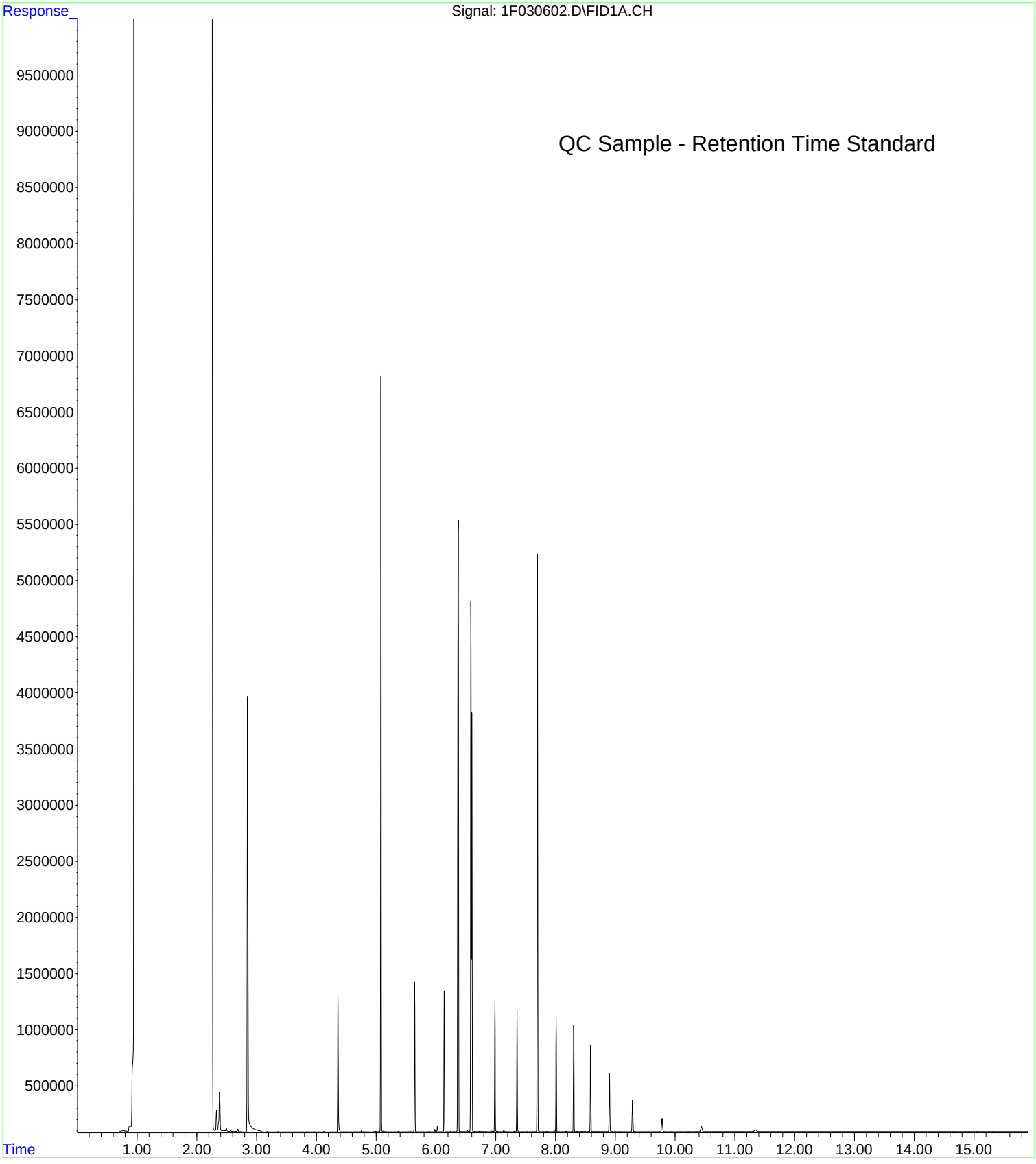
File :C:\msdchem\1\data\4C06060\1F030603.D
Operator : BLL
Acquired : 06 Mar 2024 5:14 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C06060-CCV1
Misc Info :
Vial Number: 1



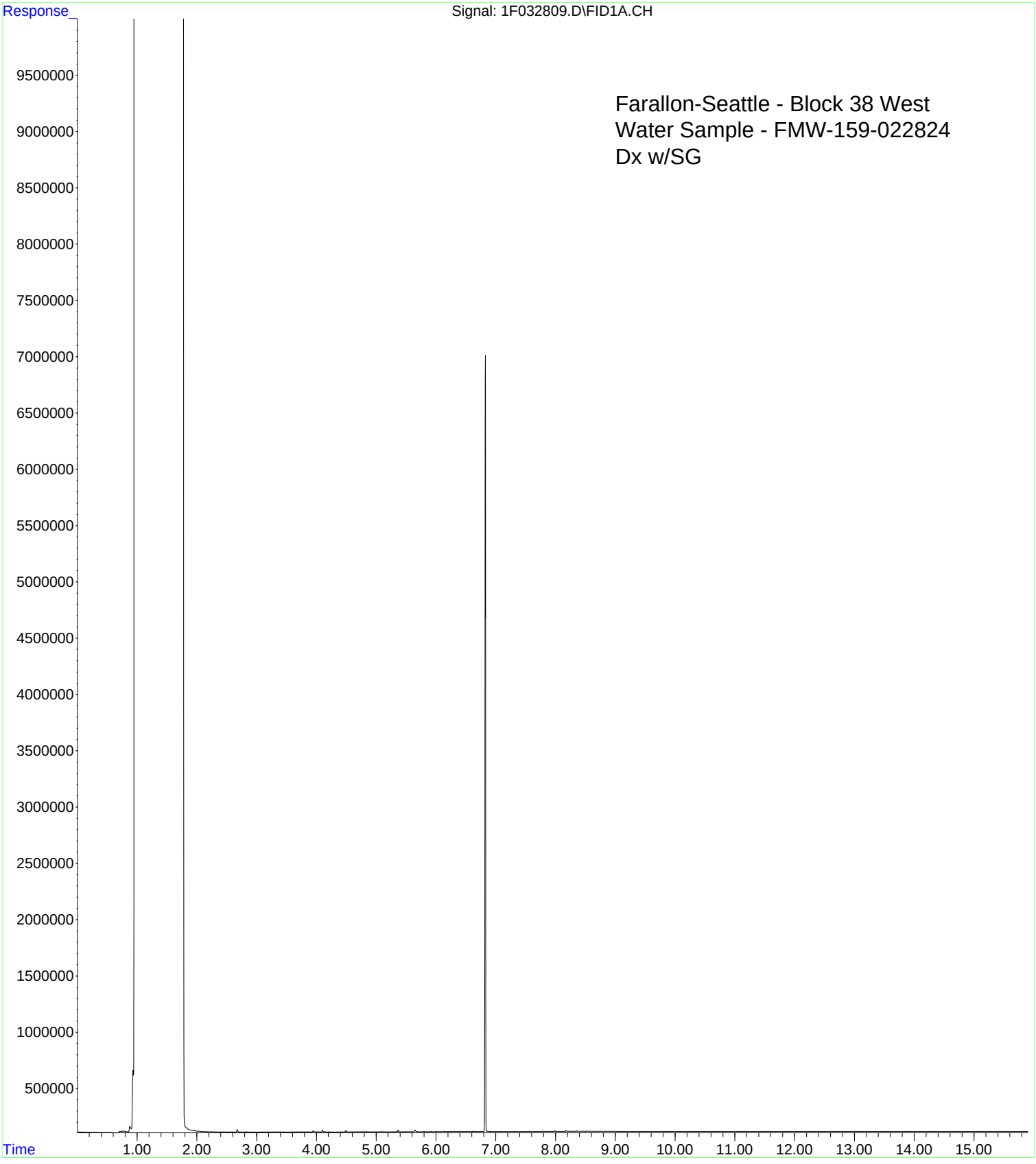
File :C:\msdchem\1\data\4C06060\1F030604.D
Operator : BLL
Acquired : 06 Mar 2024 5:37 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C06060-CCV2
Misc Info :
Vial Number: 2



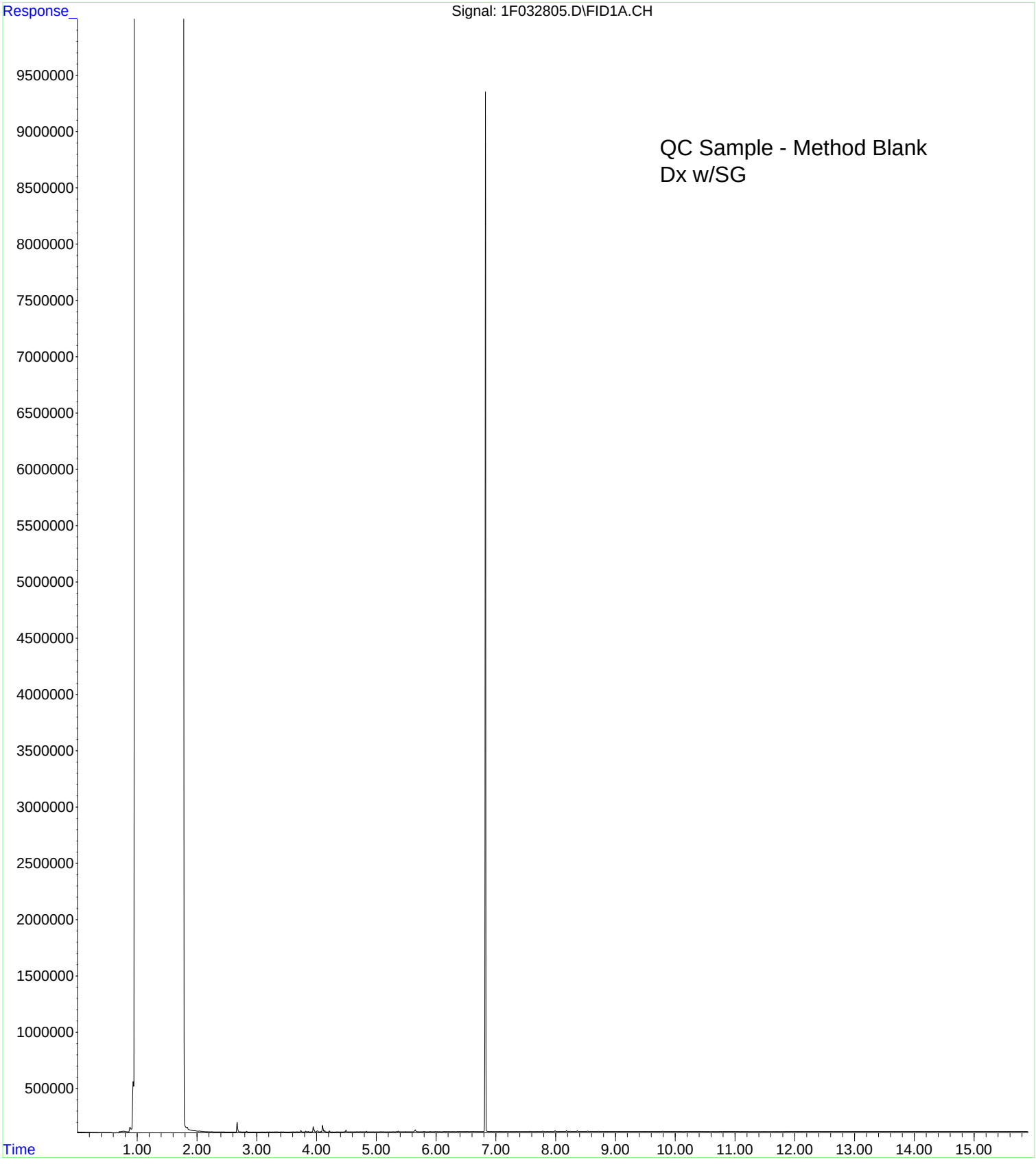
File :C:\msdchem\1\data\4C06060\1F030602.D
Operator : BLL
Acquired : 06 Mar 2024 4:51 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C06060-RES1
Misc Info :
Vial Number: 94



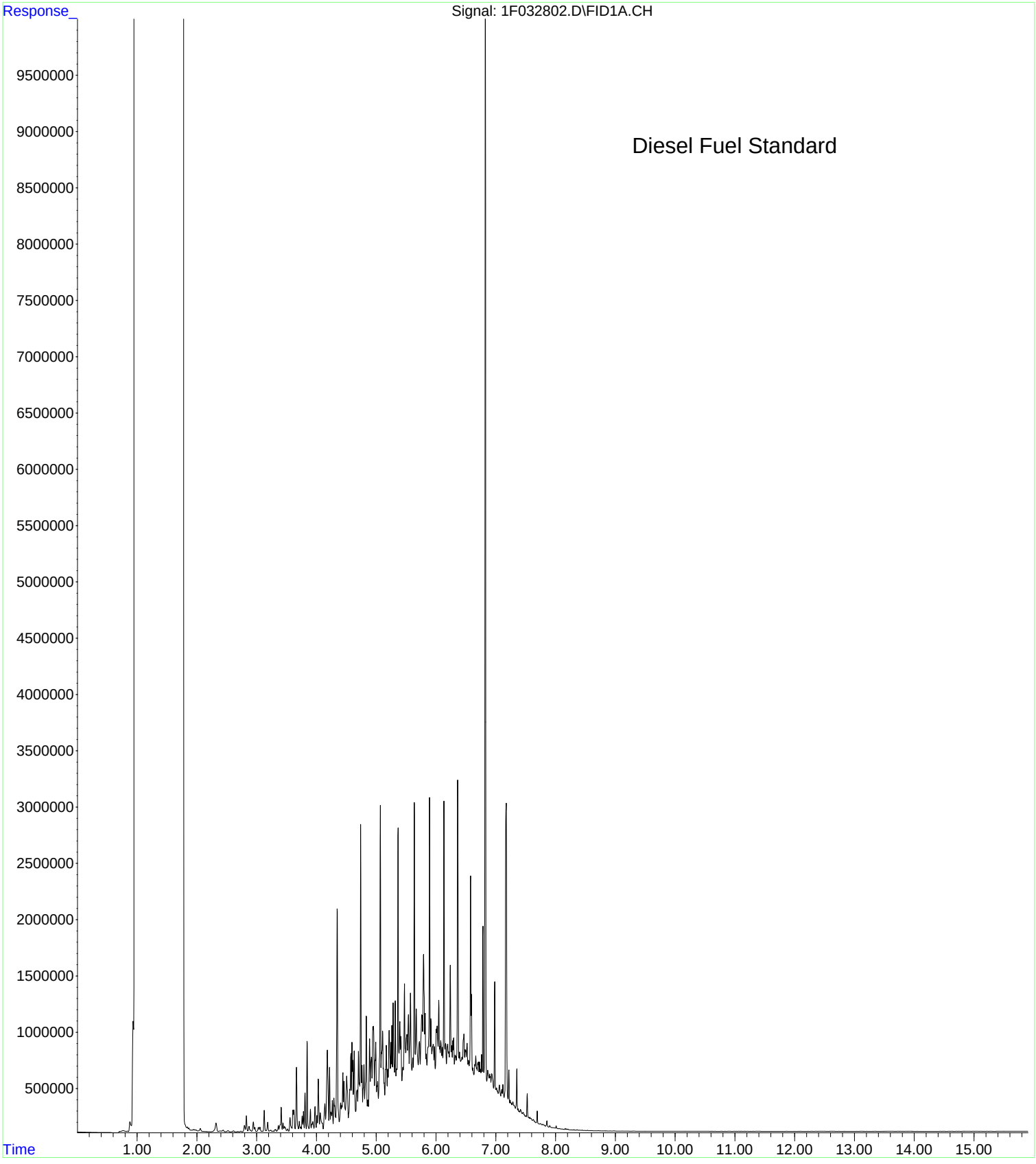
File :C:\msdchem\1\data\4C28038\1F032809.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 1:04 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4B1637-04
Misc Info :
Vial Number: 7



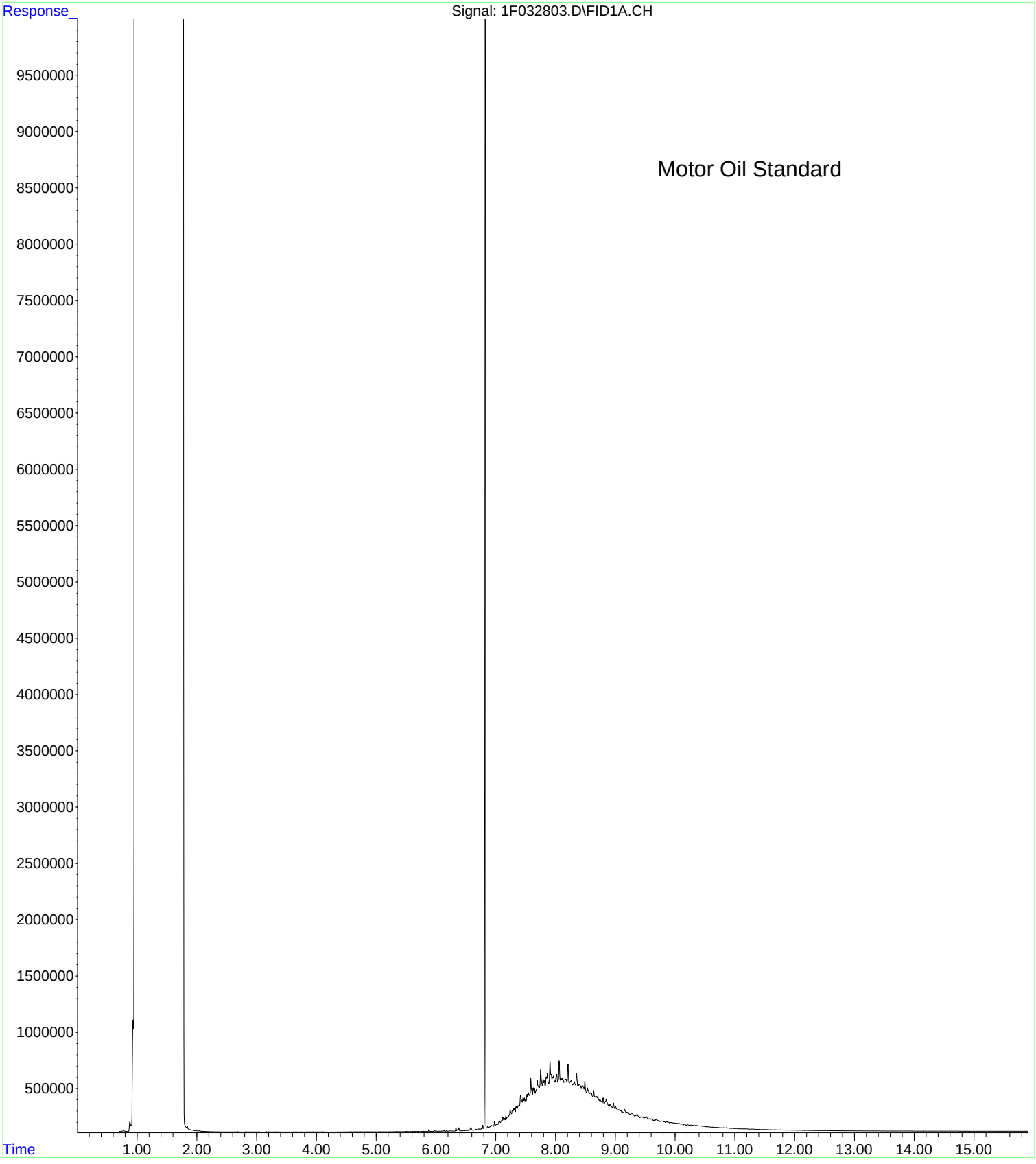
File :C:\msdchem\1\data\4C28038\1F032805.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 11:31 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 24C0983-BLK1
Misc Info :
Vial Number: 3



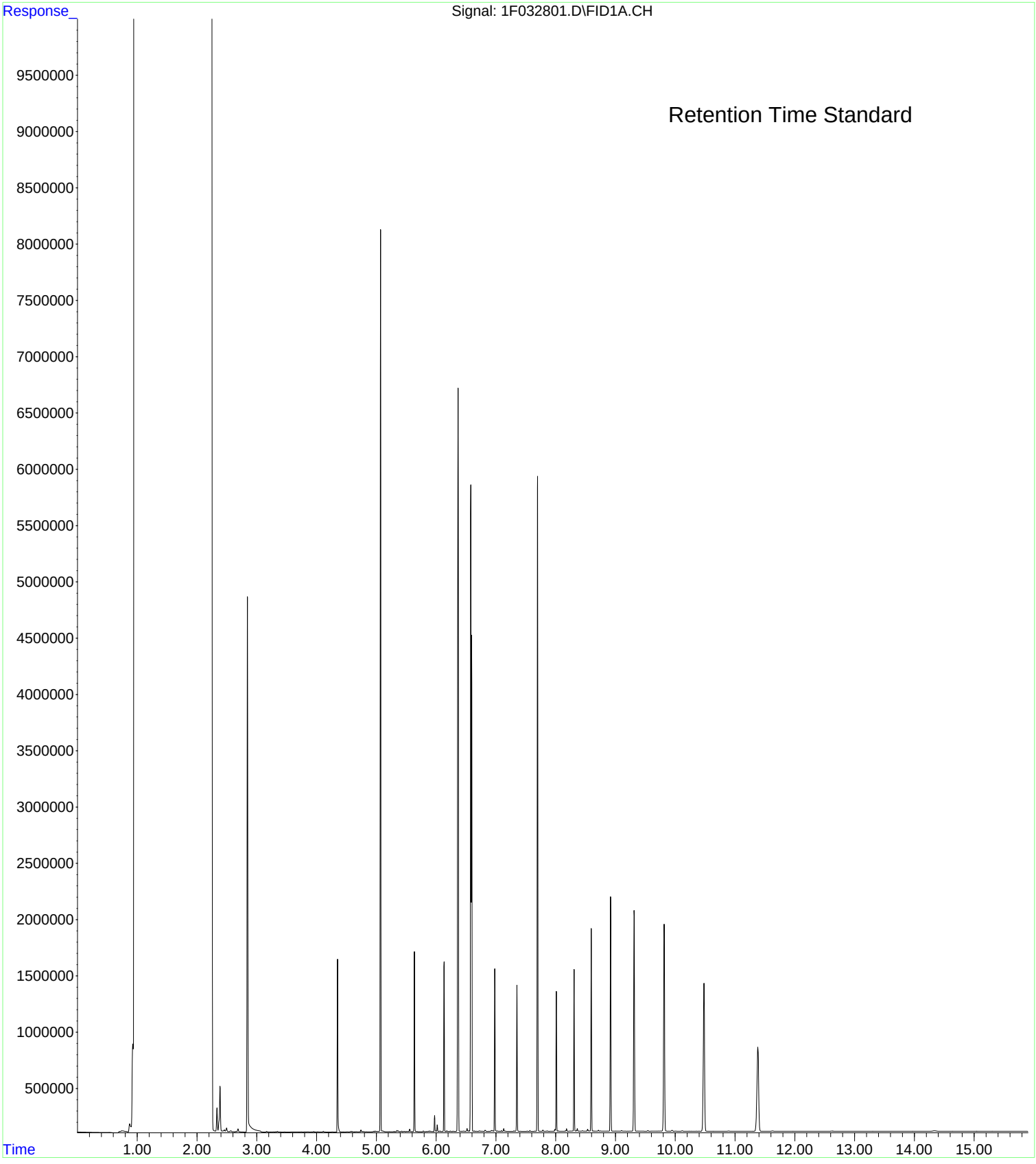
File :C:\msdchem\1\data\4C28038\1F032802.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:21 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV1
Misc Info :
Vial Number: 1



File :C:\msdchem\1\data\4C28038\1F032803.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:44 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV2
Misc Info :
Vial Number: 2



File :C:\msdchem\1\data\4C28038\1F032801.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 9:57 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-RES1
Misc Info :
Vial Number: 94



March 12, 2024 Service Request No:K2402254

Michele Poquiz
Apex Laboratories
6700 SW Sandburg St.
Tigard, OR 97223

Laboratory Results for: A4B1637

Dear Michele,

Enclosed are the results of the sample(s) submitted to our laboratory March 01, 2024
For your reference, these analyses have been assigned our service request number **K2402254.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Apex Laboratories
Project: A4B1637
Sample Matrix: Water

Service Request: K2402254
Date Received: 03/01/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 03/01/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by  Date 03/12/2024

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: FME-159-022824			Lab ID: K2402254-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	4.20		0.08	0.50	mg/L	SM 5310 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories **Service Request:**K2402254
Project: A4B1637

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2402254-001	FME-159-022824	2/28/2024	1525

SUBCONTRACT ORDER

Apex Laboratories

A4B1637

KPM

K240 2254

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Michele Poquiz

RECEIVING LABORATORY:

ALS Group USA - Kelso
1317 S 13th Avenue
Kelso, WA 98626
Phone :(360) 577-7222
Fax: (360) 636-1068

Sample Name: FME-159-022824 **Water** **Sampled: 02/28/24 15:25** (A4B1637-04)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	03/13/24 17:00	03/27/24 15:25	
Containers Supplied:			
(A)250 mL Poly - Sulfuric (H2SO4)			

Released By	Date	Received By	Date
[signature]	2/29/24	UPS (Shipper)	
UPS (Shipper)		[signature]	3/1/24 0935
Released By	Date	Received By	Date

PM HH

Cooler Receipt and Preservation Form

Client Apex Laboratories Service Request K24 01254

Received: 3/1/24 Opened: 3/1/24 By: PDP Unloaded: 3/1/24 By: PDP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
	1.2	IR06				12CIBA05013083423	

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Apex Laboratories	**Service Request:**	K2402254
Project:	A4B1637/		

Sample Name:	FME-159-022824	**Date Collected:**	02/28/24
Lab Code:	K2402254-001	**Date Received:**	03/1/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2402254
Project:	A4B1637	**Date Collected:**	02/28/24 15:25
Sample Matrix:	Water	**Date Received:**	03/01/24 09:35
Sample Name:	FME-159-022824	**Basis:**	NA
Lab Code:	K2402254-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**4.20**	mg/L	0.50	0.08	1	03/07/24 15:55	

QC Summary Forms

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2402254
Project:	A4B1637	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2402254-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	ND U	mg/L	0.50	0.08	1	03/07/24 15:55	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Apex Laboratories	**Service Request:**	K2402254
Project:	A4B1637	**Date Analyzed:**	03/07/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Carbon, Total Organic

Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	834150

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2402254-LCS	23.9	25.0	96	83-117

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Friday, March 29, 2024

Suzy Stumpf
Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

RE: A4C0878 - 397-019 Block 38 West - 397-019

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4C0878, which was received by the laboratory on 3/1/2024 at 12:37:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.					
(See Cooler Receipt Form for details)					
Cooler #1	2.6	degC	Cooler #2	5.6	degC
Cooler #3	5.1	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FMW-150-022924	A4C0878-01	Water	02/29/24 11:03	03/01/24 12:37
FMW-151-022924	A4C0878-02	Water	02/29/24 14:06	03/01/24 12:37
FMW-152-022924	A4C0878-03	Water	02/29/24 09:32	03/01/24 12:37
FMW-153-022924	A4C0878-04	Water	02/29/24 12:29	03/01/24 12:37
FMW-164-022924	A4C0878-05	Water	02/29/24 10:45	03/01/24 12:37
FMW-158-022924	A4C0878-06	Water	02/29/24 12:40	03/01/24 12:37
OW3-022824	A4C0878-07	Water	02/29/24 09:50	03/01/24 12:37
FMW-159-022824	A4C0878-08	Water	02/29/24 09:15	03/01/24 12:37

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: 397-019 Block 38 West	
1809 7th Ave Suite 1111	Project Number: 397-019	Report ID:
Seattle, WA 98101	Project Manager: Suzy Stumpf	A4C0878 - 03 29 24 1757

ANALYTICAL CASE NARRATIVE

A4C0878 — **Apex Laboratories**

Amended Final Report #2 - This report supercedes all previous reports.

Subcontract

This report is not complete without the attached subcontract laboratory report for total organic carbon (TOC) from ALS.

Michele Poquiz
Forensics Project Manager
March 29, 2024

Amended Final Report #1 - This report supersedes all previous reports.

NWTPH-Dx - WA Diesel Extended - Method Name Change

This report contains modified data for NWTPH-Dx (WA Ext) for all samples.

The reported Analytical Method Reference has changed from "**Washington Diesel Range Extended (C10-C40) by EPA 8015D Modified**" to "**Whole Product Diesel Testing (C10-C40) WDOE/NWTPH-Dx**", the Specific Method Reference has changed from "**8015DMod (WA_Ext)**" to "**NWTPH-Dx (WA Ext)**", and a Minimum Reporting Level has been set at 0.250mg/L.

The affected data is flagged in the report with the AMEND qualifier.

David Jack
Technical Manager
March 22, 2024

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

APEX LABORATORIES

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4C0878 - 03 29 24 1757

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-150-022924 (A4C0878-01)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 20:16	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*	*Limits: 50-150 %*		*1*	*03/07/24 20:16*	*NWTPH-DX (WA_Ext)*	
FMW-151-022924 (A4C0878-02)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 20:39	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*	*Limits: 50-150 %*		*1*	*03/07/24 20:39*	*NWTPH-DX (WA_Ext)*	
FMW-152-022924 (A4C0878-03)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 21:03	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 77 %*	*Limits: 50-150 %*		*1*	*03/07/24 21:03*	*NWTPH-DX (WA_Ext)*	
FMW-153-022924 (A4C0878-04)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 21:26	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 76 %*	*Limits: 50-150 %*		*1*	*03/07/24 21:26*	*NWTPH-DX (WA_Ext)*	
FMW-164-022924 (A4C0878-05)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 21:49	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 80 %*	*Limits: 50-150 %*		*1*	*03/07/24 21:49*	*NWTPH-DX (WA_Ext)*	
FMW-158-022924 (A4C0878-06)				**Matrix: Water**		**Batch: 24C0221**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/07/24 22:13	NWTPH-DX (WA_Ext)	
Surrogate: o-Terphenyl (Surr)		*Recovery: 79 %*	*Limits: 50-150 %*		*1*	*03/07/24 22:13*	*NWTPH-DX (WA_Ext)*	

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

ANALYTICAL SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-158-022924 (A4C0878-06)				**Matrix: Water**		**Batch: 24C0984**		
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	03/28/24 15:01	NWTPH-DX (WA_Ext) wSGC	
Surrogate: o-Terphenyl (Surr)		*Recovery: 78 %*		*Limits: 50-150 %*	*1*	*03/28/24 15:01*	*NWTPH-DX (WA_Ext) wSGC*	

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Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
OW3-022824 (A4C0878-07)				**Matrix: Water**		**Batch: 24C0338**		
Naphthalene	ND	---	5.00	ug/L	1	03/11/24 17:47	EPA 8260D	Q-54
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*119 %*	*Limits: 80-120 %*	*1*	*03/11/24 17:47*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/11/24 17:47*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*80-120 %*	*1*	*03/11/24 17:47*	*EPA 8260D*	
FMW-159-022824 (A4C0878-08)				**Matrix: Water**		**Batch: 24C0338**		
Naphthalene	ND	---	5.00	ug/L	1	03/11/24 14:36	EPA 8260D	Q-54
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*114 %*	*Limits: 80-120 %*	*1*	*03/11/24 14:36*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*03/11/24 14:36*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*03/11/24 14:36*	*EPA 8260D*	

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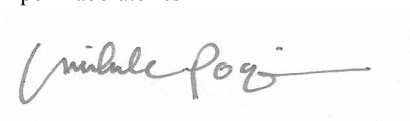

Michele Poquiz For Kurt Johnson, Senior Chemist

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4C0878 - 03 29 24 1757

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-150-022924 (A4C0878-01)				**Matrix: Water**		**Batch: 24C0220**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 19:55	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 19:55	EPA 8270E	
Naphthalene	ND	---	0.0377	ug/L	1	03/08/24 19:55	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*52 %*	*Limits: 44-120 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*44 %*	*44-120 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
Phenol-d6 (Surr)			*16 %*	*10-133 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*72 %*	*50-134 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
2-Fluorophenol (Surr)			*29 %*	*19-120 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*86 %*	*43-140 %*	*1*	*03/08/24 19:55*	*EPA 8270E*	
FMW-151-022924 (A4C0878-02)				**Matrix: Water**		**Batch: 24C0220**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 20:28	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 20:28	EPA 8270E	
Naphthalene	ND	---	0.0377	ug/L	1	03/08/24 20:28	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*49 %*	*Limits: 44-120 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*48 %*	*44-120 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
Phenol-d6 (Surr)			*15 %*	*10-133 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*66 %*	*50-134 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
2-Fluorophenol (Surr)			*26 %*	*19-120 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*91 %*	*43-140 %*	*1*	*03/08/24 20:28*	*EPA 8270E*	
FMW-152-022924 (A4C0878-03)				**Matrix: Water**		**Batch: 24C0220**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:02	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:02	EPA 8270E	
Naphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:02	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*46 %*	*44-120 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
Phenol-d6 (Surr)			*16 %*	*10-133 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*70 %*	*50-134 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
2-Fluorophenol (Surr)			*27 %*	*19-120 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*99 %*	*43-140 %*	*1*	*03/08/24 21:02*	*EPA 8270E*	
FMW-153-022924 (A4C0878-04)				**Matrix: Water**		**Batch: 24C0220**		
1-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:35	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:35	EPA 8270E	

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4C0878 - 03 29 24 1757

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FMW-153-022924 (A4C0878-04)				**Matrix: Water**		**Batch: 24C0220**		
Naphthalene	ND	---	0.0377	ug/L	1	03/08/24 21:35	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*51 %*	*Limits: 44-120 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*45 %*	*44-120 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
Phenol-d6 (Surr)			*16 %*	*10-133 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*62 %*	*50-134 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
2-Fluorophenol (Surr)			*28 %*	*19-120 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*73 %*	*43-140 %*	*1*	*03/08/24 21:35*	*EPA 8270E*	
FMW-164-022924 (A4C0878-05)				**Matrix: Water**		**Batch: 24C0220**		
1-Methylnaphthalene	ND	---	0.0408	ug/L	1	03/08/24 22:08	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0408	ug/L	1	03/08/24 22:08	EPA 8270E	
Naphthalene	ND	---	0.0408	ug/L	1	03/08/24 22:08	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*58 %*	*Limits: 44-120 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*48 %*	*44-120 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	
Phenol-d6 (Surr)			*19 %*	*10-133 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*67 %*	*50-134 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	
2-Fluorophenol (Surr)			*32 %*	*19-120 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*75 %*	*43-140 %*	*1*	*03/08/24 22:08*	*EPA 8270E*	

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0221 - EPA 3510C (Fuels/Acid Ext.)									Water			
Blank (24C0221-BLK1)			Prepared: 03/07/24 06:07		Analyzed: 03/07/24 19:06							
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	ND	---	200	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (24C0221-BS1)			Prepared: 03/07/24 06:07		Analyzed: 03/07/24 19:30							
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	280	---	200	ug/L	1	500	---	56	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (24C0221-BSD1)			Prepared: 03/07/24 06:07		Analyzed: 03/07/24 19:53							**Q-19**
NWTPH-DX (WA Ext)												
Diesel Range Organics (C10-C40)	260	---	200	ug/L	1	500	---	52	38-132%	7	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 82 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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ANALYTICAL REPORT

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1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

QUALITY CONTROL (QC) SAMPLE RESULTS

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0984 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (24C0984-BLK1)				Prepared: 03/07/24 06:07		Analyzed: 03/28/24 13:51						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	ND	---	250	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (24C0984-BS1)				Prepared: 03/07/24 06:07		Analyzed: 03/28/24 14:14						
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	291	---	250	ug/L	1	500	---	58	38-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 92 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (24C0984-BSD1)				Prepared: 03/07/24 06:07		Analyzed: 03/28/24 14:38						**Q-19**
NWTPH-DX (WA Ext) wSGC												
Diesel Range Organics (C10-C40)	278	---	250	ug/L	1	500	---	56	38-132%	5	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 83 %*		*Limits: 50-150 %*			*Dilution: 1x*					

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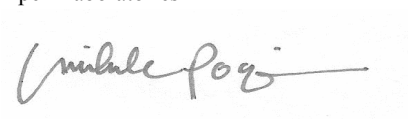

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ANALYTICAL REPORT

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QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0338 - EPA 5030C												**Water**
Blank (24C0338-BLK1)			Prepared: 03/11/24 10:00 Analyzed: 03/11/24 12:19									
EPA 8260D												
Naphthalene	ND	---	5.00	ug/L	1	---	---	---	---	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*115 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*			*"*				
LCS (24C0338-BS1)			Prepared: 03/11/24 09:30 Analyzed: 03/11/24 11:08									
EPA 8260D												
Naphthalene	12.9	---	5.00	ug/L	1	20.0	---	**65**	**80-120%**	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*94 %*		*80-120 %*			*"*				
Duplicate (24C0338-DUP1)			Prepared: 03/11/24 14:00 Analyzed: 03/11/24 20:03									
QC Source Sample: Non-SDG (A4C1027-01RE1)												
Naphthalene	ND	---	100	ug/L	20	---	ND	---	---	---	30%	Q-54
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*119 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Matrix Spike (24C0338-MS1)			Prepared: 03/11/24 12:00 Analyzed: 03/11/24 21:52									
QC Source Sample: Non-SDG (A4B1637-02)												
EPA 8260D												
Naphthalene	14.0	---	5.00	ug/L	1	20.0	ND	70	61-128%	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*			*"*				

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ANALYTICAL REPORT

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Farallon-Seattle
1809 7th Ave Suite 1111
Seattle, WA 98101

Project: **397-019 Block 38 West**
Project Number: **397-019**
Project Manager: **Suzy Stumpf**

Report ID:
A4C0878 - 03 29 24 1757

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0220 - EPA 3510C (Acid Extraction)												**Water**
Blank (24C0220-BLK1)				Prepared: 03/07/24 06:02 Analyzed: 03/08/24 18:13								
EPA 8270E												
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery: 73 %*		*Limits: 44-120 %*		*Dilution: 1x*						
2-Fluorobiphenyl (Surr)		*65 %*		*44-120 %*		*"*						
Phenol-d6 (Surr)		*24 %*		*10-133 %*		*"*						
p-Terphenyl-d14 (Surr)		*80 %*		*50-134 %*		*"*						
2-Fluorophenol (Surr)		*39 %*		*19-120 %*		*"*						
2,4,6-Tribromophenol (Surr)		*91 %*		*43-140 %*		*"*						
LCS (24C0220-BS1)				Prepared: 03/07/24 06:02 Analyzed: 03/08/24 18:47								
EPA 8270E												
1-Methylnaphthalene	1.83	---	0.160	ug/L	4	4.00	---	46	41-120%	---	---	
2-Methylnaphthalene	1.72	---	0.160	ug/L	4	4.00	---	43	40-121%	---	---	
Naphthalene	1.75	---	0.160	ug/L	4	4.00	---	44	40-121%	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery: 78 %*		*Limits: 44-120 %*		*Dilution: 4x*						
2-Fluorobiphenyl (Surr)		*74 %*		*44-120 %*		*"*						
Phenol-d6 (Surr)		*26 %*		*10-133 %*		*"*						
p-Terphenyl-d14 (Surr)		*87 %*		*50-134 %*		*"*						
2-Fluorophenol (Surr)		*44 %*		*19-120 %*		*"*						
2,4,6-Tribromophenol (Surr)		*91 %*		*43-140 %*		*"*						
LCS Dup (24C0220-BSD1)				Prepared: 03/07/24 06:02 Analyzed: 03/08/24 19:21								**Q-19**
EPA 8270E												
1-Methylnaphthalene	1.84	---	0.160	ug/L	4	4.00	---	46	41-120%	0.6	30%	
2-Methylnaphthalene	1.82	---	0.160	ug/L	4	4.00	---	46	40-121%	6	30%	
Naphthalene	1.81	---	0.160	ug/L	4	4.00	---	45	40-121%	3	30%	
Surr: Nitrobenzene-d5 (Surr)		*Recovery: 76 %*		*Limits: 44-120 %*		*Dilution: 4x*						
2-Fluorobiphenyl (Surr)		*74 %*		*44-120 %*		*"*						
Phenol-d6 (Surr)		*25 %*		*10-133 %*		*"*						
p-Terphenyl-d14 (Surr)		*89 %*		*50-134 %*		*"*						
2-Fluorophenol (Surr)		*44 %*		*19-120 %*		*"*						
2,4,6-Tribromophenol (Surr)		*91 %*		*43-140 %*		*"*						

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24C0220 - EPA 3510C (Acid Extraction)								**Water**				

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SAMPLE PREPARATION INFORMATION

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0221							
A4C0878-01	Water	NWTPH-DX (WA_Ext)	02/29/24 11:03	03/07/24 06:07	1050mL/2mL	1000mL/2mL	0.95
A4C0878-02	Water	NWTPH-DX (WA_Ext)	02/29/24 14:06	03/07/24 06:07	1050mL/2mL	1000mL/2mL	0.95
A4C0878-03	Water	NWTPH-DX (WA_Ext)	02/29/24 09:32	03/07/24 06:07	1060mL/2mL	1000mL/2mL	0.94
A4C0878-04	Water	NWTPH-DX (WA_Ext)	02/29/24 12:29	03/07/24 06:07	1060mL/2mL	1000mL/2mL	0.94
A4C0878-05	Water	NWTPH-DX (WA_Ext)	02/29/24 10:45	03/07/24 06:07	1060mL/2mL	1000mL/2mL	0.94
A4C0878-06	Water	NWTPH-DX (WA_Ext)	02/29/24 12:40	03/07/24 06:07	1000mL/2mL	1000mL/2mL	1.00

Whole Product Diesel Testing (C10-C40) by WDOE/NWTPH-Dx with Silica Gel Column Cleanup

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0984							
A4C0878-06	Water	NWTPH-DX (WA_Ext) wSGC	02/29/24 12:40	03/07/24 06:07	1000mL/2mL	1000mL/5mL	0.40

BTEX+N Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0338							
A4C0878-07	Water	EPA 8260D	02/29/24 09:50	03/11/24 14:00	5mL/5mL	5mL/5mL	1.00
A4C0878-08	Water	EPA 8260D	02/29/24 09:15	03/11/24 14:00	5mL/5mL	5mL/5mL	1.00

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24C0220							
A4C0878-01	Water	EPA 8270E	02/29/24 11:03	03/07/24 06:02	1060mL/1mL	1000mL/1mL	0.94
A4C0878-02	Water	EPA 8270E	02/29/24 14:06	03/07/24 06:02	1060mL/1mL	1000mL/1mL	0.94
A4C0878-03	Water	EPA 8270E	02/29/24 09:32	03/07/24 06:02	1060mL/1mL	1000mL/1mL	0.94

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SAMPLE PREPARATION INFORMATION

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4C0878-04	Water	EPA 8270E	02/29/24 12:29	03/07/24 06:02	1060mL/1mL	1000mL/1mL	0.94
A4C0878-05	Water	EPA 8270E	02/29/24 10:45	03/07/24 06:02	980mL/1mL	1000mL/1mL	1.02

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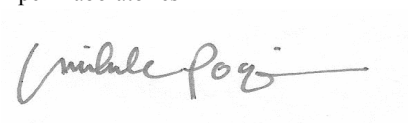

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-19 Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.

Q-54 Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -15%. The results are reported as Estimated Values.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold

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ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation
Water	**NWTPH-DX (WA_Ext)**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	
Water	**NWTPH-DX (WA_Ext) wSGC**	**FLS-W-01**	**Diesel Range Organics (C10-C40)**	**9369**	

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Michele Poquiz For Kurt Johnson, Senior Chemist

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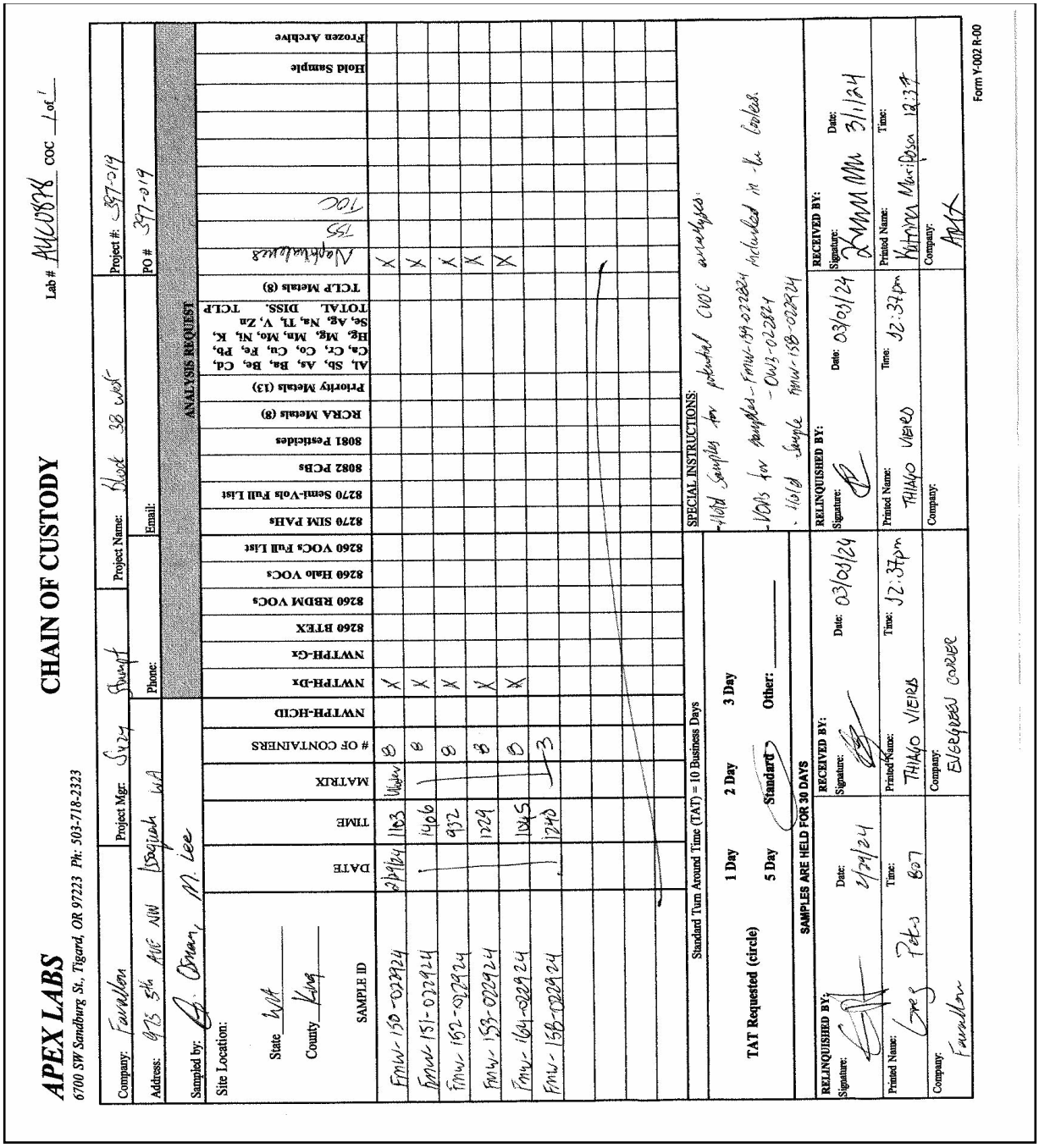
ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**



APEX LABS — **CHAIN OF CUSTODY**
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323
Lab # A4C0878 COC 1 of 1

Company: Farallon | Project Mgr: Suzy Stumpf | Project Name: Block 38 West | Project #: 397-019
Address: 975 5th Ave NW Issaquah WA | Phone: | Email: | PO # 397-019
Sampled by: G. Osmer, M. Lee

Site Location: State WA County King

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Naphthalenes	TSS	TOC	Hold Sample	Frozen Archive
FMW-150-022924	2/29/24	1103	Water	3		X													X					
FMW-151-022924		1406		3		X													X					
FMW-152-022924		932		3		X													X					
FMW-153-022924		1129		3		X													X					
FMW-164-022924		1045		3		X													X					
FMW-158-022924		1240		3																				

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: _____

SPECIAL INSTRUCTIONS:
Hold samples for potential CVOC analysis.
VOCs for samples FMW-150-022924 included in the coolers.
- CW2-022824
- Hold Sample FMW-158-022924

SAMPLES ARE HELD FOR 30 DAYS

	RELINQUISHED BY:	RECEIVED BY:	Date:
	Signature:	Signature:	Date: 03/01/24
	Printed Name: Joe Peters	Printed Name: THIAGO VIEIRA	Time: 12:37pm
	Company: Farallon	Company: Evergreen Courier	

	RELINQUISHED BY:	RECEIVED BY:	Date:
	Signature:	Signature:	Date: 03/01/24
	Printed Name: THIAGO VIEIRA	Printed Name:	Time: 12:37pm
	Company:	Company:	

	RELINQUISHED BY:	RECEIVED BY:	Date:
	Signature:	Signature:	Date: 3/1/24
	Printed Name:	Printed Name: KATHRYN Morrison	Time: 12:37
	Company:	Company: APEX	

Form Y-002 R-00

Apex Laboratories

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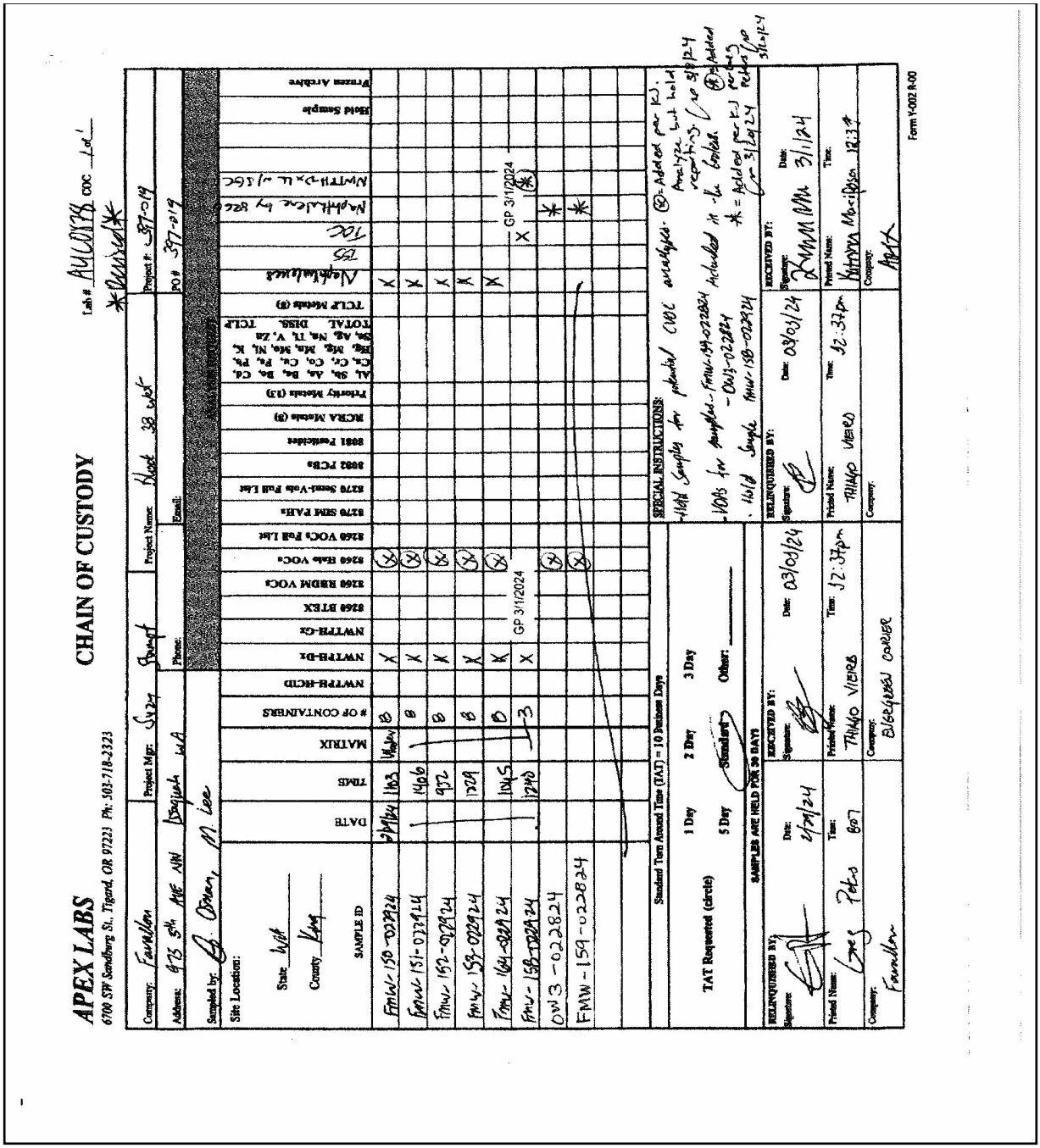
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**



Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

AMENDED REPORT

Farallon-Seattle	Project: **397-019 Block 38 West**	
1809 7th Ave Suite 1111	Project Number: **397-019**	**Report ID:**
Seattle, WA 98101	Project Manager: **Suzy Stumpf**	**A4C0878 - 03 29 24 1757**

APEX LABS COOLER RECEIPT FORM

Client: Farallon Element WO#: A4 C0878 MAB 3/4/24

Project/Project #: Block 38 West / 397-019

Delivery Info:

Date/time received: 3/1/24 @ 1237 By: KAM

Delivered by: Apex__Client__ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen_Y_Other__

From USDA Regulated Origin? Yes _____ No _X_

Cooler Inspection Date/time inspected: 3/1/24 @ 1240 By: KAM

Chain of Custody included? Yes _X_ No _____

Signed/dated by client? Yes _Y_ No _____

Contains USDA Reg. Soils? Yes _____ No _X_ Unsure (email RegSoils) _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.6	5.6	5.1				
Custody seals? (Y/N)	N →						
Received on ice? (Y/N)	Y →						
Temp. blanks? (Y/N)	Y →						
Ice type: (Gel/Real/Other)	Real →						
Condition (In/Out):	In →						

Cooler out of temp? (Y/(N)) Possible reason why: _____

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 3/1/24 @ 1312 By: KRS

All samples intact? Yes _X_ No ___ Comments: _____

Bottle labels/COCs agree? Yes ___ No _X_ Comments: T on FMW-150 reads 1109. ID ID IT reads OW3-022924 2/29/24@950 & FMW-159-022924 2/29/24 @915.

COC/container discrepancies form initiated? Yes ___ No _Y_

Containers/volumes received appropriate for analysis? Yes _X_ No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No _X_ NA ____

Comments _____

Water samples: pH checked: Yes _X_ No___ NA___ pH appropriate? Yes _X_ No___ NA____ pH ID: A23I172

Comments: _____

Transcribed for KAM/KRS - AFIC 3/1/24

Labeled by: KRS Witness: KAM Cooler Inspected by: KRS

Form Y-003 R-02 -

Apex Laboratories

Michele Poquiz

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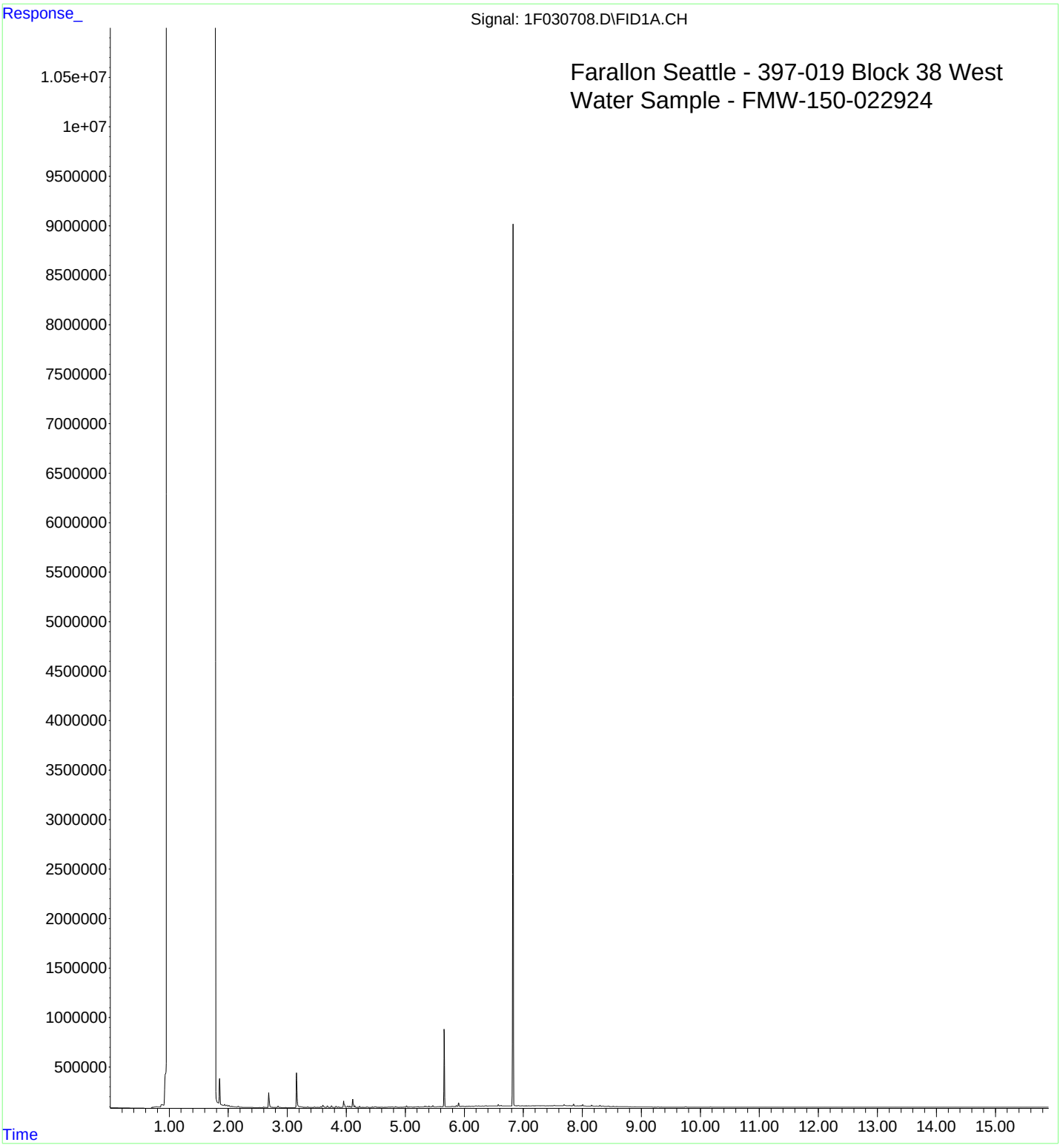
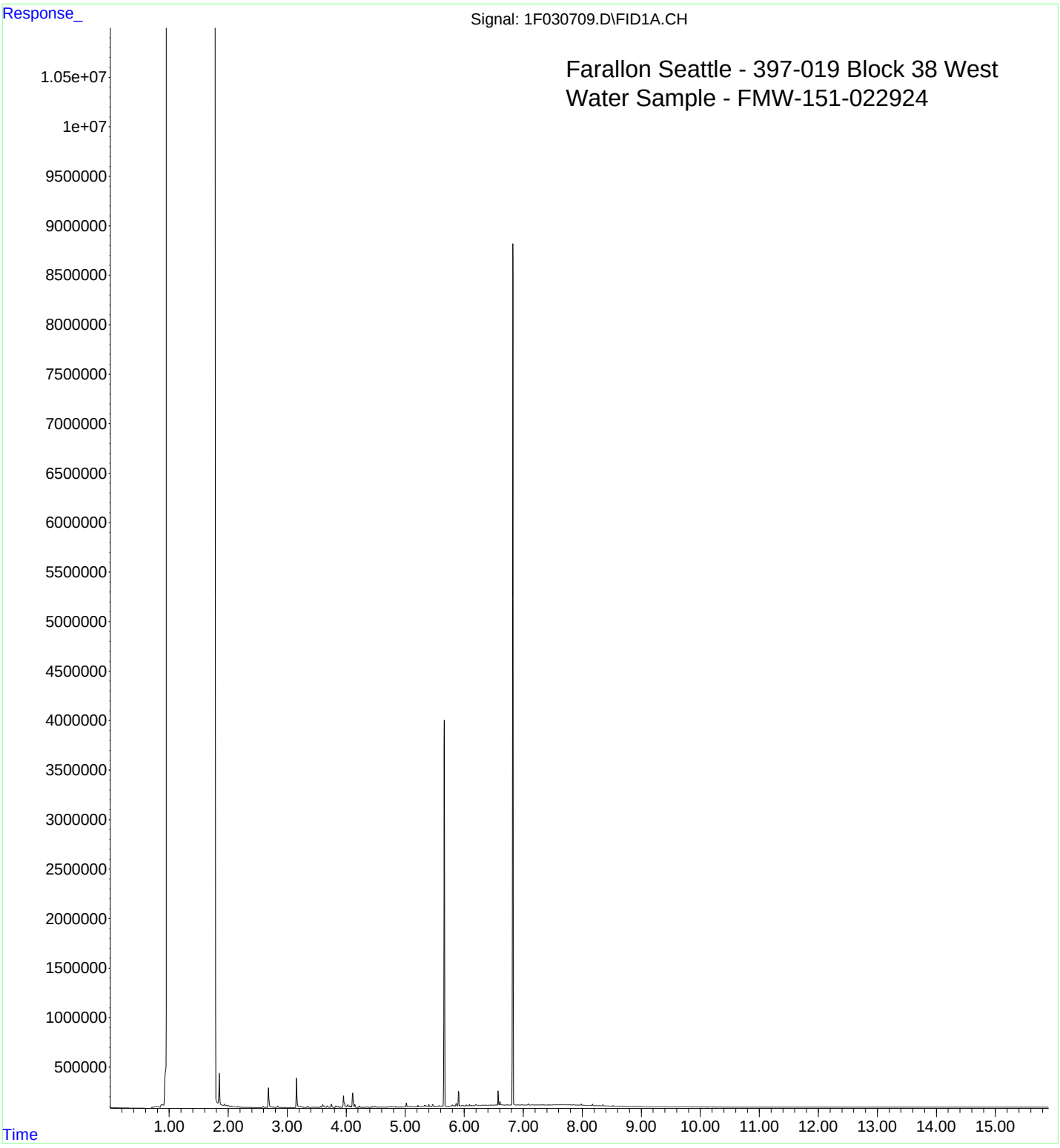
Michele Poquiz For Kurt Johnson, Senior Chemist

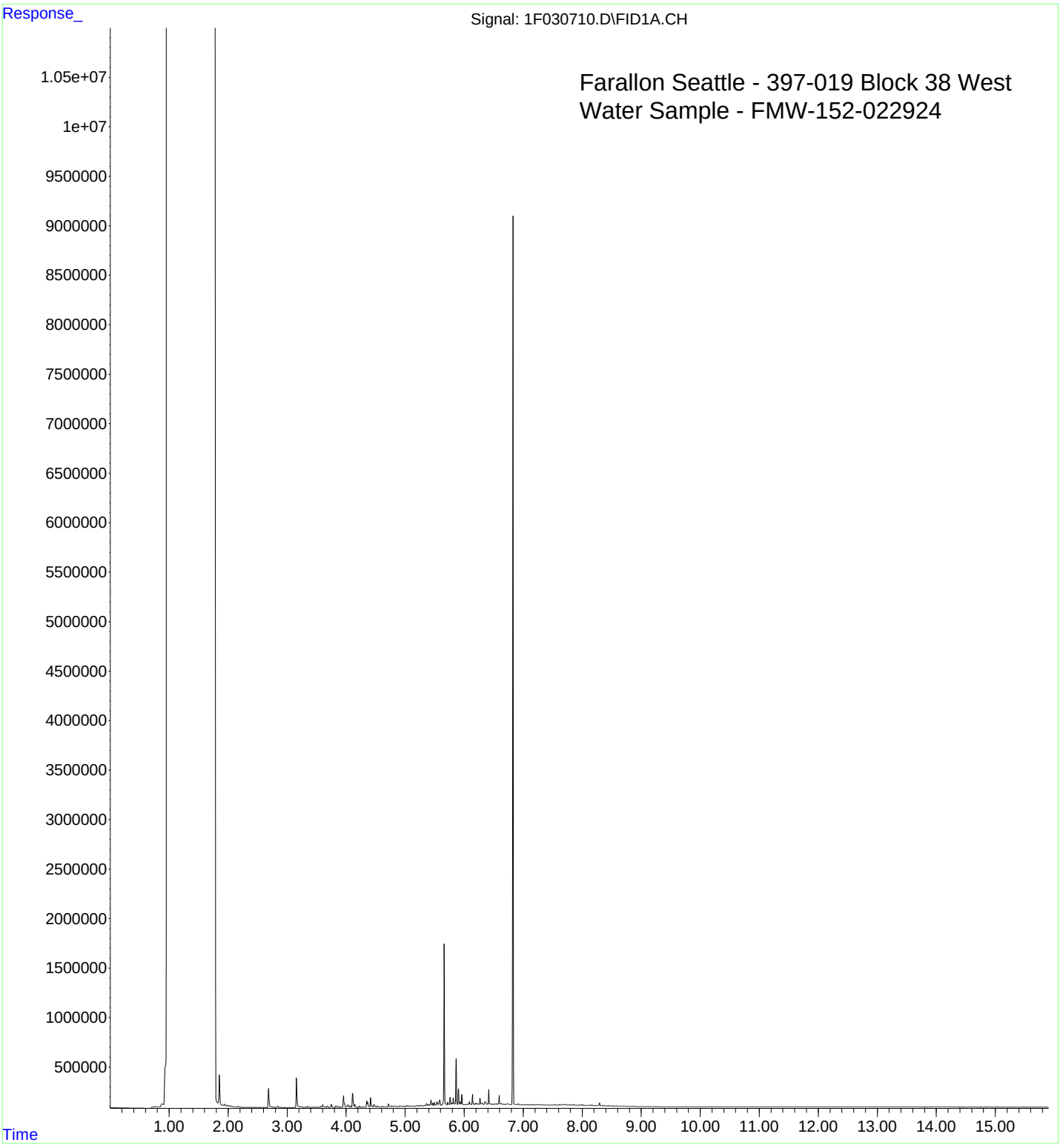
File :C:\msdchem\1\copied data\4C07057\1F030708.D
Operator : BLL
Acquired : 07 Mar 2024 8:16 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4C0878-01
Misc Info :
Vial Number: 6



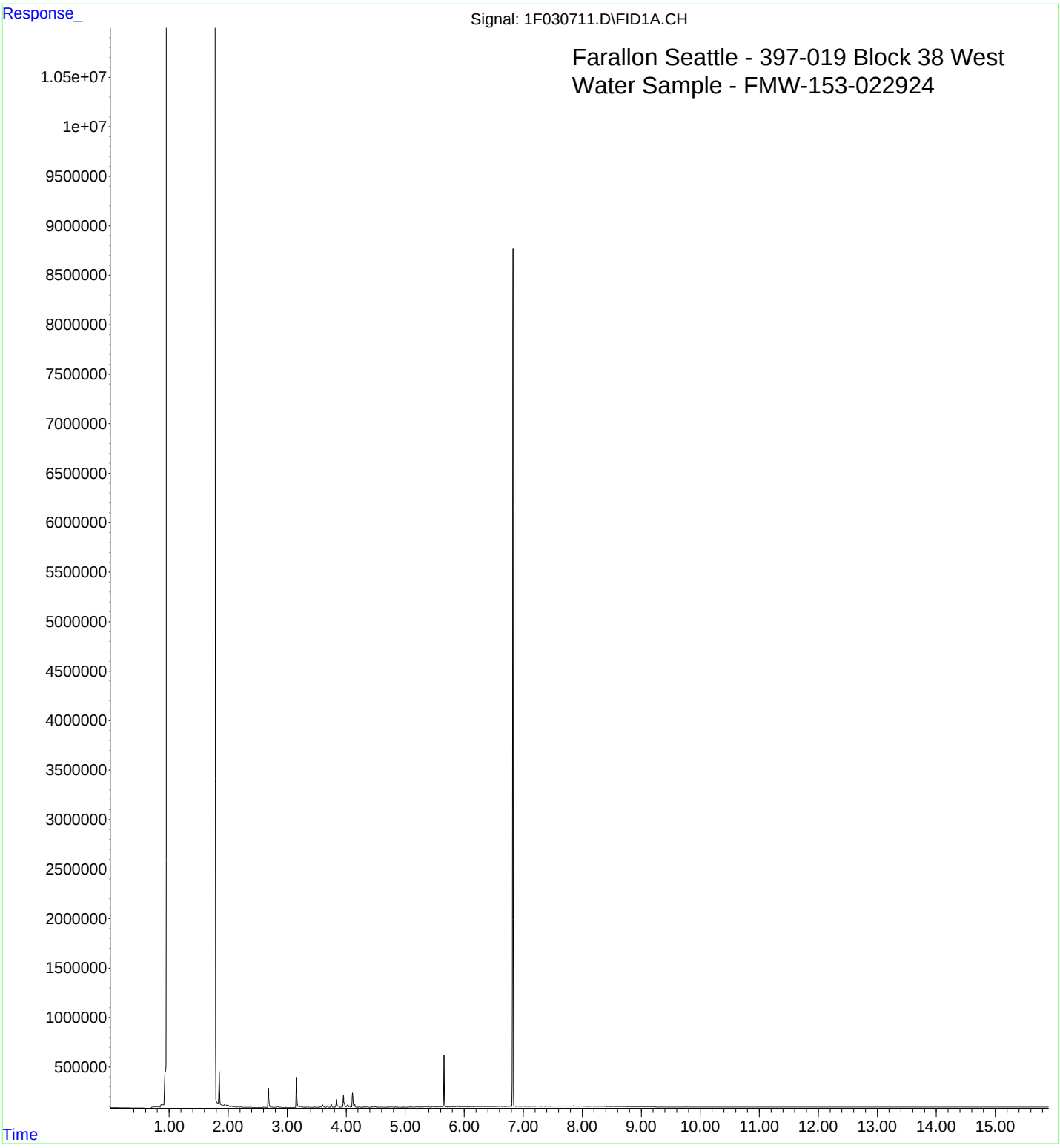
File :C:\msdchem\1\copied data\4C07057\1F030709.D
Operator : BLL
Acquired : 07 Mar 2024 8:39 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4C0878-02
Misc Info :
Vial Number: 7



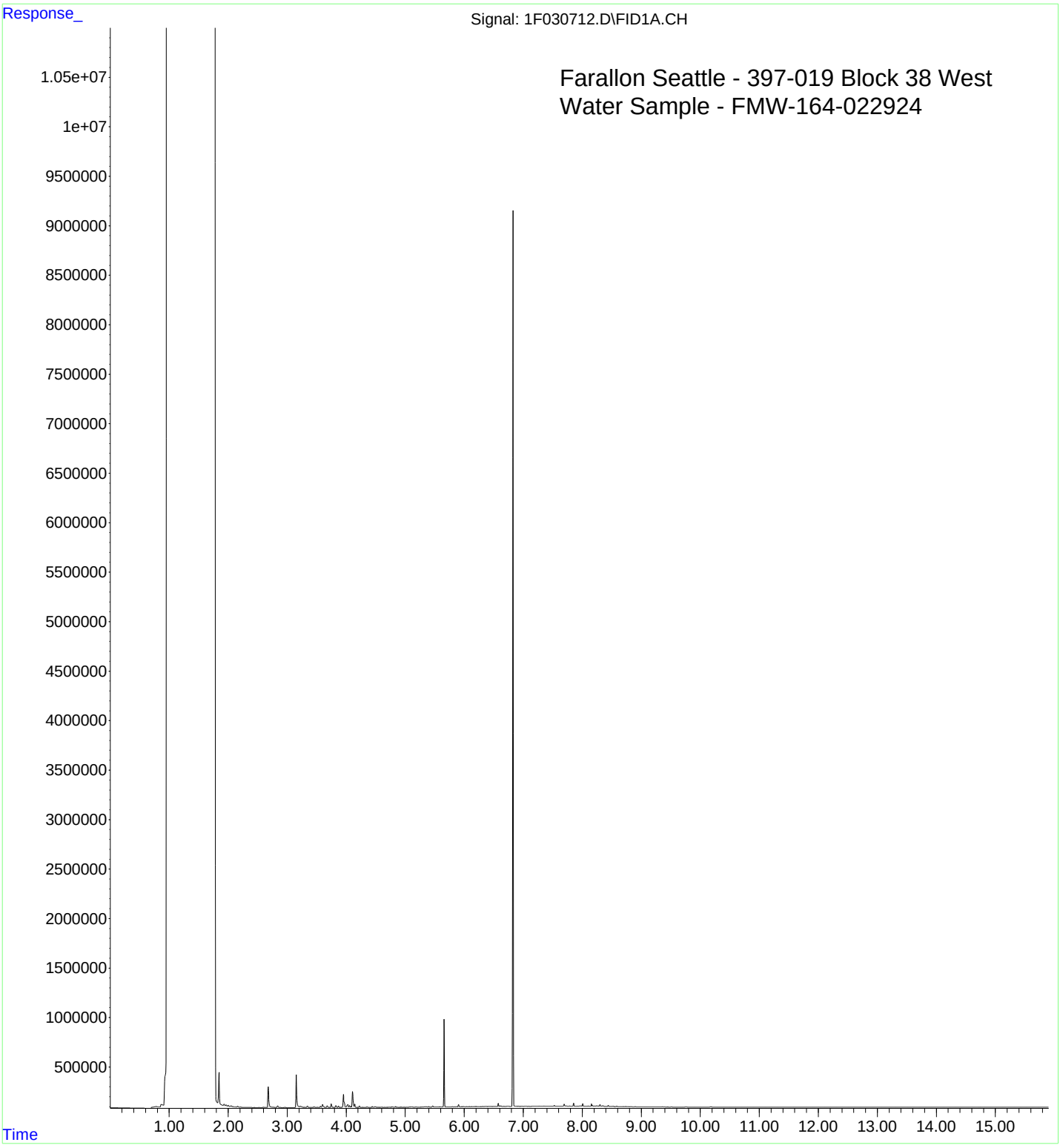
File   :C:\msdchem\1\copied data\4C07057\1F030710.D
Operator   : BLL
Acquired   : 07 Mar 2024   9:03 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4C0878-03
Misc Info :
Vial Number: 8



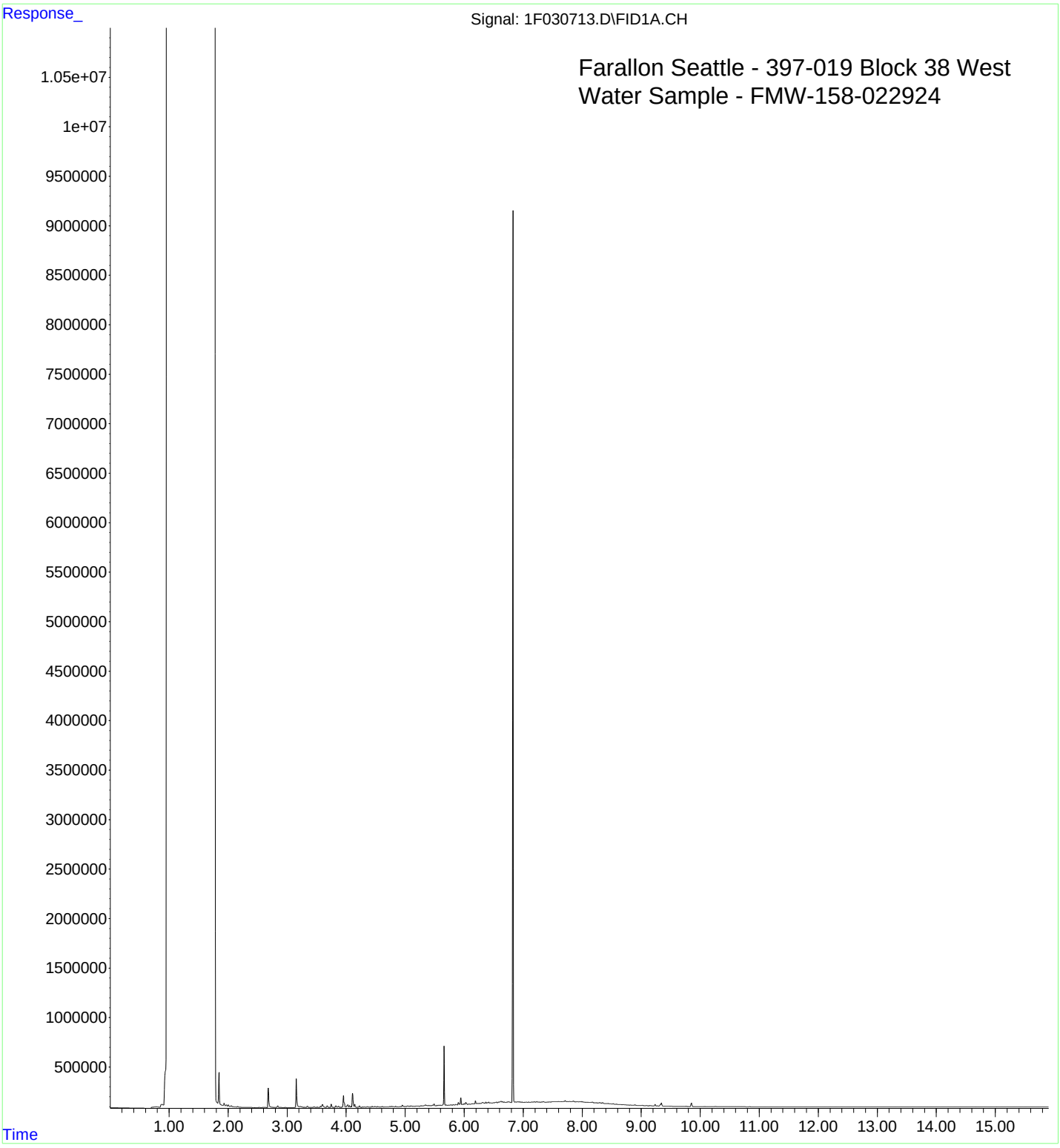
File :C:\msdchem\1\copied data\4C07057\1F030711.D
Operator : BLL
Acquired : 07 Mar 2024 9:26 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4C0878-04
Misc Info :
Vial Number: 9



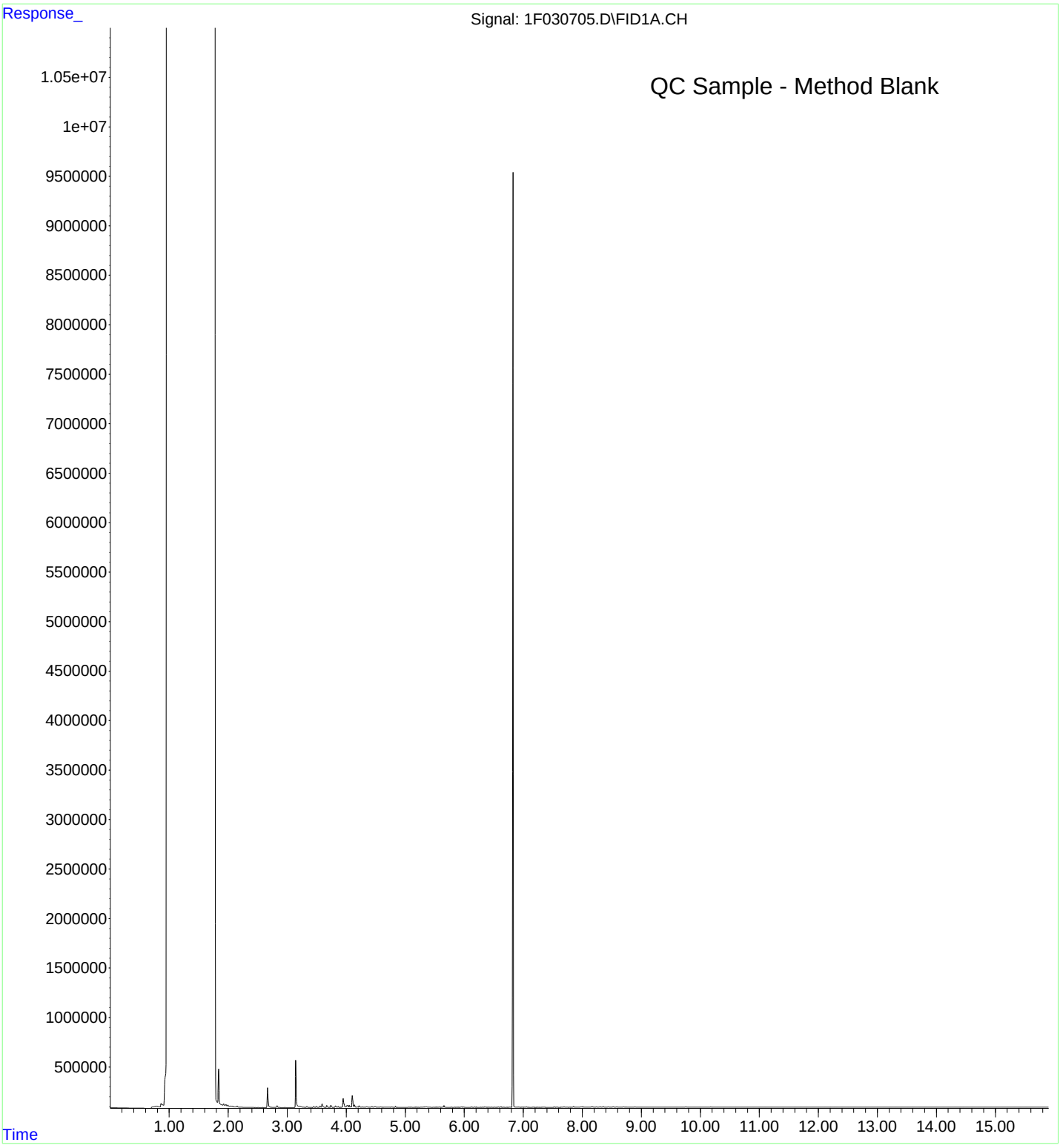
File   :C:\msdchem\1\copied data\4C07057\1F030712.D
Operator   : BLL
Acquired   : 07 Mar 2024   9:49 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4C0878-05
Misc Info :
Vial Number: 10



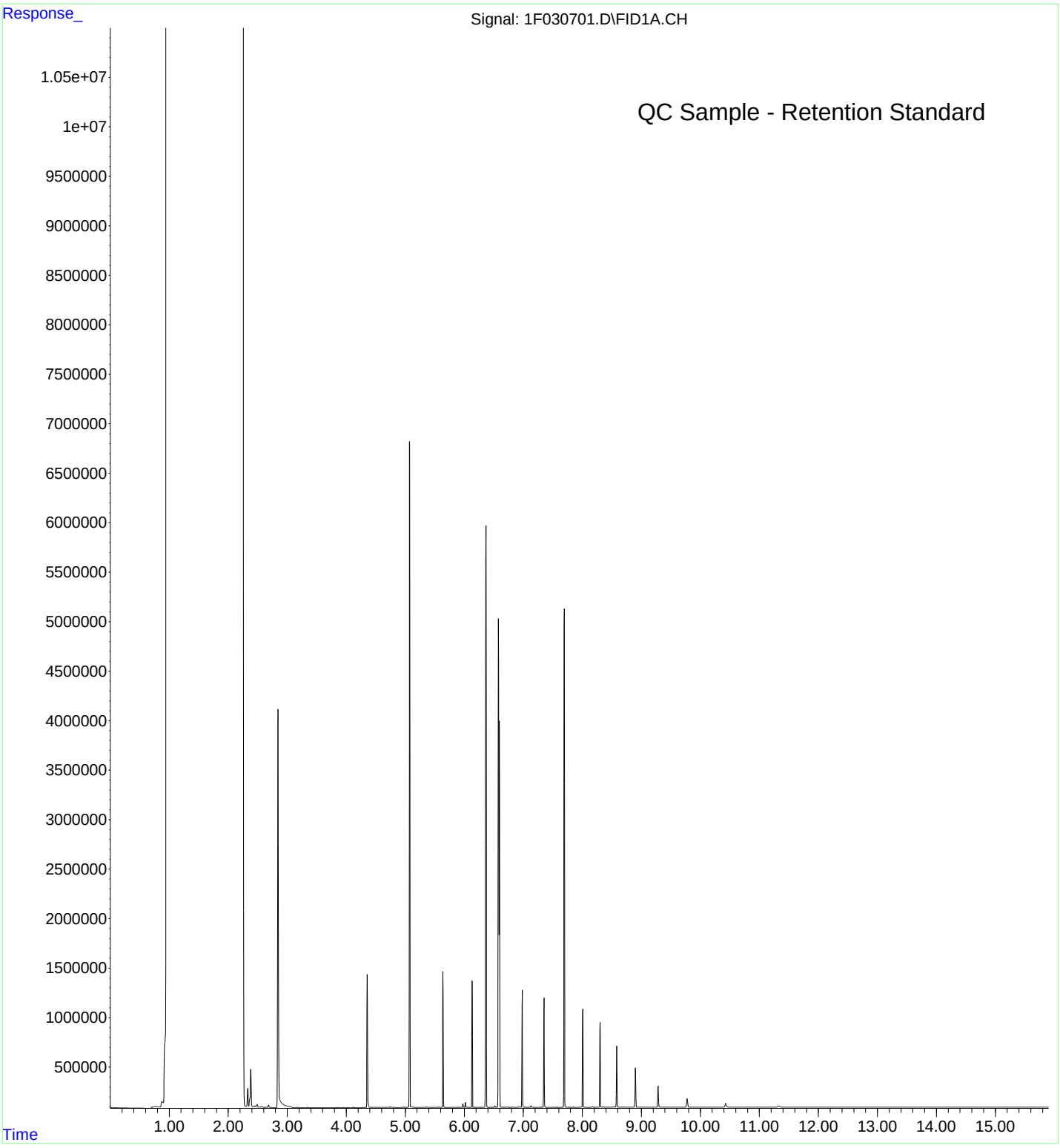
File   :C:\msdchem\1\copied data\4C07057\1F030713.D
Operator   : BLL
Acquired   : 07 Mar 2024 10:13 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: A4C0878-06
Misc Info :
Vial Number: 11



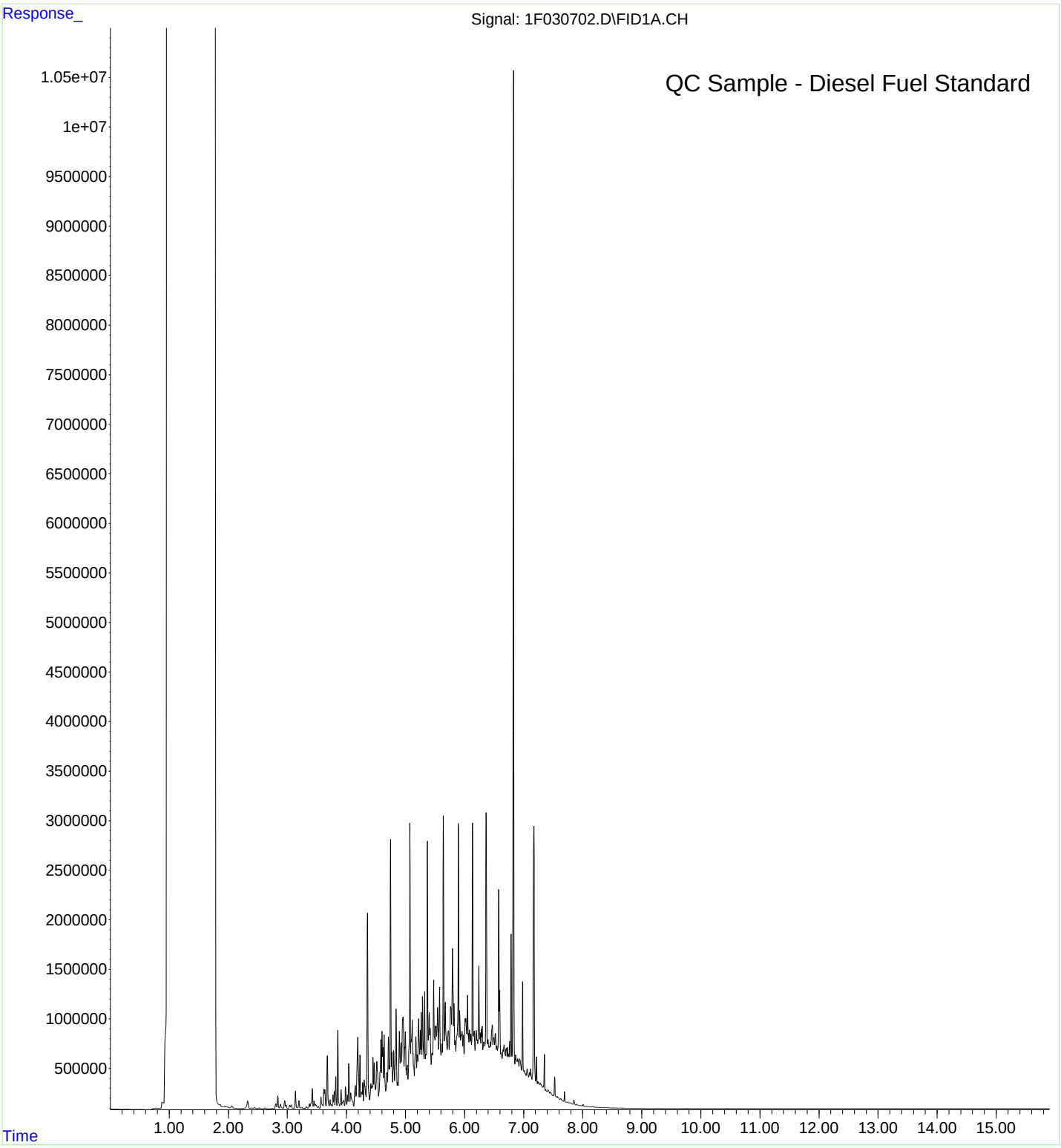
File   :C:\msdchem\1\copied data\4C07057\1F030705.D
Operator   : BLL
Acquired   : 07 Mar 2024   7:06 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 24C0221-BLK1
Misc Info :
Vial Number: 3



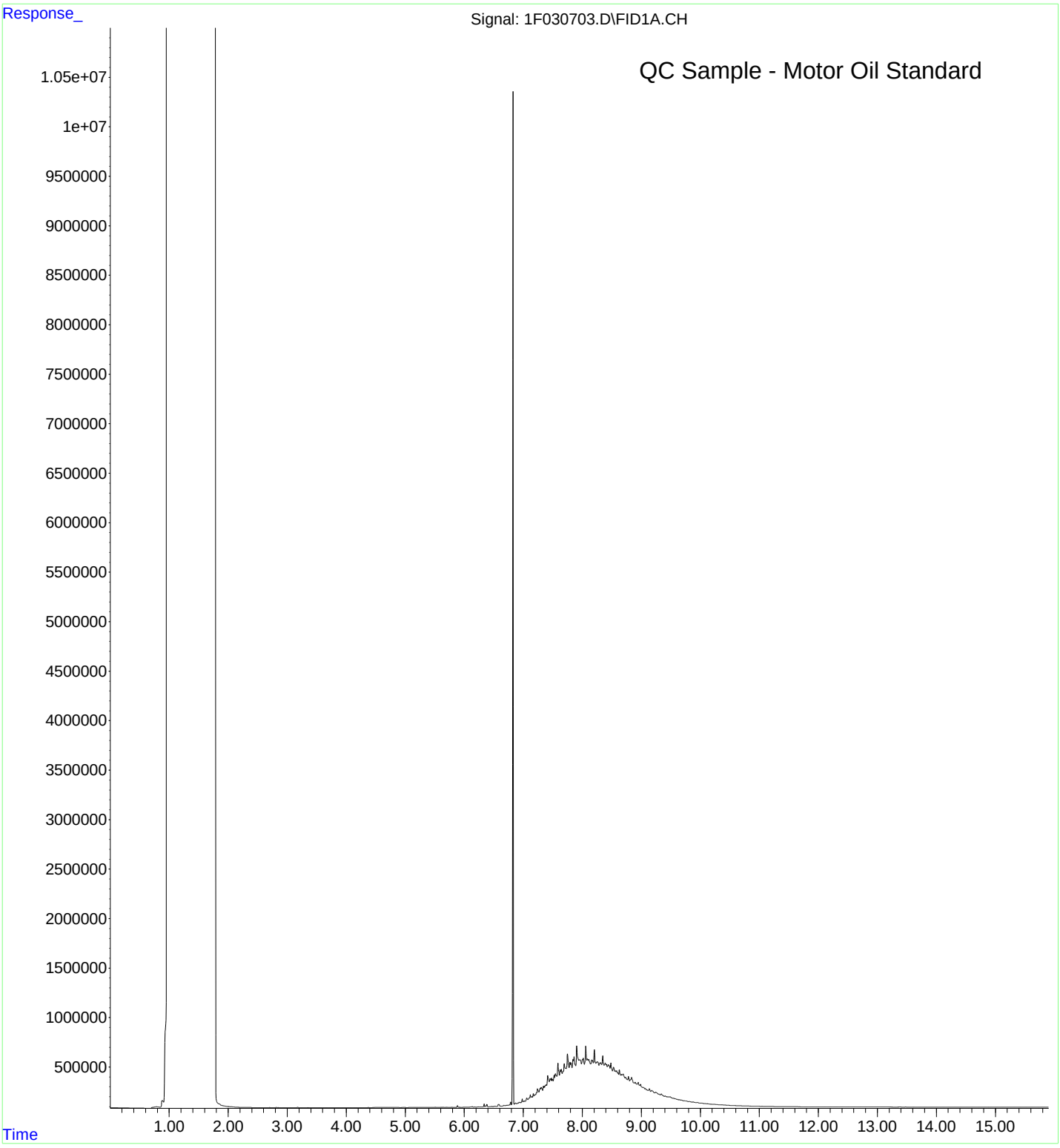
File   :C:\msdchem\1\copied data\4C07057\1F030701.D
Operator   : BLL
Acquired   : 07 Mar 2024   5:04 pm using AcqMethod A1F40422.M
Instrument :   HP G1530A
Sample Name: 4C07057-RES1
Misc Info :
Vial Number: 94



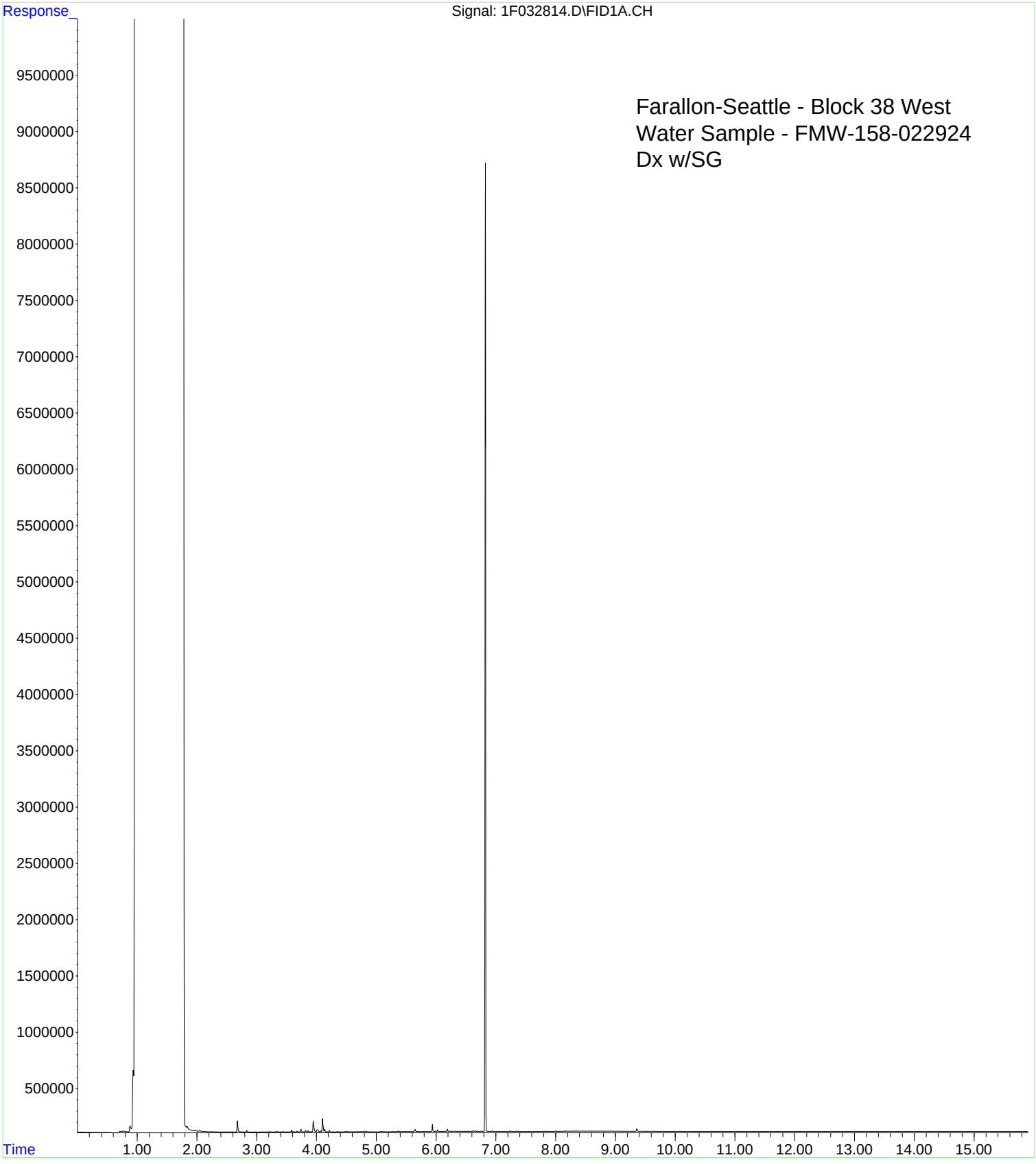
File :C:\msdchem\1\copied data\4C07057\1F030702.D
Operator : BLL
Acquired : 07 Mar 2024 5:27 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C07057-CCV1
Misc Info :
Vial Number: 1



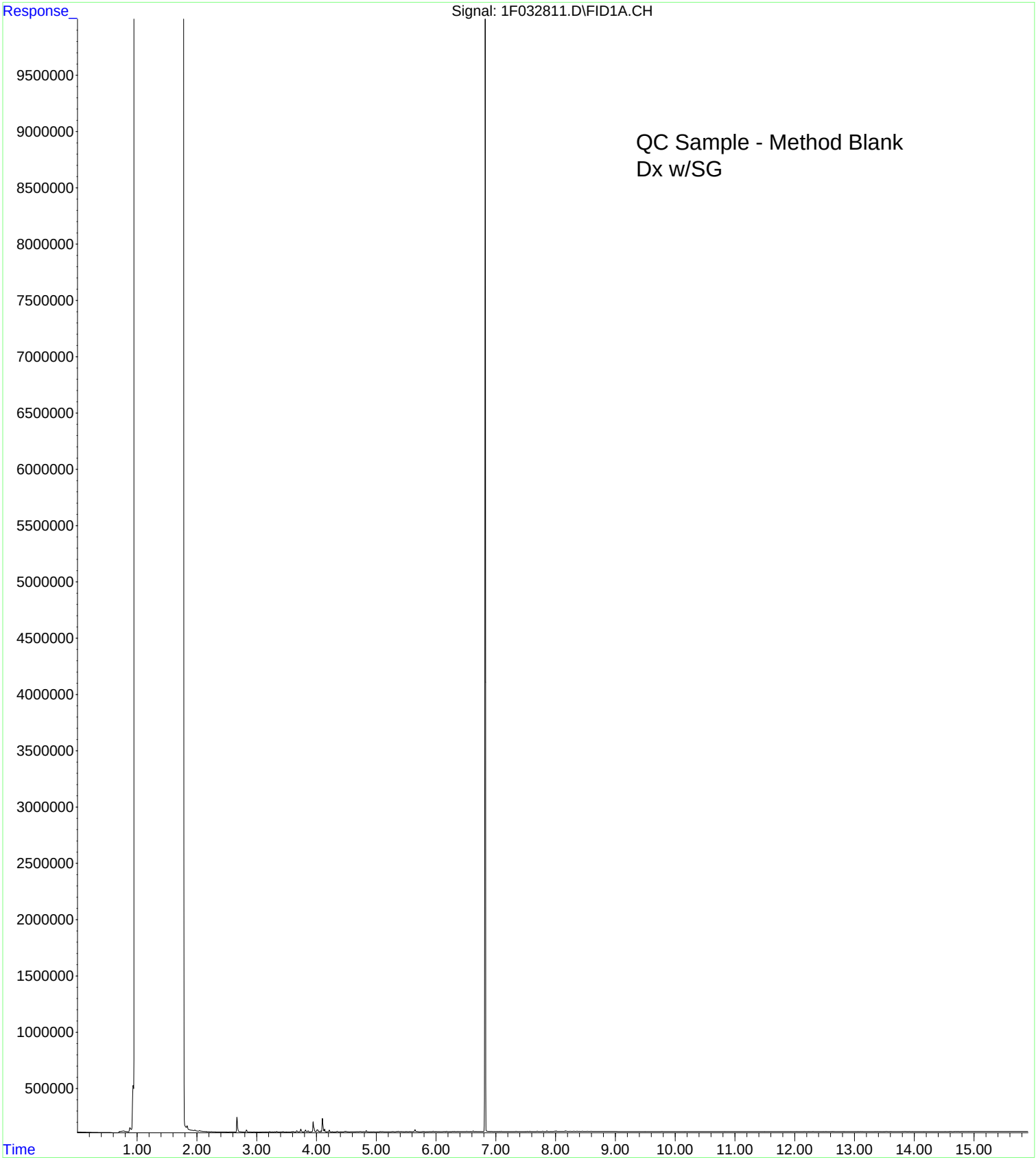
File :C:\msdchem\1\copied data\4C07057\1F030703.D
Operator : BLL
Acquired : 07 Mar 2024 5:51 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C07057-CCV2
Misc Info :
Vial Number: 2



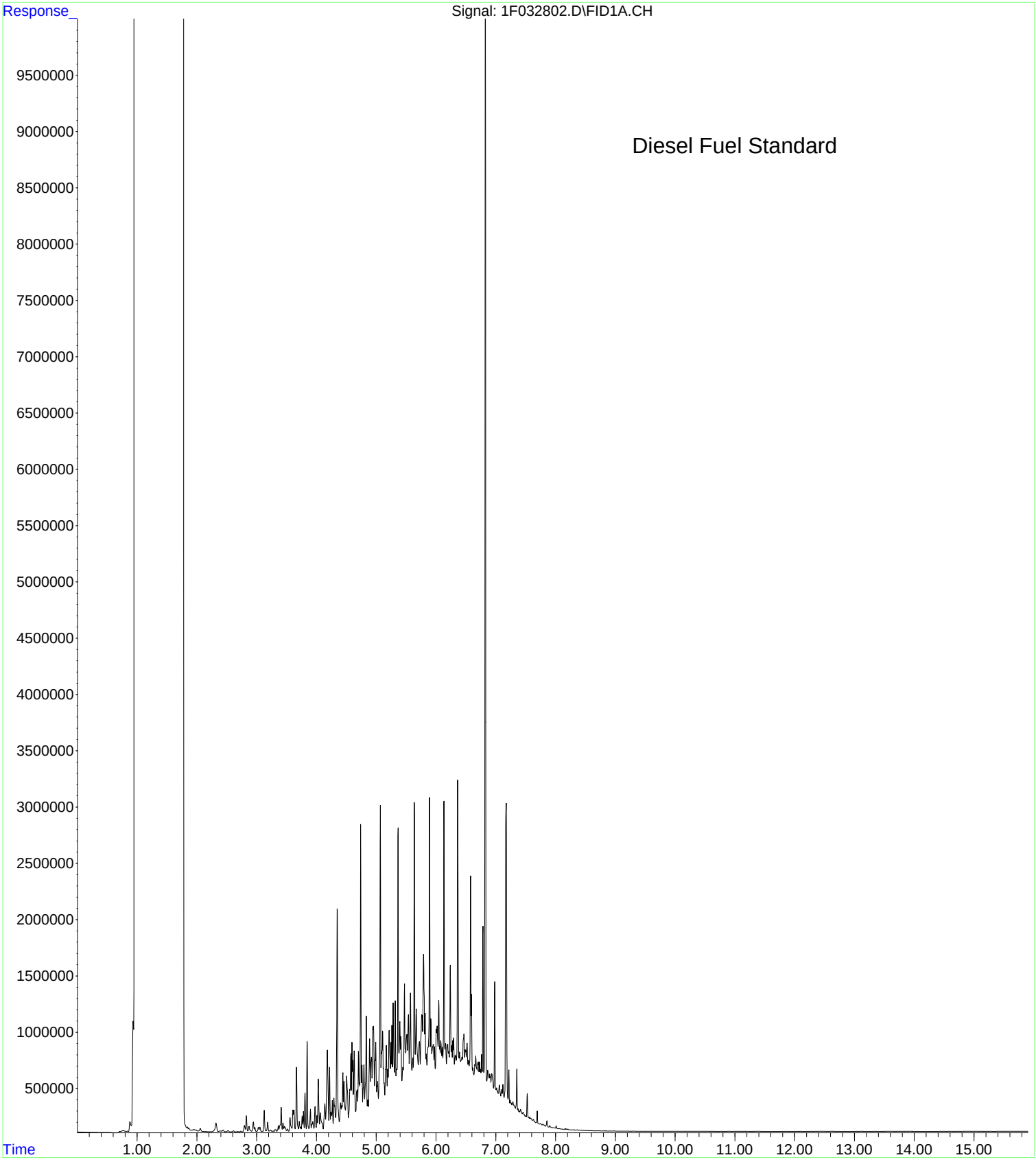
File :C:\msdchem\1\data\4C28038\1F032814.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 3:01 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: A4C0878-06
Misc Info :
Vial Number: 11



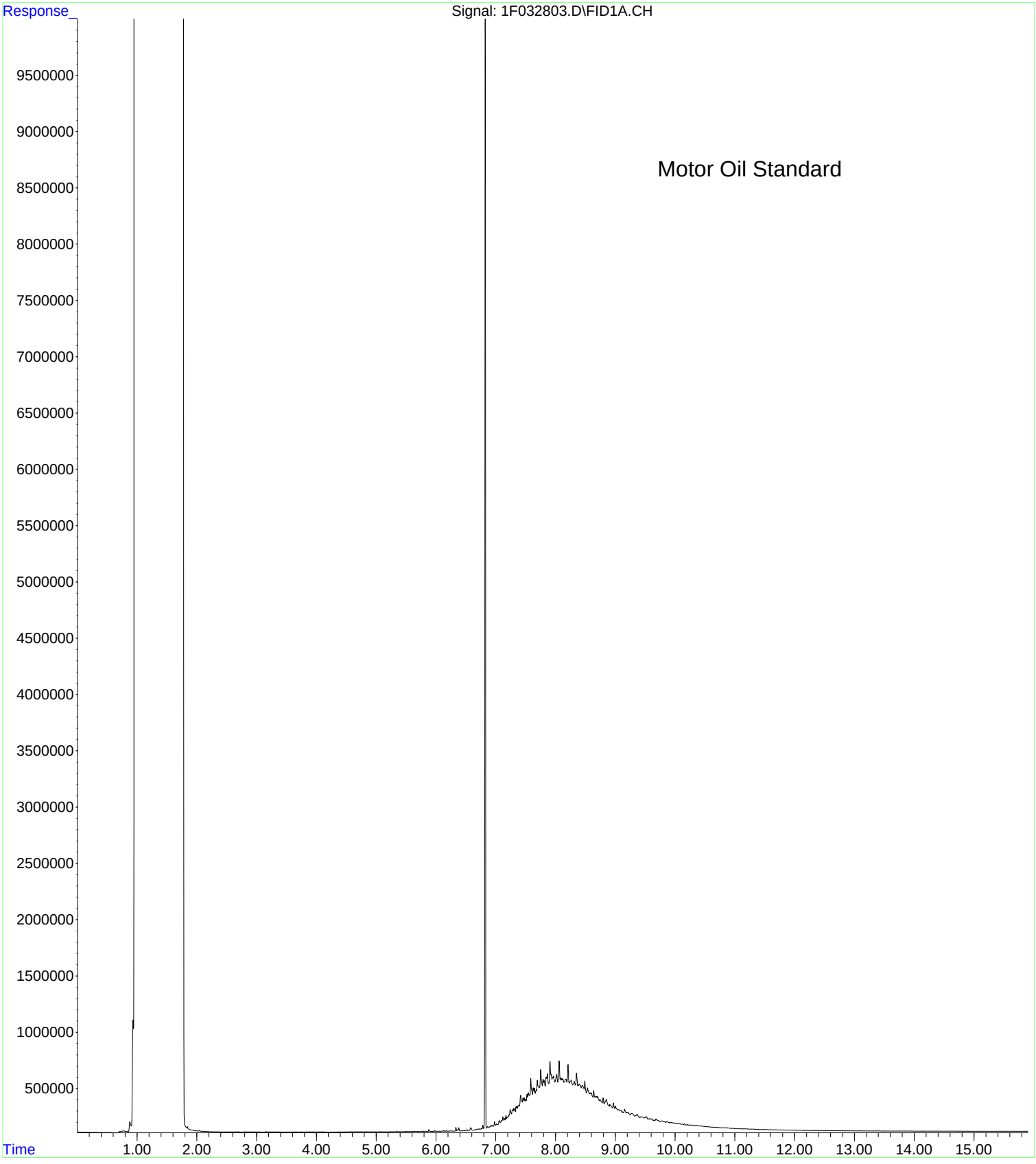
File :C:\msdchem\1\data\4C28038\1F032811.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 1:51 pm using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 24C0984-BLK1
Misc Info :
Vial Number: 8



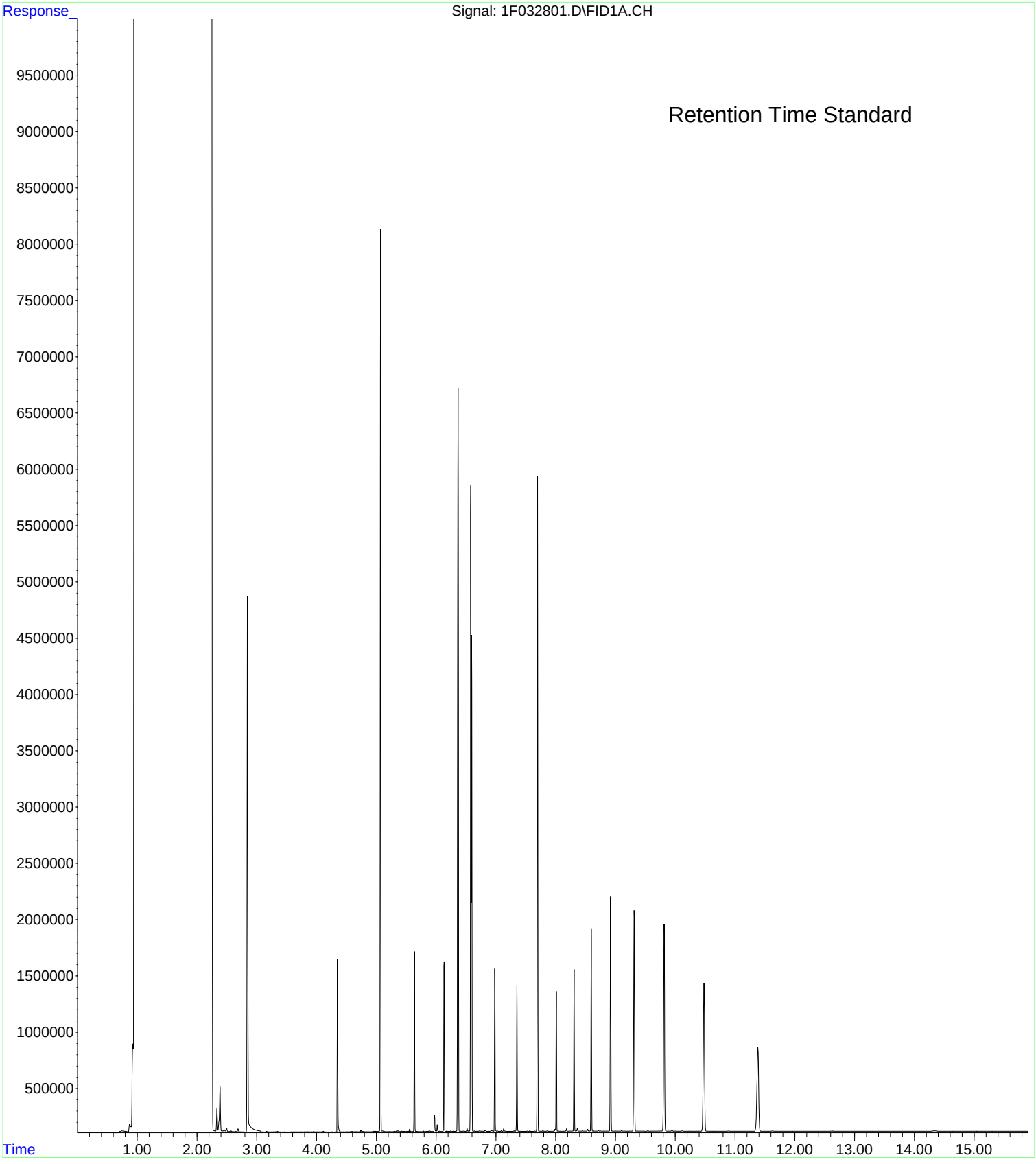
File :C:\msdchem\1\data\4C28038\1F032802.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:21 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV1
Misc Info :
Vial Number: 1



File :C:\msdchem\1\data\4C28038\1F032803.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 10:44 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-CCV2
Misc Info :
Vial Number: 2



File :C:\msdchem\1\data\4C28038\1F032801.D
Operator : BLL/BJY
Acquired : 28 Mar 2024 9:57 am using AcqMethod A1F40422.M
Instrument : HP G1530A
Sample Name: 4C28038-RES1
Misc Info :
Vial Number: 94



March 15, 2024 Service Request No:K2402326

Michele Poquiz
Apex Laboratories
6700 SW Sandburg St.
Tigard, OR 97223

Laboratory Results for: A4C0878

Dear Michele,

Enclosed are the results of the sample(s) submitted to our laboratory March 04, 2024
For your reference, these analyses have been assigned our service request number **K2402326.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Apex Laboratories
Project: A4C0878
Sample Matrix: Water

Service Request: K2402326
Date Received: 03/04/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 03/04/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by  Date 03/15/2024

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: FMW-158-022924			Lab ID: K2402326-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	8.80		0.08	0.50	mg/L	SM 5310 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories **Service Request:**K2402326
Project: A4C0878

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2402326-001	FMW-158-022924	2/29/2024	1240

SUBCONTRACT ORDER

Apex Laboratories

A4C0878

AWE 3/1/24

35

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Michele Poquiz

RECEIVING LABORATORY:

ALS Group USA - Kelso
1317 S 13th Avenue
Kelso, WA 98626
Phone :(360) 577-7222
Fax: (360) 636-1068

K2402326

Sample Name: FMW-158-022924 **Sampled: 02/29/24 12:40** (A4C0878-06)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	03/14/24 17:00	03/28/24 12:40	
Containers Supplied:			
(E)250 mL Poly - Sulfuric (H2SO4)			

Standard TAT

Released By	Date	Received By	Date
	3/4/24 1100		3-4-24 1100
	3.4.24 1240		3/4/24 1240

PM HH

Cooler Receipt and Preservation Form

Client Apex Service Request K24 02326

Received: 3/4/24 Opened: 3/4/24 By: AP Unloaded: 3/4/24 By: AP

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number / NA	Filed
	4.7	IR04					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Apex Laboratories	**Service Request:**	K2402326
Project:	A4C0878/		

Sample Name:	FMW-158-022924	**Date Collected:**	02/29/24
Lab Code:	K2402326-001	**Date Received:**	03/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2402326
Project:	A4C0878	**Date Collected:**	02/29/24 12:40
Sample Matrix:	Water	**Date Received:**	03/04/24 12:40
Sample Name:	FMW-158-022924	**Basis:**	NA
Lab Code:	K2402326-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**8.80**	mg/L	0.50	0.08	1	03/11/24 18:43	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2402326
Project:	A4C0878	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2402326-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	ND U	mg/L	0.50	0.08	1	03/11/24 18:43	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Apex Laboratories	**Service Request:**	K2402326
Project:	A4C0878	**Date Analyzed:**	03/11/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Carbon, Total Organic

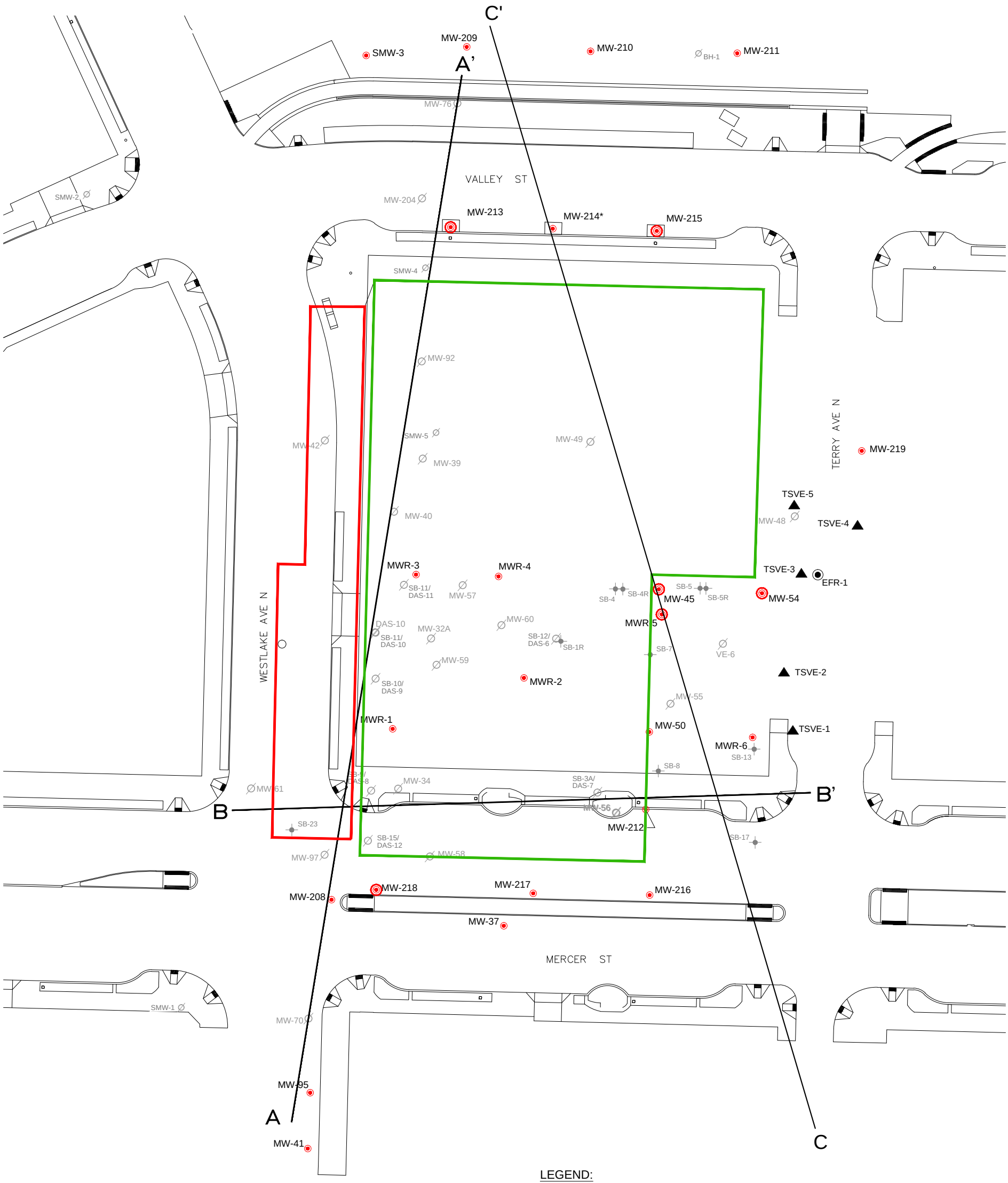
Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	834642

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2402326-LCS	23.9	25.0	96	83-117

APPENDIX D
ATC CLEANUP ACTION SUMMARY

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019



LEGEND:

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL WITH IMPACTED READINGS
- SOIL BORING - DELTA 2005
- SVE WELL ON TERRY AVENUE - 2007
- SB-1/DAS-6 — AS WELL - DELTA 2005 (DESTROYED)
- SB-6/VE-6 — SVE WELL - DELTA 2005 (DESTROYED)
- MW-48 — MONITOR WELL - 1991 OR 1992 (DESTROYED)
- EFR-1 — ENHANCED FLUID RECOVERY WELL - 2007
- SMW-2 — MONITOR WELL - SCS 1991 (DESTROYED)
- A—A' — CROSS SECTION TRANSECT
- IMPACTED AREAS OF PHASE I REMEDIAL EXCAVATION
- IMPACTED AREAS OF PHASE II REMEDIAL EXCAVATION

0 60 120

SCALE, FT

NOTE: 1. ALL LOCATIONS ARE APPROXIMATE

CROSS-SECTION TRANSECT LOCATIONS

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
600 WESTLAKE AVENUE N
SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 7/23/2019	FIGURE 6
APPROVED BY: ES		DRAWN BY: BK	

ATC
6347 Seaview Avenue NW
Seattle, Washington 98107
Ph: (206) 781-1449 *** Fax: (206) 781-1543

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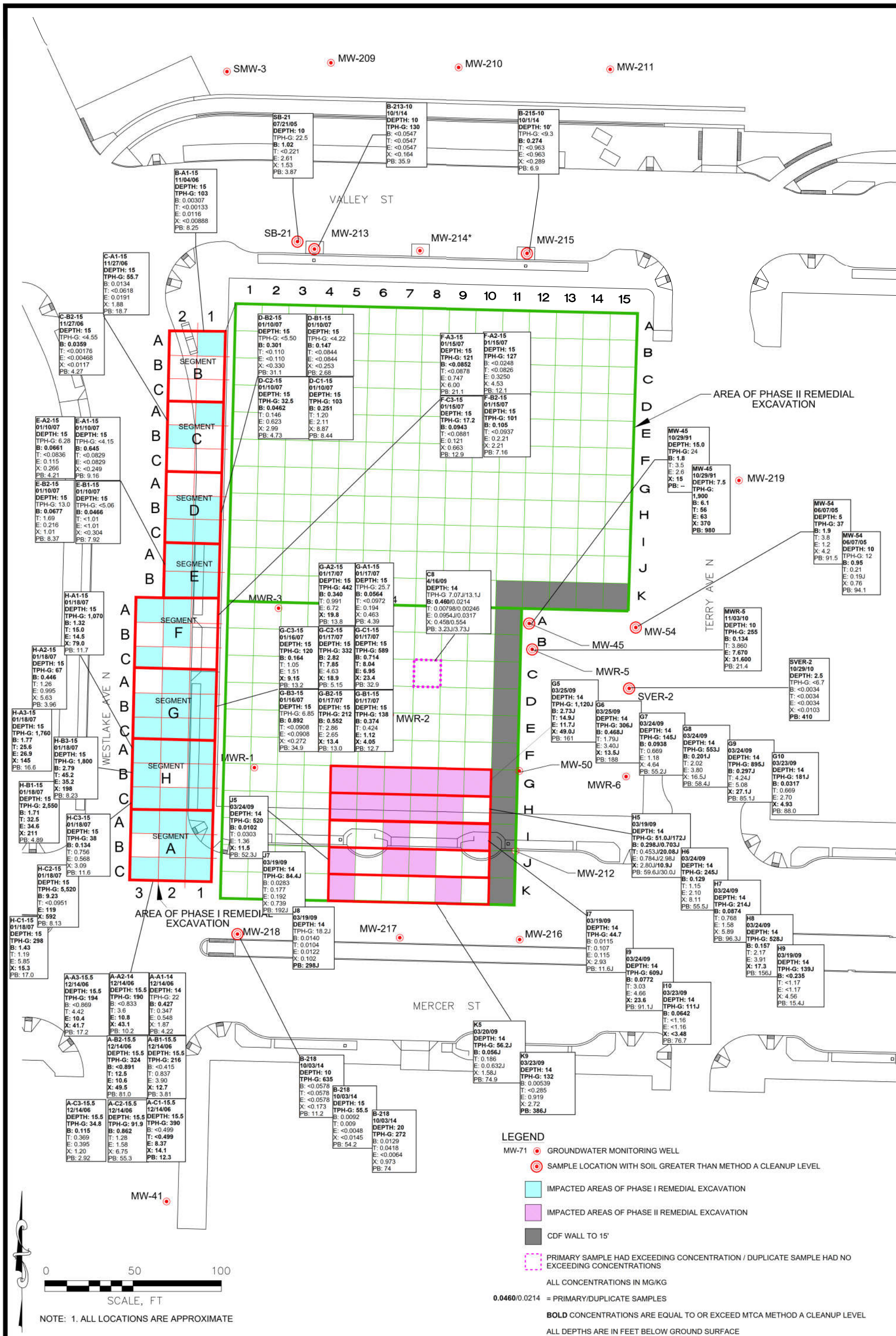

POST EXCAVATION SOIL CONDITIONS MAP

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
600 WESTLAKE AVENUE N
SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 2/16/18	FIGURE 5
APPROVED BY: ES		DRAWN BY: BK	

ATC
6347 Seaview Avenue NW
Seattle, Washington 98107
Ph: (206) 781-1449 *** Fax: (206) 781-1543

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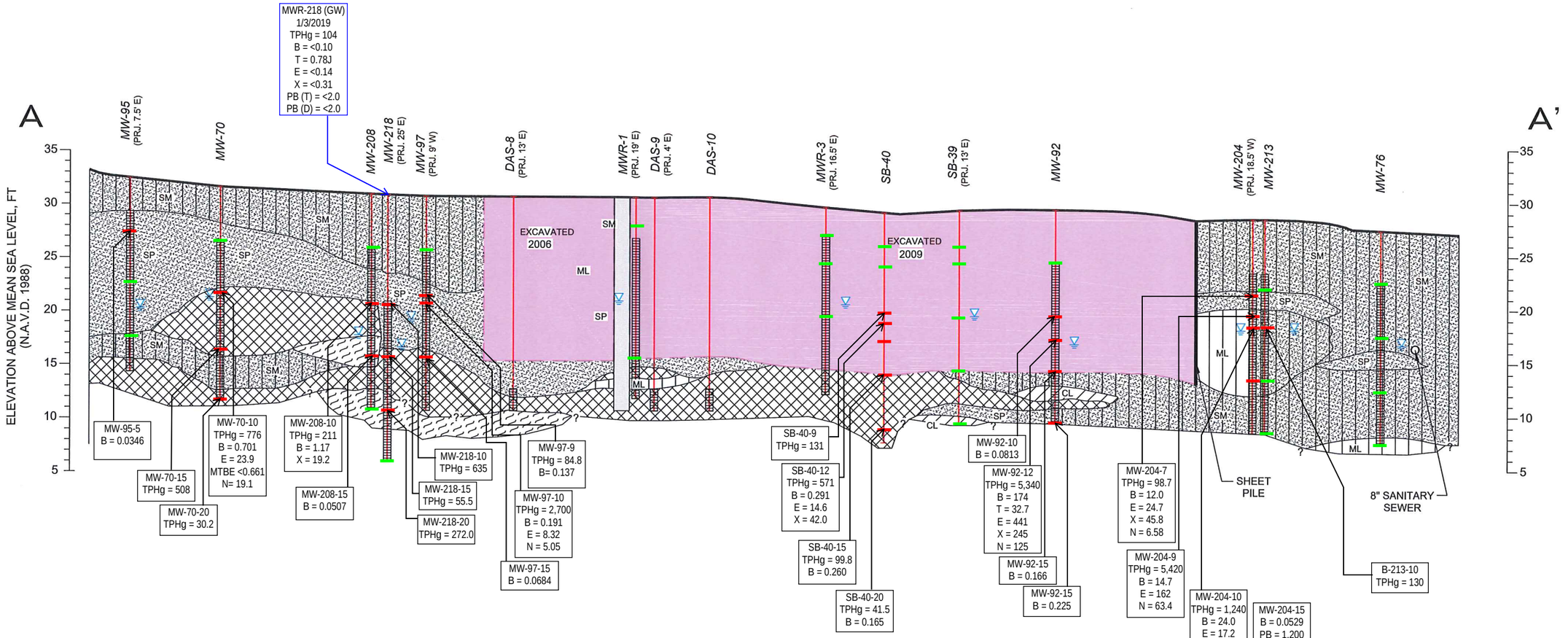

LEGEND

= SOIL SAMPLE WITH ONE OR MORE ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL

= SOIL SAMPLE WITH NO ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL

BLUE DATA BOXES = GROUNDWATER DATA (CONCENTRATIONS IN MICROGRAMS PER LITER)

BLACK DATA BOXES = SOIL DATA (CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM. ALL CONCENTRATIONS SHOWN EXCEED MTCA METHOD A CLEANUP LEVELS

TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHd = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHo = TOTAL PETROLEUM HYDROCARBONS AS OIL
B = BENZENEE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
MTBE = METHYL TERT-BUTYL ETHER
N = NAPTHALENE
PB = LEAD (FOR GROUNDWATER DATA (T) = TOTAL LEAD, (D) = DISSOLVED LEAD)

BOLDED CONCENTRATIONS EXCEED MTCA METHOD A CLEANUP LEVELS

SP - POORLY GRADED SAND, WITH OR WITHOUT GRAVEL

ML - SANDY SILT OR CLAYEY SILT, WITH OR WITHOUT GRAVEL

FILL

PT - PEAT

CL - CLAY WITH OR WITHOUT SILT

SM - SILTY SAND, WITH OR WITHOUT GRAVEL

SLURRY WALL

APPROXIMATE FIRST ENCOUNTERED WATER LEVEL

BORING

WELL SCREEN

NOTES:

1. THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE SOIL BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE SOIL BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE SOIL BORINGS MAY VARY FROM THOSE INDICATED.
2. THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURING AT THESE BORING LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.

0 10 20
APPROX. VERTICAL SCALE, FT

0 50 100
APPROX. HORIZONTAL SCALE, FT

CROSS SECTION A - A'

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
600 WESTLAKE AVENUE NORTH
SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 1/29/18	FIGURE 7
APPROVED BY: ES		DRAWN BY: BK	

ATC
6347 Seaview Avenue NW
Seattle, Washington 98107
Ph: (206) 781-1449 *** Fax: (206) 781-1543

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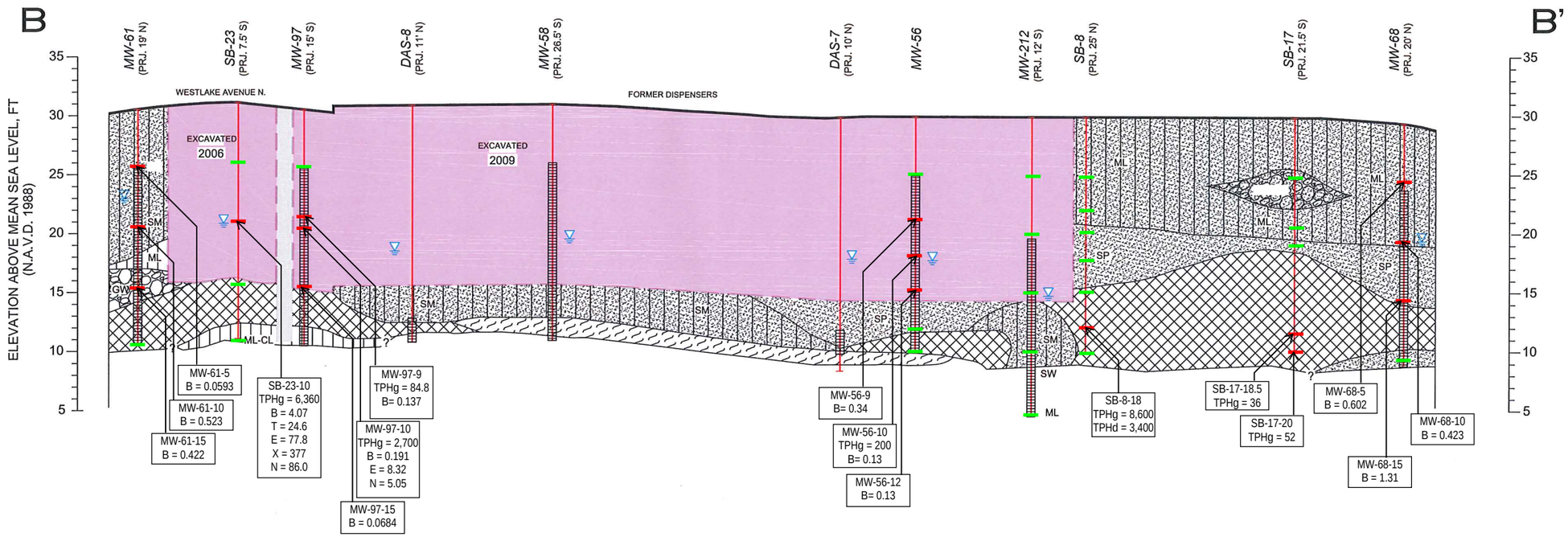

LEGEND

- = SOIL SAMPLE WITH ONE OR MORE ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL
- = SOIL SAMPLE WITH NO ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL

BLACK DATA BOXES = SOIL DATA (CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM. ALL CONCENTRATIONS SHOWN EXCEED MTCA METHOD A CLEANUP LEVELS

TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHd = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHo = TOTAL PETROLEUM HYDROCARBONS AS OIL
B = BENZENEE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
N = NAPTHALENE

BOLDED CONCENTRATIONS EXCEED MTCA METHOD A CLEANUP LEVELS

- SP - POORLY GRADED SAND, WITH OR WITHOUT GRAVEL
- ML - SANDY SILT OR CLAYEY SILT, WITH OR WITHOUT GRAVEL
- FILL
- PT - PEAT
- CL - CLAY WITH OR WITHOUT SILT
- SM - SILTY SAND, WITH OR WITHOUT GRAVEL
- GW, GM - WELL GRADED GRAVEL, WITH OR WITHOUT SILT
- SLURRY WALL
- BORING
- WELL SCREEN
- APPROXIMATE FIRST ENCOUNTERED WATER LEVEL

NOTES:

1. THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE SOIL BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE SOIL BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE SOIL BORINGS MAY VARY FROM THOSE INDICATED.
2. THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURING AT THESE BORING LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.

0 10 20
APPROX. VERTICAL SCALE, FT

0 30 60
APPROX. HORIZONTAL SCALE, FT

CROSS SECTION B - B'

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
600 WESTLAKE AVENUE NORTH
SEATTLE, WA

PROJECT NUMBER: Z076000073		DATE: 1/29/18	FIGURE 8
APPROVED BY: ES		DRAWN BY: BK	

ATC
6347 Seaview Avenue NW
Seattle, Washington 98107
Ph: (206) 781-1449 *** Fax: (206) 781-1543

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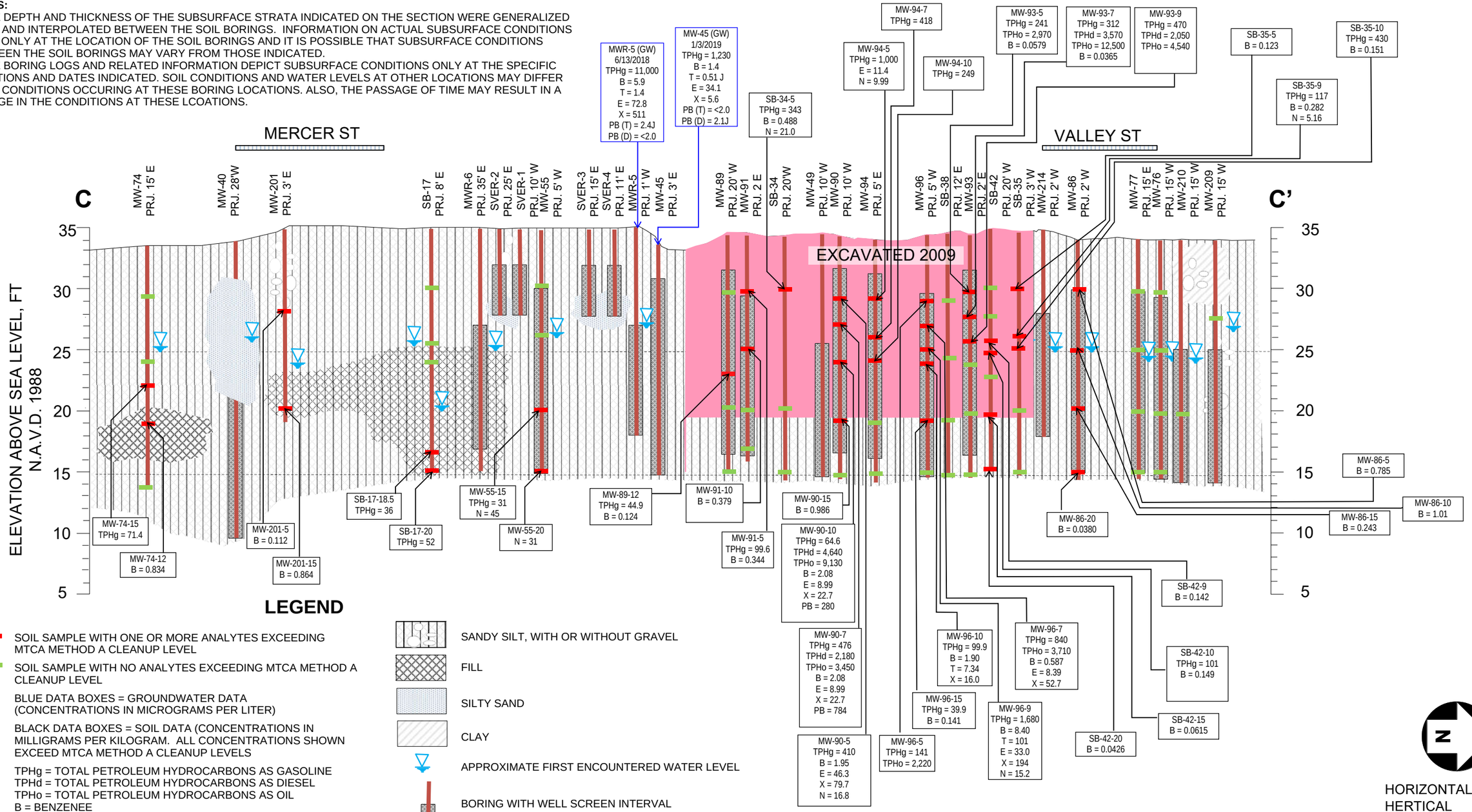
NOTES:
1. THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTION WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE SOIL BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXIST ONLY AT THE LOCATION OF THE SOIL BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE SOIL BORINGS MAY VARY FROM THOSE INDICATED.
2. THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURING AT THESE BORING LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE LCOATIONS.



LEGEND

- SOIL SAMPLE WITH ONE OR MORE ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL
- SOIL SAMPLE WITH NO ANALYTES EXCEEDING MTCA METHOD A CLEANUP LEVEL
- BLUE DATA BOXES = GROUNDWATER DATA (CONCENTRATIONS IN MICROGRAMS PER LITER)
- BLACK DATA BOXES = SOIL DATA (CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM. ALL CONCENTRATIONS SHOWN EXCEED MTCA METHOD A CLEANUP LEVELS

TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHd = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHo = TOTAL PETROLEUM HYDROCARBONS AS OIL
B = BENZENEE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
N = NAPTHALENE
PB = LEAD (FOR GROUNDWATER DATA (T) = TOTAL LEAD, (D) = DISSOLVED LEAD)

BOLDED CONCENTRATIONS EXCEED MTCA METHOD A CLEANUP LEVELS

- SANDY SILT, WITH OR WITHOUT GRAVEL
- FILL
- SILTY SAND
- CLAY
- APPROXIMATE FIRST ENCOUNTERED WATER LEVEL
- BORING WITH WELL SCREEN INTERVAL

HORIZONTAL 1:50
HERTICAL 1:10

CROSS SECTION C-C'

PHILLIPS 66 FACILITY NO. 255353 (AOC 1396)
600 WESTLAKE AVENUE NORTH
SEATTLE, WA

PROJECT NO. Z076000073	DATE: 04/2919	FIGURE
APPROVED BY: ES	DRAWN BY: AD	9

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

6347 Seaview Avenue NW
Seattle, Washington 98107
(206) 781-1449

APPENDIX E
GEOENGINEERS CLEANUP ACTION SUMMARY

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Rosen Property
aka H+A Investments Property
Seattle
LUST 4654
VCP NW 1936

CLEANUP ACTION REPORT
INTERURBAN EXCHANGE 2
535 TERRY AVENUE NORTH
SEATTLE, WASHINGTON

OCTOBER 28, 2008

FOR
LAKE UNION IV, LLC

GeoEngineers

File No. 7131-002-11

TABLE 1
LOTS 1 AND 2 REMEDIAL EXCAVATION SOIL CHEMICAL ANALYTICAL DATA
PETROLEUM HYDROCARBONS, BENZENE, ETHYLBENZENE, TOLUENE AND XYLENES
INTERURBAN EXCHANGE 2
535 TERRY AVENUE NORTH, SEATTLE, WASHINGTON

Sample ID[1, 2]	Sample Date	Elevation	Depth (ft bgs)	Field Screening		Petroleum Hydrocarbons (mg/kg)				BETX[3] (mg/kg)			
				Sheen	Headspace (ppm)	Gasoline Range[3]	Diesel Range[4]	Heavy Oil Range[4]	Mineral Oil Range[4]	B	E	T	X
Waste Disposal Authorization Characterization Soil Samples[5]													
TP-11-9[6]	05/05/08	NA	9	SS	--	<10	<20	<50	<40	--	--	--	--
HA-1-6	05/13/08	NA	6	NS	--	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
HA-2-2	05/13/08	NA	2	NS	--	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-1-9.0[7]	06/24/08	NA	9	SS	--	**40**	**30**	<200	<400	--	--	--	--
Confirmation Soil Samples													
Base Confirmation Soil Samples													
EX-2-EL15	06/26/08	15	14	NS	2	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-21-EL16	07/11/08	16	17.5	MS	36	**55**	**730**	<50	<40	<0.02	**0.11**	<0.05	**0.17**
EX-22-EL16	07/11/08	16	17.5	SS	170	**70**	<20	<50	**28**	<0.02	**1.3**	<0.05	**0.66**
EX-23-EL16[5]	07/11/08	16	17.5	SS	>300	**250**	<20	<50	<40	<0.02	**2.4**	**0.21**	**4.7**
EX-23-EL15	07/15/08	15	16.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-24-EL16[5]	07/11/08	16	17.5	SS	>300	**290**	<20	<50	<40	<0.02	**1.1**	**0.11**	**3.5**
EX-24-EL15	07/16/08	15	16.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-25-EL16	07/14/08	16	17.5	NS	13	**15**	<20	<50	<40	<0.02	**0.08**	<0.05	**0.15**
EX-26-EL16	07/14/08	16	17.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-27-EL16[10]	07/14/08	16	17.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-28-EL16	07/14/08	16	17.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-30-EL19[10]	07/15/08	19	11	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-31-EL20[10]	07/15/08	20	10	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-43-EL15.5	07/22/08	15.5	17	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-44-EL17.5[10]	07/22/08	17.5	16	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15

Sample ID[1,2]	Sample Date	Elevation	Depth (ft bgs)	Field Screening		Petroleum Hydrocarbons (mg/kg)				BETX[3] (mg/kg)			
				Sheen	Headspace (ppm)	Gasoline Range[3]	Diesel Range[4]	Heavy Oil Range[4]	Mineral Oil Range[4]	B	E	T	X
Sidewall Confirmation Soil Samples													
EX-3-E3	06/30/08	22	8	MS	>200	**64**	**230**	<50	<40	<0.02	**0.13**	<0.05	**0.25**
EX-4-N13.5[8]	06/30/08	22	8	MS	>400	**145**	<20	<50	<40	<0.02	**1.6**	**1.0**	**5.2**
EX-5-N10[8]	06/30/08	21	9	SS	>400	**340**	<20	<50	<40	**0.1**	**5.4**	**2.4**	**19**
EX-6-N6[8]	06/30/08	23	7	HS	>400	**280**	<20	**320**	<40	**0.11**	**4.2**	**2.2**	**7.4**
EX-10-N2[8]	07/01/08	22	8	HS	>400	**1100**	<20	**430**	<40	**0.05**	**3.8**	**2.3**	**12**
EX-11-W21	07/02/08	21	9.5	NS	15	**11**	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-12-W16.5	07/02/08	22	7	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-13-E15	07/02/08	23	11	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-15-E11	07/02/08	21	12	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-16-E7	07/02/08	21	12	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-17-W13	07/03/08	20	6.5	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
EX-18-W9	07/03/08	19.5	6	NS	0	<10	<20	<50	<40	<0.02	<0.05	<0.05	<0.15
MTCA Method A or B Cleanup Levels						100/30[9]	2000	2000	4000	0.03	6	7	9

Notes:

[1]Sample locations shown on the attached site plan.

[2]GeoEngineers samples submitted to Fremont Analytical, Seattle, Washington.

[3]Analyzed by Ecology Method NWTPH-Gx and 8021B.

[4]Analyzed by Ecology Method NWTPH-Dx or NWTPH-Dx Extended with a silica gel cleanup.

[5]Contaminated soil represented by this sample was subsequently excavated and removed from the site for permitted disposal.

[6]This sample was also analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260 and RCRA 8 Metals. VOCs were not detected in the sample. Metals either were not detected or were detected at concentrations less than the MTCA Method A cleanup levels. See the laboratory report for the full list ofanalytes tested.

[7]This sample was also analyzed for Polycyclic Aromatic Hydrocarbons (PAHs), lead and PCBs. PAHs and PCBs were not detected (less than 0.5 mg/kg). Lead was detected at a concentration less than the MTCA Method A cleanup level. See the laboratory report for the full list of analytes tested.

[8]Contaminated soil represented by this sample was left in place because it extends into the right-of-way and was not accessible.

[9]When benzene is present, the gasoline range cleanup level is 30 mg/kg. When benzene is not present the gasoline range cleanup level is 100 mg/kg.

[10]This sample was also submitted for chemical analysis of lead, cadmium and/or PAHs. These results are presented in Table 3. See the laboratory report for the full list of analytes tested.

mg/kg = milligrams per kilogram -- = Not Tested MTCA = Model Toxic Control Act

bgs = below ground surface NA = Not applicable.

NS = no sheen, SS = slight sheen, MS = moderate sheen, HS = heavy sheen

Bolding indicates analyte was detected. Shading indicates that analyte was detected at concentrations greater than MTCA Method A cleanup levels.

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TABLE 2
LOTS 3, 4 AND 5 REMEDIAL EXCAVATION SOIL CHEMICAL ANALYTICAL DATA
CADMIUM, LEAD AND POLYCYCLIC AROMATIC HYDROCARBONS
INTERURBAN EXCHANGE 2
535 TERRY AVENUE NORTH, SEATTLE, WASHINGTON

Sample ID[1]	Consultant[2, 3]	Sample Date	Elevation	Depth (ft bgs)	Field Screening		Total Metals[4] (mg/kg)		Non-carcinogenic Polycyclic Aromatic Hydrocarbons[5] (mg/kg)									Carcinogenic Polycyclic Aromatic Hydrocarbons[5] (mg/kg)							
					Sheen	Headspace (ppm)	Cadmium	Lead	Naph-thalenes	Acenaph-thylene	Acenaph-thene	Fluorene	Phenan-threne	Anthra-cene	Fluoran-thene	Pyrene	Benzo(g,h,i)-perylene	Benzo(a)-anthracene	Chrysene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Benzo(a)-pyrene	Indeno(1,2,3--cd)Pyrene	Dibenz(a,h)-anthracene	Total cPAHs (TEQ)[9]
Waste Characterization Soil Samples[7, 12]																									
TP-10-4[8]	GeoEngineers	05/05/08	NA	4	SS	--	2.4	1,900	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	0.21	0.33	0.1	0.17	0.29	0.25	0.36	0.16	<0.03	<0.03	0.245
HA-3-4		05/13/08	NA	4	NS	--	<2	56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HA-4-2		05/13/08	NA	2	NS	--	<2	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Confirmation Samples																									
Base Confirmation Soil Samples																									
EX-27-EL16	GeoEngineers	07/14/08	16	17.5	NS	0	--	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-30-EL19[12]		07/15/08	19	7	NS	0	<2.0	52	<0.05	<0.05	<0.05	<0.05	0.15	0.14	0.22	0.22	0.12	0.24	0.16	<0.01	0.15	0.10	0.09	0.07	0.16
EX-30-EL18		07/18/08	18	8	NS	0	<2.0	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-31-EL20		07/15/08	20	8	NS	0	<2.0	12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	0.13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
EX-32-EL19		07/16/08	19	5.0	NS	0	<2.0	44	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-34-EL20[12]		07/17/08	20	3.5	NS	0	<2.0	110	1.75	0.11	0.09	0.17	0.49	0.23	0.39	0.45	0.17	0.23	0.15	0.19	0.13	0.17	0.10	0.10	0.11
EX-34-EL19		07/21/08	19	4.5	NS	0	--	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-42-EL21		07/18/08	21	2.5	NS	0	<2.0	37	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.14	0.09	0.09	0.10	0.05	0.06	<0.01	0.03
EX-44-EL17.5		07/22/08	17.5	16	NS	0	<2.0	115	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Base Confirmation Wood Samples																									
ATP-1 (7.5)	Adapt	08/12/06	NA	7.5	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0042	0.0048	0.0067	ND	0.0053	ND	ND	0.0044
ATP-2 (4)		08/12/06	NA	4	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0038	0.0067	0.0064	0.0028	0.0045	ND	ND	0.0048
ATP-3 (7)		08/12/06	NA	7	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0052	0.0050	0.0070	ND	0.0050	ND	ND	0.0035
ATP-4 (4.5)		08/12/06	NA	4.5	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0240	0.0390	0.0770	0.0220	0.0550	0.0130	ND	0.0223
ATP-5 (5)		08/12/06	NA	5	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.1500	0.1500	0.1400	ND	ND	ND	ND	0.0417
ATP-6 (8)		08/12/06	NA	8	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0070	0.0100	0.0140	0.0059	0.0088	0.0024	ND	0.0059
ATP-7 (6)		08/13/06	NA	6	NA	NA	--	--	--	--	--	--	--	--	--	--	--	ND	0.0046	0.0130	0.0110	0.0080	0.0210	ND	0.0188
ATP-8 (6.5)		08/13/06	NA	6.5	NA	NA	--	--	--	--	--	--	--	--	--	--	--	0.0130	0.0140	0.0390	0.0170	0.0280	0.0130	ND	0.0293
ATP-9 (6)		08/13/06	NA	6	NA	NA	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	0.0276
ATP-10 (5.5)		08/13/06	NA	5.5	NA	NA	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	0.0181
Sidewall Confirmation Soil Samples																									
EX-7-E31.5	GeoEngineers	07/01/08	23	12	NS	0	<2.0	12	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.11	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-8-E27.5		07/01/08	23	12	NS	0	<2.0	<4.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-9-E23		07/01/08	23	12	NS	0	<2.0	<4.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-14-E19		07/02/08	23	11	NS	0	<2.0	12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-19-W5[10, 11]		07/03/08	20	5	NS	0	<2.0	64	0.07	0.11	0.42	0.30	2.3	0.98	2.9	3.6	2.0	0.97	0.88	1.3	0.55	1.7	0.78	0.50	2.17
EX-20-W1.5[11]		07/03/08	19.5	5.5	NS	0	<2.0	120	0.13	0.12	0.63	0.42	4.2	1.5	4.4	5.5	3.0	1.2	1.2	2.1	0.75	2.3	1.2	0.76	2.99
EX-29-EL16		07/14/08	16	--	NS	0	<2.0	29	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-33-EL21		07/16/08	21	3.0	NS	0	<2.0	27	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-35-EL22.5[11]		07/17/08	22.5	1.5	NS	0	<2.0	7.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	0.08	0.11	0.15	0.06	0.08	<0.01	0.11
EX-36-EL23[11]		07/18/08	23	1.5	NS	0	<2.0	35	<0.05	<0.05	<0.05	<0.05	0.28	0.28	0.56	0.56	0.34	0.47	0.16	0.33	0.24	0.16	0.17	<0.01	0.28
EX-37-EL23		07/18/08	23	1.5	NS	0	<2.0	<4.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EX-38-EL23[11]		07/18/08	23	1.0	NS	0	<2.0	160	<0.05	0.14	<0.05	0.43	4.2	1.7	6.3	7.8	2.9	2.7	1.4	1.6	1.7	2.9	1.1	1.0	3.82
EX-39-EL23[11]		07/18/08	23	1.0	NS	0	<2.0	86	<0.05	0.11	<0.05	0.13	0.27	0.27	0.51	0.0	0.39	0.73	0.21	0.23	0.31	0.32	0.18	<0.01	0.47
EX-40-EL22[11]		07/18/08	22	2.0	NS	0	<2.0	1,800	6	7.2	0.61	4.9	53	40	43	53	12	17	9.4	17	20	19.00	5.7	1.40	25.34
EX-41-EL22[11]		07/18/08	22	3.0	NS	0	<2.0	1,200	0.56	0.49	0.16	0.31	3.3	1.4	4.1	4.7	1.7	2.9	2.1	1.3	1.1	2.30	0.69	0.62	3.04
MTCA Method A or B Cleanup Levels							2	250	5	NE	4,800	3,200	NE	24,000	3,200	2,400	NE	NA	NA	NA	NA	NA	NA	NA	0.1

Notes:

[1]Sample locations shown on the attached site plan.

[2]GeoEngineers samples submitted to Fremont Analytical in Seattle, Washington.

[3]Adapt Engineering, Inc. (Adapt) samples submitted to Friedman and Bruya Inc. in Seattle, Washington.

[4]Analyzed by EPA Method 6020

[5]Analyzed by EPA Method 8270C (SIM).

[6]Calculated using the toxicity equivalency (TEQ) methodology specified in WAC 173-340-780(8). cPAHs that were not detected were assigned half the value of the detection limit for these calculations. Total cPAHs for the Adapt samples was calculated using the wood Ecology and using the sampling method approved by Toxicity Equivalency Factors (TEF).

[7]Each of the characterization soil samples were also analyzed for RCRA 8 Metals and gasoline-, diesel-, and lube oil-range petroleum hydrocarbons and BETX using Ecology methods NWTPH-Gx, NWTPH-Dx and EPA Method 8021B. Petroleum hydrocarbons, BETX and metals other than cadmium and lead were either not detected or were detected at concentrations less than the MTCA Method A cleanup level. See the laboratory report for the full list of analytes tested.

[8]Mercury was detected in this sample at a concentration of 4 mg/kg, which is greater than the MTCA Method A cleanup level. Soil represented by this sample was subsequently excavated and a new sample (EX-19-W5) was obtained in its place. Mercury was not detected in EX-10-W5. Lead and cadmium toxicity characteristic leaching procedure (TCLP) was also conducted on this sample for disposal characterization purposes.

[9]This sample was subsequently re-analyzed for lead. The second time lead was detected at 370 parts per million.

[10]This sample was also submitted for chemical analysis of mercury using EPA Method 6020. Mercury was not detected (<1.0 parts per million).

[11]Contaminated soil represented by this sample was left in place because it extends into the right-of-way and was not accessible.

[12]Contaminated soil represented by this sample was subsequently excavated and removed from the site for permitted disposal.

mg/kg = milligrams per kilogram

bgs = below ground surface

-- = Not Tested

NA = Not applicable.

MTCA - Model Toxic Control Act

Bolding indicates analyte was detected. Shading indicates that analyte was detected at concentrations greater than MTCA Method A cleanup levels.

TABLE 3
SOIL CHEMICAL ANALYTICAL DATA - TEQ CALCULATIONS
INTERURBAN EXCHANGE 2
535 TERRY AVENUE NORTH, SEATTLE, WASHINGTON

Sample ID	TP-10-4			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.17	0.1	0.017	Detected
chrysene	0.29	0.01	0.003	Detected
benzo(b)fluoranthene	0.25	0.1	0.025	Detected
benzo(k)fluoranthene	0.36	0.1	0.036	Detected
benzo(a)pyrene	0.16	1.0	0.160	Detected
indeno(1,2,3-cd)pyrene	0.015	0.1	0.002	Not Detected
dibenzo(a,h)anthracene	0.015	0.4	0.003	Not Detected
Total			0.245	

Sample ID	EX-19-W5			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.97	0.1	0.097	Detected
chrysene	0.88	0.01	0.009	Detected
benzo(b)fluoranthene	1.3	0.1	0.130	Detected
benzo(k)fluoranthene	0.55	0.1	0.055	Detected
benzo(a)pyrene	1.7	1.0	1.700	Detected
indeno(1,2,3-cd)pyrene	0.78	0.1	0.078	Detected
dibenzo(a,h)anthracene	0.50	0.4	0.100	Detected
Total			2.169	

Sample ID	EX-20-W1.5			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	1.2	0.1	0.120	Detected
chrysene	1.2	0.01	0.012	Detected
benzo(b)fluoranthene	2.1	0.1	0.210	Detected
benzo(k)fluoranthene	0.75	0.1	0.075	Detected
benzo(a)pyrene	2.3	1.0	2.300	Detected
indeno(1,2,3-cd)pyrene	1.2	0.1	0.120	Detected
dibenzo(a,h)anthracene	0.76	0.4	0.152	Detected
Total			2.989	

Sample ID	EX-30-EL19			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.24	0.1	0.024	Detected
chrysene	0.16	0.01	0.002	Detected
benzo(b)fluoranthene	0.005	0.1	0.001	Not Detected
benzo(k)fluoranthene	0.15	0.1	0.015	Detected
benzo(a)pyrene	0.1	1.0	0.100	Detected
indeno(1,2,3-cd)pyrene	0.09	0.1	0.009	Detected
dibenzo(a,h)anthracene	0.07	0.4	0.014	Detected
Total			0.164	

Sample ID	EX-31-EL20			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.13	0.1	0.013	Detected
chrysene	0.005	0.01	0.000	Not Detected
benzo(b)fluoranthene	0.005	0.1	0.001	Not Detected
benzo(k)fluoranthene	0.005	0.1	0.001	Not Detected
benzo(a)pyrene	0.005	1.0	0.005	Not Detected
indeno(1,2,3-cd)pyrene	0.005	0.1	0.001	Not Detected
dibenzo(a,h)anthracene	0.005	0.4	0.001	Not Detected
Total			**0.021**	

Sample ID	EX-34-EL20			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.23	0.1	0.023	Detected
chrysene	0.15	0.01	0.002	Detected
benzo(b)fluoranthene	0.19	0.1	0.019	Detected
benzo(k)fluoranthene	0.13	0.1	0.013	Detected
benzo(a)pyrene	0.17	1.0	0.170	Detected
indeno(1,2,3-cd)pyrene	0.1	0.1	0.010	Detected
dibenzo(a,h)anthracene	0.1	0.4	0.020	Detected
Total			**0.257**	

Sample ID	EX-35-EL22.5			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.19	0.1	0.019	Detected
chrysene	0.08	0.01	0.001	Detected
benzo(b)fluoranthene	0.11	0.1	0.011	Detected
benzo(k)fluoranthene	0.15	0.1	0.015	Detected
benzo(a)pyrene	0.06	1.0	0.060	Detected
indeno(1,2,3-cd)pyrene	0.08	0.1	0.008	Detected
dibenzo(a,h)anthracene	0.01	0.4	0.001	Detected
Total			**0.115**	

Sample ID	EX-36-EL23			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.47	0.1	0.047	Detected
chrysene	0.16	0.01	0.002	Detected
benzo(b)fluoranthene	0.33	0.1	0.033	Detected
benzo(k)fluoranthene	0.24	0.1	0.024	Detected
benzo(a)pyrene	0.16	1.0	0.160	Detected
indeno(1,2,3-cd)pyrene	0.17	0.1	0.017	Detected
dibenzo(a,h)anthracene	0.00	0.4	0.000	Detected
Total			**0.283**	

Sample ID	EX-38-EL23			
Analyte	Detected Concentrations (mg/kg)	Cal TEF	TEQ (mg/kg)	Comments
benzo(a)anthracene	2.7	0.1	0.270	Detected
chrysene	1.4	0.01	0.014	Detected
benzo(b)fluoranthene	1.6	0.1	0.160	Detected
benzo(k)fluoranthene	1.7	0.1	0.170	Detected
benzo(a)pyrene	2.9	1.0	2.900	Detected
indeno(1,2,3-cd)pyrene	1.1	0.1	0.110	Detected
dibenzo(a,h)anthracene	1.0	0.4	0.200	Detected
Total			**3.824**	

Sample ID	EX-39-EL23			
Analyte	Detected Concentrations (mg/kg)	Cal TEF	TEQ (mg/kg)	Comments
benzo(a)anthracene	0.73	0.1	0.073	Detected
chrysene	0.21	0.01	0.002	Detected
benzo(b)fluoranthene	0.23	0.1	0.023	Detected
benzo(k)fluoranthene	0.31	0.1	0.031	Detected
benzo(a)pyrene	0.32	1.0	0.320	Detected
indeno(1,2,3-cd)pyrene	0.18	0.1	0.018	Detected
dibenzo(a,h)anthracene	0.01	0.4	0.001	Detected
Total			**0.468**	

Sample ID	EX-40-EL22			
Analyte	Detected Concentrations (mg/kg)	Cal TEF	TEQ (mg/kg)	Comments
benzo(a)anthracene	17	0.1	1.700	Detected
chrysene	9.4	0.01	0.094	Detected
benzo(b)fluoranthene	17	0.1	1.700	Detected
benzo(k)fluoranthene	20	0.1	2.000	Detected
benzo(a)pyrene	19.0	1.0	19.000	Detected
indeno(1,2,3-cd)pyrene	5.7	0.1	0.570	Detected
dibenzo(a,h)anthracene	1.4	0.4	0.280	Detected
Total			**25.344**	

Sample ID	EX-41-EL22			
Analyte	Detected Concentrations (mg/kg)	Cal TEF	TEQ (mg/kg)	Comments
benzo(a)anthracene	2.9	0.1	0.290	Detected
chrysene	2.1	0.01	0.021	Detected
benzo(b)fluoranthene	1.3	0.1	0.130	Detected
benzo(k)fluoranthene	1.1	0.1	0.110	Detected
benzo(a)pyrene	2.3	1.0	2.300	Detected
indeno(1,2,3-cd)pyrene	0.69	0.1	0.069	Detected
dibenzo(a,h)anthracene	0.6	0.4	0.124	Detected
Total			**3.044**	

Sample ID	EX-42-EL21			
	Detected Concentrations		TEQ	
Analyte	(mg/kg)	Cal TEF	(mg/kg)	Comments
benzo(a)anthracene	0.14	0.1	0.014	Detected
chrysene	0.009	0.01	0.000	Detected
benzo(b)fluoranthene	0.009	0.1	0.001	Detected
benzo(k)fluoranthene	0.1	0.1	0.010	Detected
benzo(a)pyrene	0.005	1.0	0.005	Not Detected
indeno(1,2,3-cd)pyrene	0.006	0.1	0.001	Detected
dibenzo(a,h)anthracene	0.005	0.4	0.001	Not Detected
Total			**0.032**	

Notes:

Calculated using the toxicity equivalency (TEQ) methodology specified in WAC 173-340-780(8). cPAHs that were not detected were assigned half the value of the detection limit for these calculations.

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TABLE 4
GROUNDWATER DISCHARGE SCREENING LEVELS AND DETECTED ANALYTE CONCENTRATIONS
INTERURBAN EXCHANGE 2
535 TERRY AVENUE NORTH, SEATTLE, WASHINGTON

Sample ID[1]	Sample Date	Depth to Groundwater (ft)	BETX (µg/L)[2]				Petroleum Hydrocarbons (µg/L)				Total Metals[4] (µg/L)	
			B	E	T	X	Diesel Range[3]	Heavy Oil Range[3]	Mineral Oil Range[3]	Gasoline Range[2]	Cadmium	Lead
Dewatering Well Groundwater Samples												
DN1-050808	05/08/08	11.63	<1	<1	**2.8**	<2	<200	<500	<400	<100	--	**52**
DN5-050808	05/08/08	11.92	<1	<1	**1.5**	**1.9**	<200	<500	<400	<100	--	10
DN10-050708	05/07/08	12	**20**	**16**	**19**	**23**	<200	<500	<400	**1,100**	--	**5**
DN14-050808	05/08/08	13.03	**24**	**16**	**28**	**33**	<200	<500	<400	**1,700**	--	<2
Dewatering Effluent Discharge Samples												
Baker-1[5]	05/13/08	NA	**1.7**	<1.0	<1.0	<2.0	<200	<500	<400	**120**	--	3
Baker-2[6]	06/23/08	NA	<1.0	<1.0	<1.0	<1.0	<200	<500	<400	<100	<2	<2
Baker-3	06/24/08	NA	<1.0	<1.0	<1.0	<1.0	<200	<500	<400	<100	<2	<2
Baker-4	06/25/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<2	<2
Baker -5	06/26/08	NA	**1.3**	<1.0	<2.0	<2.0	<200	<500	<400	<100	<2	<2
Baker -6	06/27/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	**150**	<2	<2
Baker -7	07/02/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	**110**	<2	<2
Baker -8	07/09/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<2	<2
Baker -9	07/16/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<2	**5.3**
Baker -10	07/23/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<5	<4
Baker -11	07/30/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<5	<4
Baker -12	08/26/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<5	<4
Baker -13	09/30/08	NA	<1.0	<1.0	<2.0	<2.0	<200	<500	<400	<100	<5	<4
King County Discharge Screening Levels[7]			70	1,700	1,400	2,200	100,000 [8]				600	4,000

Notes:

[1]GeoEngineers Samples submitted to Fremont Analytical in Seattle, Washington.

[2]Analyzed by ecology Method NWTPH-Gx and 8021B.

[3]Analyzed by Ecology Method NWTPH-Dx.

[4]Analyzed by EPA Method 6020.

[5]This sample is referred to as BAY-051308 in the laboratory report.

[6]This sample was also analyzed for naphthalenes, EDB, EDC and MTBE. These compounds were not detected (less than the applicable clean up levels).

[7]According to our King County Wastewater Discharge Authorization Number 4147-01

[8]This is the King County Discharge Screening Level for FOG and refers to the sum of all of the detected petroleum hydrocarbons in the sample.

µg/L = micrograms per liter

-- = Not Tested

MTCA - Model Toxic Control Act

Bolding indicates analyte was detected

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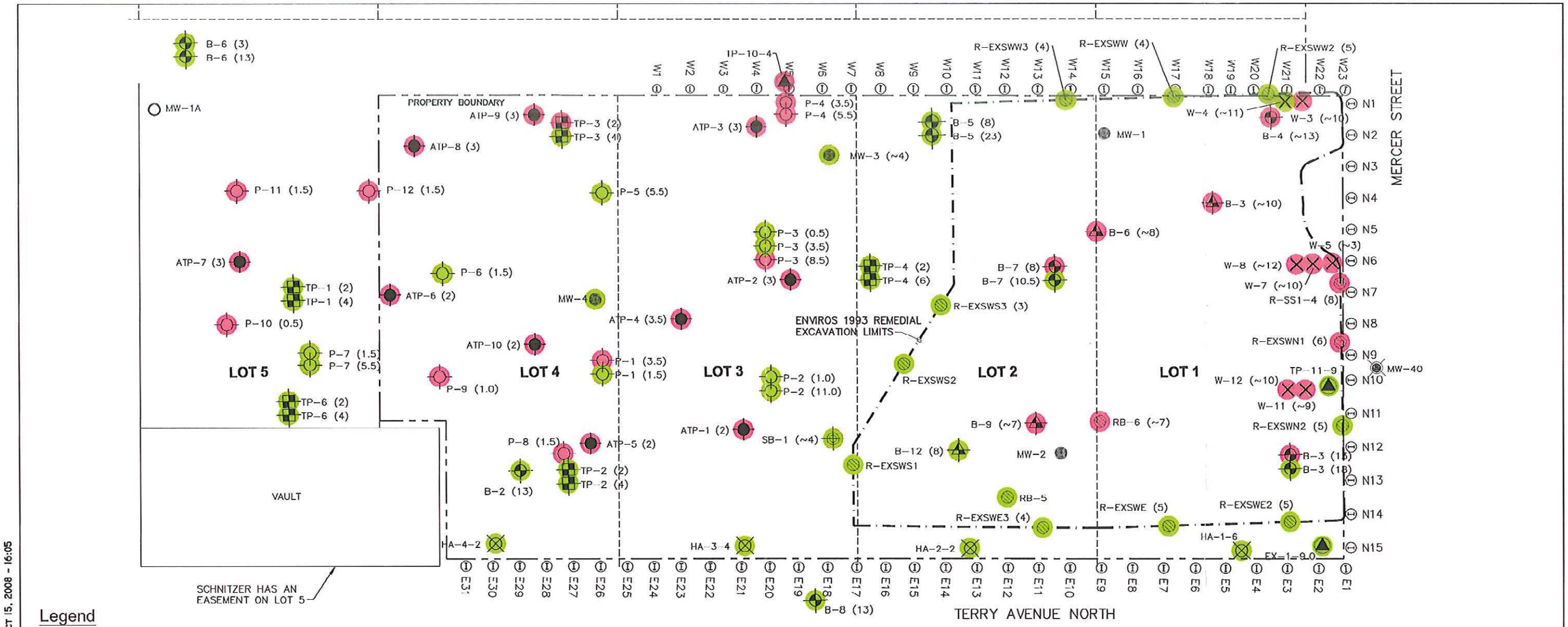

Legend

- P-7 — GeoEngineers 2002 boring
- TP-1 — Test pit completed 1999
- B-1 — GeoEngineers 1998 boring
- B-9 — GeoEngineers 1993 hand boring
- W-11 — GeoEngineers 1993 soil sample
- MW-1 — Secor 1994 monitoring well
- SB-1 — Secor 1994 boring
- ATP-1 — Adapt Engineering, Inc. 2006 test pits
- TP-1 — GeoEngineers 2008 test pit soil sample
- TP-1 — AGI Technologies 1994 test pit
- MW-1A — AGI Technologies 1994 monitoring well
- RB-6 — Enviros 1993 excavation sample
- MW-40 — Phillips/Tosco monitoring well
- Approximate limit of 1993 remedial excavation
- E31 — Soldier pile
- HA-1-16 — GeoEngineers 2008 hand auger boring

Contaminants of concern were not detected or were detected at concentrations less than the applicable MTCA Method A cleanup levels.

Contaminants of concern were detected at concentrations greater than the applicable MTCA Method A cleanup levels.

MTCA = Model Toxic Control Act

ATP-1 (2) — Depth below original ground surface. Original ground surface was approximately elevation 25 on Lots 3, 4 & 5 and elevation 25 - 30 on Lots 1 and 2.

Notes

1. The locations of all features shown are approximate.
2. See supporting tables for additional information. All depths are approximate.
3. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document. Data were compiled from sources as listed in this figure. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this figure. This figure is a copy of a master document. The master hard copy is stored by GeoEngineers, Inc. and will serve as the official document of record.
4. All monitoring wells have either been decommissioned or were destroyed during construction activities.

Reference: Drawing entitled "Interurban Exchange 2" by DCI Engineers D' Amato Conversano Inc., dated 04/01/02, and "Boundary & Topography Survey, U.W. Labs, South Lake Union" by Bush, Roed & Hitchings, Inc., dated 12/04/98.

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Site Plan with Historic Soil Sample Locations

Interurban Exchange 2
Seattle, Washington

GeoEngineers

Figure 2

P:\7\7151002\II\CAD\16-II-081\7151002II-F2.DWG\TAB:F2 MODIFIED BY LKNOWLTON ON OCT 15, 2008 - 16:05

Legend

Approximate limit of 1993 remedial excavation

E31 Soldier pile

Soil sample obtained in 2008 by GeoEngineers. Petroleum hydrocarbons and BTEX either were not detected or were detected at concentrations less than the applicable MTCA Method A clean-up levels.

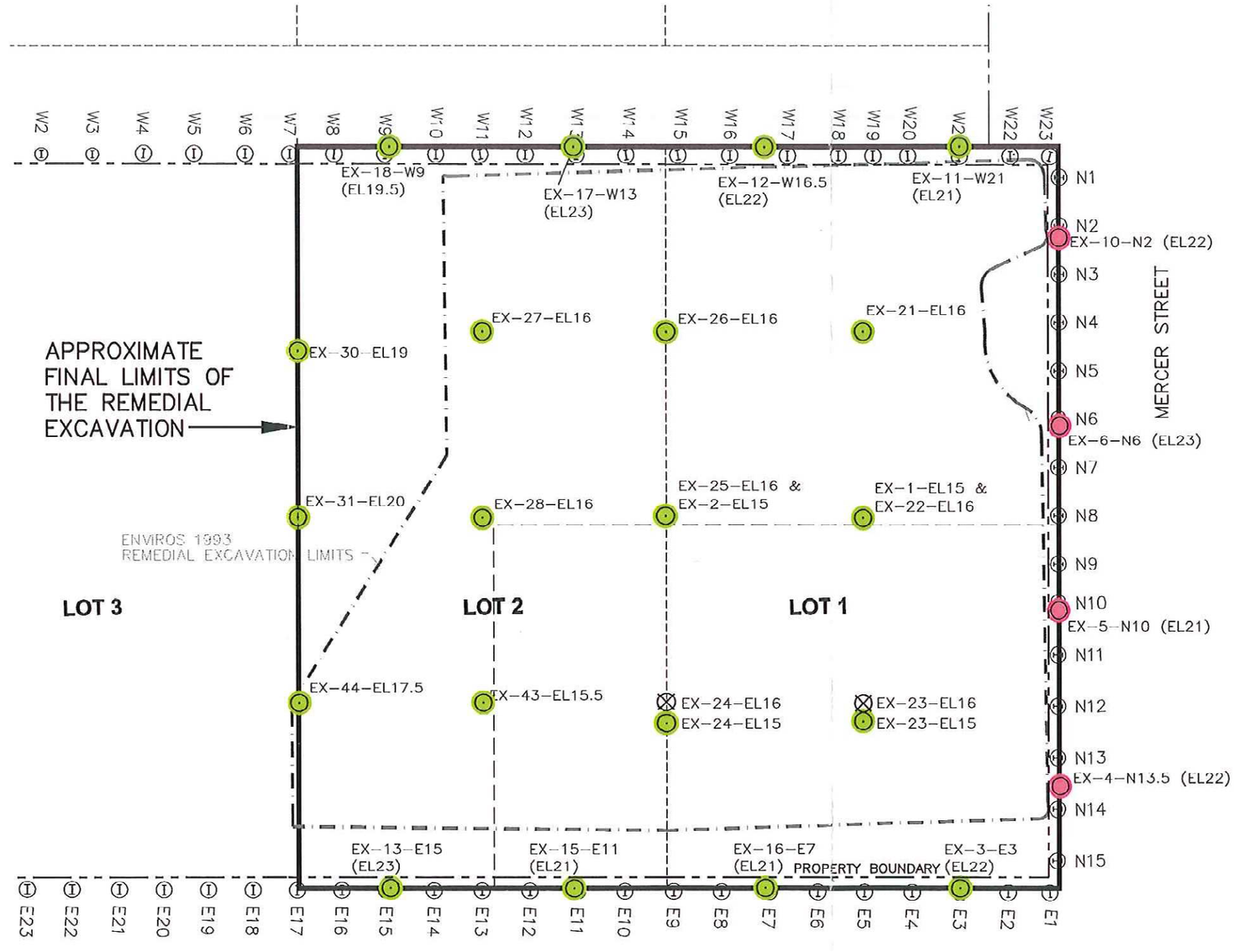
Soil sample obtained in 2008 by GeoEngineers. Petroleum hydrocarbons and BTEX were detected at concentrations greater than the applicable MTCA Method A clean-up levels. Soil represented by this sample could not be excavated without risking damage to offsite utilities, roadways and/or sidewalks or utilizing extensive shoring.

Soil sample obtained in 2008 by GeoEngineers. Petroleum hydrocarbons and BTEX were detected at concentrations greater than the applicable MTCA Method A clean-up levels. Soil represented by this sample was subsequently over-excavated and transported to Allied Waste in Seattle, Washington for permitted disposal.

Approximate limits of over-excavations. Soil represented by samples EX-24-EL16 and EX-23-EL16 were over-excavated and removed from the site for permitted disposal. Confirmation soil samples were obtained at the base of the over-excavation.

EX-44-EL17.5 — Approximate soil sample elevation

EX-18-W9 (EL17.5) — Approximate soil sample elevation



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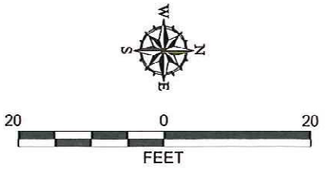
4. Confirmation soil samples were obtained in 2008 by GeoEngineers and were submitted for chemical analysis of petroleum hydrocarbons and associated constituents. Analytical data is summarized in Table 2.

Reference: Drawing entitled "Interurban Exchange 2" by DCI Engineers D' Amato Conversano Inc., dated 04/01/02, and "Boundary & Topography Survey, U.W. Labs, South Lake Union" by Bush, Rood & Hitchings, Inc., dated 12/04/98.



Petroleum Hydrocarbon Remedial Excavation and Confirmation Soil Sample Locations Lots 1 and 2

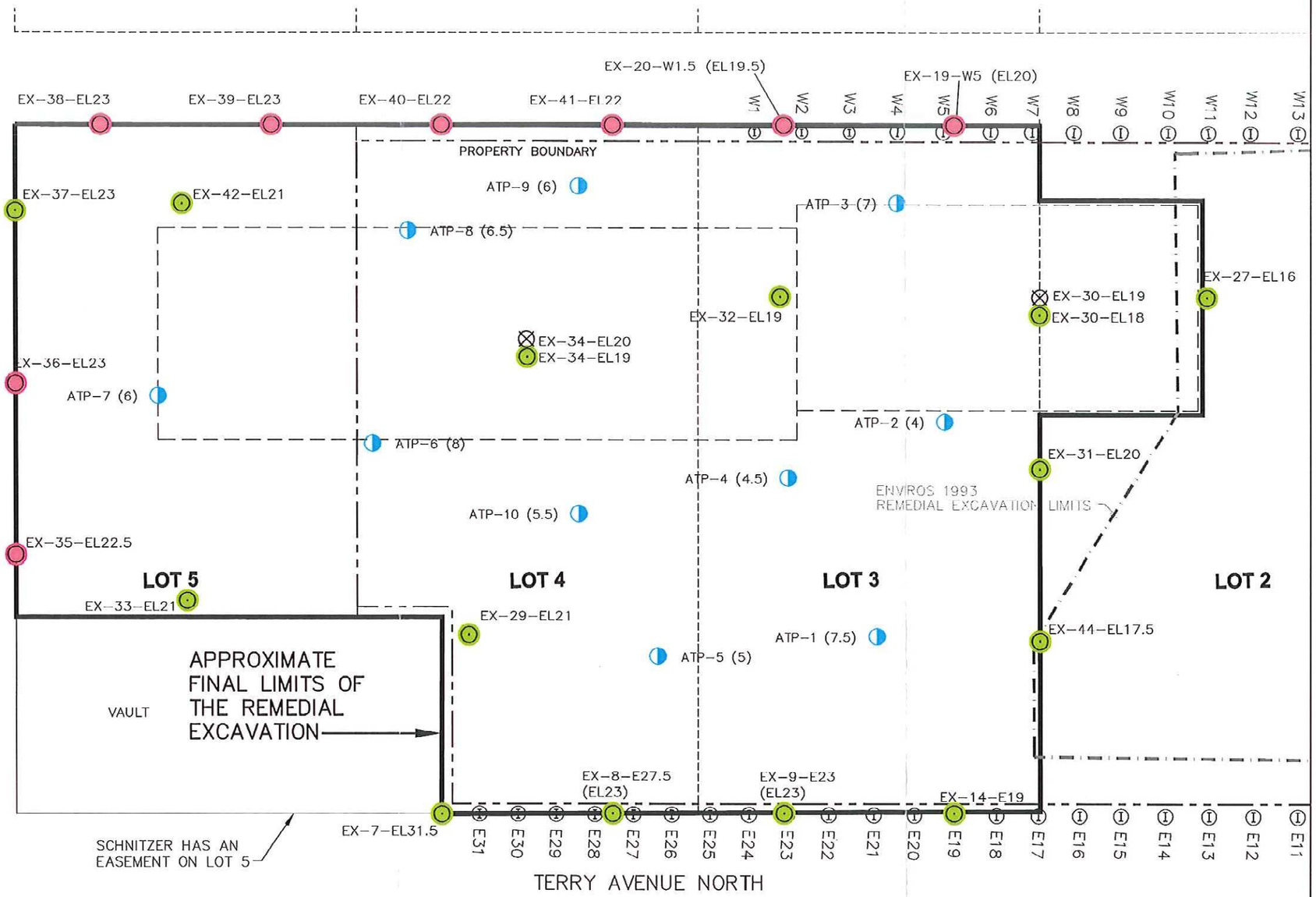
Interurban Exchange 2
Seattle, Washington

GeoEngineers

Figure 3

Legend

- Approximate limit of 1993 remedial excavation
- E31 Soldier pile
- Soil sample obtained in 2008 by GeoEngineers. PAHs, lead, and cadmium either were not detected or were detected at concentrations less than the applicable MTCA Method A clean-up levels.
- Soil sample obtained in 2008 by GeoEngineers. PAHs, lead, and cadmium were detected at concentrations greater than the applicable MTCA Method A clean-up levels. Soil represented by this sample could not be excavated without risking damage to offsite utilities, roadways and/or sidewalks or utilizing extensive shoring.
- Soil sample obtained in 2008 by GeoEngineers. PAHs, lead, and cadmium were detected at concentrations greater than the applicable MTCA Method A clean-up levels. Soil represented by this sample was subsequently over-excavated and transported to Allied Waste in Seattle, Washington for permitted disposal.
- Wood sample obtained in 2006 by Adapt Engineering. PAHs, lead, and cadmium either were not detected or were detected at concentrations less than the applicable MTCA Method A clean-up levels.
- Approximate limits of over-excavations. Soil represented by samples EX-34-EL20 and EX-30-EL19 were over-excavated and removed from the site for permitted disposal. Final confirmation soil samples were obtained at the base of the over-excavation.
- Property boundary
- EX-40-EL22 — Approximate soil sample elevation
- ATP-7(6) — Approximate wood sample depth below original ground surface. Original ground surface was approximately elevation 25.



Notes

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3. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document. Data were compiled from sources as listed in this figure. The data sources do not guarantee these data are accurate or complete. There may have been updates to the data since the publication of this figure. This figure is a copy of a master document. The master hard copy is stored by GeoEngineers, Inc. and will serve as the official document of record.
4. Confirmation soil samples were obtained in 2008 by GeoEngineers and in 2006 by Adapt Engineering and were submitted for chemical analysis of cadmuim, lead and/or PAHs. Analytical data is summarized in Table 3.

Reference: Drawing entitled "Interurban Exchange 2" by DCI Engineers D' Amato Conversano Inc., dated 04/01/02, and "Boundary & Topography Survey, U.W. Labs, South Lake Union" by Bush, Roed & Hitchings, Inc., dated 12/04/98.

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PAH, Lead, and Cadmium Remedial Excavation and Confirmation Soil Sample Locations Lots 3, 4 and 5

Interurban Exchange 2
Seattle, Washington

GeoEngineers | Figure 4

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APPENDIX F
DEEP OUTWASH AQUIFER MONITORING

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

FARALLON CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Folsom | Irvine

T E C H N I C A L M E M O R A N D U M

TO: Tena Seeds – Washington State Department of Ecology Toxics Cleanup Program

cc: Jim Broadlick – City Investors XI L.L.C.

FROM: Clifford Schmitt, L.G., L.H.G., Principal Hydrogeologist
Eric Buer, L.G., L.H.G., P.G., Senior Hydrogeologist

DATE: January 13, 2020

RE: **GROUNDWATER MONITORING PROGRAM**
SOUTH LAKE UNION BLOCK 38 WEST PROPERTY
SEATTLE, WASHINGTON
FARALLON PN: 397-061

Farallon Consulting, L.L.C. (Farallon) has prepared this Technical Memorandum to provide the rationale for selection of monitoring locations and sampling frequency for the Deep Outwash Aquifer Groundwater Performance Monitoring Program (Groundwater Monitoring Program) that will be conducted prior to, in conjunction with, and after completion of construction dewatering to facilitate mass excavation and building construction at the Block 38 West Property at 500 Westlake Avenue North in Seattle, Washington (Block 38 West) (Figure 1). The Groundwater Monitoring Program is a component of the interim action cleanup activities and is described in Section 8.4 of the *Interim Action Work Plan, Block 38 West Property, 500 through 536 Westlake Avenue North, Seattle, Washington* dated November 8, 2019, prepared by Farallon for City Investors IX L.L.C. (Interim Action Work Plan). The Groundwater Monitoring Program is being implemented in response to historical releases of the dry cleaning solvent tetrachloroethene (PCE) at the property at 700 Dexter Avenue North (BMR-Dexter Property), which resulted in a regional plume of chlorinated volatile organic compounds (CVOCs)[1] that has migrated through multiple water-bearing zones in the South Lake Union area (BMR-Dexter CVOC Plume).

Concentrations of CVOCs, specifically cDCE and vinyl chloride, that are attributable to the BMR-Dexter CVOC Plume are known to be present at, and/or immediately north-northwest of, Block

[1] The CVOCs include PCE; trichloroethene (TCE); isomers of dichloroethene, primarily cis-1,2-dichloroethene (cDCE); and vinyl chloride.

38 West. This Technical Memorandum provides a general overview of hydrogeologic units in the vicinity of Block 38 West, groundwater flow under static[2] (e.g. non-pumping) and pumping conditions, distribution of the BMR-Dexter CVOC Plume, and other information pertinent to development of the Groundwater Monitoring Program.

GROUNDWATER ZONES PRESENT IN SOUTH LAKE UNION AREA

Previous investigations in the South Lake Union area have described three water-bearing zones based on the lithologic unit in which they are encountered. These zones have varying degrees of hydraulic interconnection dependent on the location. The water-bearing zones at Block 38 West are summarized as follows:

- The uppermost water-bearing zone encountered on Block 38 West is the Shallow Water-Bearing Zone. The Shallow Water-Bearing Zone comprises fill and underlying recent deposits. At Block 38 West, the Shallow Water-Bearing Zone varies in thickness from approximately 5 to 15 feet and is first encountered at elevations between 22 and 25 feet North American Vertical Datum 1988 (NAVD88).
- The Intermediate Water-Bearing Zone[3] refers to groundwater encountered in consolidated glacial deposits. Typically, these deposits comprise dense silty sands and stiff sandy silts. The Intermediate Water-Bearing Zone is first encountered at approximate elevations of 5 to 10 feet NAVD88. Based on previous subsurface investigations, the Shallow Water-Bearing Zone is in direct communication with the Intermediate Water-Bearing Zone on Block 38 West.
- The Deep Outwash Aquifer refers to groundwater first encountered at approximate elevations of -30 to -40 feet NAVD88 in outwash sands with minor silt content below the consolidated glacial deposits.

At Block 38 West, the vertical gradient between the water-bearing zones is relatively small (e.g., approximately 1 foot downward) and groundwater levels have ranged from 16 to 18 feet NAVD88.

GROUNDWATER FLOW UNDER STATIC CONDITIONS

Under static conditions, there is typically a downward vertical gradient present from the Shallow Water-Bearing Zone to the Intermediate Water-Bearing Zone and from the Intermediate Water-Bearing Zone to the Deep Outwash Aquifer in the South Lake Union area. In the area west of Terry Avenue North where no aquitard is present between the Shallow and Intermediate Water-Bearing Zones or between the Intermediate Water-Bearing Zone and the Deep Outwash Aquifer, groundwater from the Shallow Water-Bearing Zone discharges to the Intermediate Water-Bearing Zone and from the Intermediate Water-Bearing Zone to the Deep Outwash Aquifer as groundwater flows from west to east. A detailed description of the evidence supporting this conceptual model

[2] Static conditions in this Technical Memorandum refers to periods when no groundwater extraction is occurring for the purposes of construction dewatering or groundwater treatment, or for other purposes.

[3] The Intermediate Water-Bearing Zone is sometimes further divided into an "A" and "B" units. For the purposes of this Technical Memorandum, this subdivision was not considered necessary.

of groundwater flow under static conditions is not presented in this Technical Memorandum but can be provided upon request[4].

DISTRIBUTION OF BMR-DEXTER CVOC PLUME

The BMR-Dexter CVOC Plume currently extends more than 1,000 feet from the BMR-Dexter Property to the east-southeast as shown on Figure 2[5]. While construction dewatering associated with neighboring properties has had short-term, temporary impacts on the BMR-Dexter CVOC Plume, its current footprint is the result of significant releases of CVOCs to groundwater at the BMR Dexter Property beginning in 1966, followed by decades of down-gradient migration under static conditions (i.e., west to east).

Construction dewatering events were limited in duration and are relatively recent compared to the decades since dry cleaning services started at the BMR-Dexter Property and releases of PCE occurred to the subsurface. During most of the period when the BMR-Dexter CVOC Plume was migrating down-gradient of BMR-Dexter Property source areas, groundwater flow occurred under static conditions from west to east, including in the Intermediate Water-Bearing Zone and Deep Outwash Aquifer. Temporary variations in groundwater flow in the Intermediate Water-Bearing Zone and/or Deep Outwash Aquifer may have occurred during some construction dewatering or other groundwater extraction events for limited periods of time.

OVERVIEW OF CONSTRUCTION DEWATERING AT BMR-DEXTER PROPERTY

It is Farallon's understanding based upon submissions to Ecology by BMR-Dexter LLC that construction dewatering at the BMR-Dexter Property commenced on August 9, 2019[6], and will continue for approximately 14 months during construction of two 14-story towers above three levels of subgrade parking[7]. The purpose of the construction dewatering system is to lower the groundwater table to an elevation below the base of the BMR-Dexter Property parking garage foundation (i.e., to below 1.6 feet NAVD88), which is up to 35 feet below the static groundwater level, prior to construction.

During the period of construction dewatering, groundwater beneath the BMR-Dexter Property and surrounding properties, including Block 79 to the east and Blocks 49 and 84 (City Mega Block) to

---

[4] Briefly, comparison of groundwater elevations between appropriately screened wells that progress along the static-condition groundwater flow line from the BMR-Dexter Property to the east show positive head differences from the Shallow to Intermediate Water-Bearing Zones and from the Intermediate Water-Bearing Zone to the Deep Outwash Aquifer.

[5] Approximate extent is based on groundwater data reported in the *Revised Agency Review Draft Remedial Investigation/Feasibility Study Work Plan, American Linen Supply Co – Dexter Avenue Site, 700 Dexter Avenue North, Seattle, Washington* dated April 15, 2019, prepared by PES Environmental, Inc. for the Washington State Department of Ecology (Ecology) (Draft RI/FS Report).

[6] Letter regarding Progress Report No. 22 – August 2019, American Linen Supply Co – Dexter Ave Site, Agreed Order No. DE 14302 dated September 13, 2019, from Mr. Daniel A. Balbiani of PES Environmental, Inc. to Ms. Tamara Cardona of Ecology.

[7] Pumping started on the northwestern leg of the BMR-Dexter Property dewatering system on August 6, 2019 and on the southern and eastern legs on August 19, 2019. An estimated 14-month construction period would result in system shut-down on or approximately on October 2020.

the south, will be within the radius of influence of the construction dewatering system. As a result, the direction of groundwater flow will be altered to flow radially toward the BMR-Dexter Property (e.g., groundwater at Block 79 will reverse from the static condition west-to-east flow direction and will flow east-to-west toward the BMR-Dexter Property).

OVERVIEW OF CONSTRUCTION DEWATERING AT BLOCK 38 WEST

Construction dewatering at Block 38 West will commence on approximately on December 30, 2019 and will continue for approximately 9 months during construction of a multistory mixed-use building with five stories above street level and four levels of parking below street level[8]. The objective of the construction dewatering system is to lower the groundwater table to an elevation below the base of the Block 38 West parking garage foundation (i.e., to below -10 feet NAVD88[9]), which is just over 25 feet below the static groundwater level prior to construction. During the period of construction dewatering, groundwater beneath Block 38 West and surrounding properties, including Block 37 to the north and Block 43 to the northwest, will be within the radius of influence of the construction dewatering system. As a result, the direction of groundwater flow will be altered to flow radially toward Block 38 West.

Although the current concentrations of CVOCs in the Deep Outwash Aquifer at Block 38 West (less than 1 microgram per liter of cDCE at monitoring wells FMW-137 and FMW-138) are less than the proposed screening levels for the American Linen Supply Co. – Dexter Avenue Site, concentrations of CVOCs exceeding the screening levels are present at distal end of the BMR-Dexter CVOC Plume on the western portion of Block 37 to the north (Figure 2). It is expected that much of the BMR-Dexter CVOC Plume mass presently located within approximately 400 to 500 feet[10] of Block 38 West will be extracted during the period of construction dewatering system operation. The extracted BMR-Dexter CVOC Plume mass will be treated prior to discharge in accordance with the Interim Action Work Plan and applicable permit requirements, including Administrative Order Docket No. 16592.

EFFECTS OF CONCURRENT CONSTRUCTION DEWATERING

As stated above, construction dewatering at the BMR-Dexter Property will lower the groundwater table up to 35 feet, while construction dewatering at Block 38 West will lower the groundwater table approximately 26 to 28 feet below static groundwater levels. Because both systems will have similar cones of depression (e.g., depressions in the water table surface associated with groundwater withdrawal), it is anticipated that contamination at, and proximate to, each property will not be drawn toward the other property. As a result of concurrent construction dewatering at the BMR-Dexter Property and Block 38 West, a temporary groundwater divide will develop centered in the vicinity of the intersection of Valley Street and 9th Avenue North, oriented

[8] The estimated 9-month dewatering schedule will result in system shut-down beginning in early September 2020.

[9] *Groundwater Control Plan, Block 38, Seattle, Washington* dated October 17, 2018, prepared for GLY Construction by Middour Consulting, LLC.

[10] The distance from Block 38 West that CVOC mass will be captured is dependent on the groundwater extraction rate during dewatering; the length of the dewatering at Block 38 West; the presence of a groundwater divide during concurrent construction dewatering at the both the BMR-Dexter Property and Block 38 West; and other hydrogeologic and fate and transport factors.

approximately north-northeast to south-southwest (Figure 2). Groundwater north and west of the divide will flow toward the BMR-Dexter Property construction dewatering system. Groundwater south and east of the divide will flow toward the Block 38 West construction dewatering system.

This condition is shown schematically on Figure 2 both in plan view and in profile. On the plan view, the approximate presently known extent of the BMR-Dexter CVOC Plume is shown in red shading[11] and the blue arrows depict the radial inward groundwater flow direction during construction dewatering at the BMR-Dexter Property and Block 38 West. The profile A-A'-A" depicts the static and depressed groundwater levels and the groundwater divide that will temporarily be present between the properties during concurrent construction dewatering events.

The Block 38 West construction dewatering system is expected to capture groundwater at the distal end of the BMR-Dexter CVOC Plume located south and east of the groundwater divide (Figure 2). As the Block 38 West construction dewatering system operates, radial flow toward Block 38 West will develop. This radial flow will include a slightly more south-southeastern groundwater flow in the area of Block 43 on the southeastern side of the groundwater divide compared to static conditions.

RATIONALE FOR GROUNDWATER MONITORING PROGRAM

The purpose of the Groundwater Monitoring Program is to monitor groundwater with measurable concentrations of CVOCs that are associated with the BMR-Dexter CVOC Plume that will be affected by construction dewatering. Figure 3 shows the locations of the wells that will be sampled in conjunction with the Groundwater Monitoring Program proximate to the BMR-Dexter CVOC Plume, and summarizes analytical results for prior monitoring events at each well for which data are available.

Table 1 presents detailed information for each of the wells selected for inclusion in the Groundwater Monitoring Program and the rationale for selection as a monitoring point. The south-southeastern flow direction during construction dewatering in the area of the distal portion of the BMR-Dexter CVOC Plume is referred to as a "temporary flow path" in Table 1. With the exception of monitoring well FMW-141, located west of the temporary groundwater divide, and monitoring well MW113, located in the approximate vicinity of the temporary groundwater divide, the current concentrations of CVOCs at selected Groundwater Monitoring Program wells are low compared to CVOC concentrations within the radius of influence of the BMR-Dexter Property dewatering system.

The frequency of sampling at each well has been selected based on the location of the well along the temporary flow paths and proximity to the BMR-Dexter CVOC Plume. All wells will be sampled prior to start-up and after shut-down of the Block 38 West construction dewatering system to obtain baseline and completion groundwater quality data.

[11] Based on data reported in the Draft RI/FS Report.

Sampling frequencies for selected wells included in the Groundwater Monitoring Program are described below:

- Monthly Sampling Events (dewatering wells DW-16, DW-17, and DW-18; interim action well IA-1; and geotechnical well GEI-2): These wells are located adjacent to Block 38 West or immediately up-gradient of Block 38 West on Block 37. This frequency of monitoring will support near-term decision making for treatment options of the extracted groundwater.
- Monthly and/or Bimonthly Sampling Events (monitoring wells MW113, MW119, FMW-129, FMW-140, and FMW-141): These wells are located within the current footprint of the BMR-Dexter CVOC Plume in areas further from Block 38 West than the wells to be sampled monthly.
    - CVOC mass[12] migrating on temporary flow paths passing monitoring wells MW119, FMW-129, and FMW-140 during the first few months of Block 38 West construction dewatering system operation will reach Block 38 West. CVOC mass migrating on temporary flow paths passing these wells after approximately 4 to 5 months of operation will not reach the Block 38 West construction dewatering system before it is turned off; therefore, the frequency of monitoring will be decreased during the latter half of operation of the Block 38 West construction dewatering system.
    - CVOC mass at monitoring well MW113 may not be captured by the Block 38 West construction dewatering system because of its position relative to the temporary groundwater divide, where the gradient will be relatively flat and the groundwater flow velocity correspondingly low.
    - CVOC mass[13] at monitoring well FMW-141 will be within the radius of influence of the BMR-Dexter Property construction dewatering system and will not migrate toward Block 38 West during concurrent dewatering at both properties.
- Bimonthly Sampling Events (monitoring wells MW128 and FMW-131, and interim action well IA-4): These wells are located at the northeastern edge of the current BMR-Dexter CVOC Plume footprint. The temporary flow paths at these wells will be southerly during operation of the Block 38 West construction dewatering system. It is expected that CVOC concentrations to the north of these wells will be less than the proposed screening levels for the American Linen Supply Co. – Dexter Avenue Site and may be less than laboratory reporting limits. As Block 38 West construction dewatering progresses, CVOC concentrations are expected to decline at monitoring wells MW128 and FMW-131 and remain reported non-detect at interim action well IA-4. A bimonthly sampling frequency for these wells will be sufficient to confirm the expected trend of CVOC concentrations at this area of the BMR-Dexter CVOC Plume.

[12] CVOCs, including cDCE and vinyl chloride. TCE may potentially reach the Block 38 West construction dewatering system. PCE is not anticipated to reach the Block 38 West construction dewatering system.
[13] Including PCE and PCE breakdown products.

- No Sampling During Construction Dewatering (monitoring wells FMW-137 and FMW-138): Groundwater monitoring at other wells near monitoring well FMW-137 make it unnecessary to collect groundwater samples at this location during dewatering. The temporary flow path at monitoring well FMW-138 will be from south to north and is not associated with the area of the BMR-Dexter CVOC Plume that currently exceeds screening levels (Figure 2). Monitoring wells FMW-137 and FMW-138 will be sampled prior to start-up and after shut-down of the Block 38 West construction dewatering system to obtain baseline and completion groundwater quality data.

The data collected during the Groundwater Monitoring Program will be used to make any necessary modifications to the dewatering treatment system to maintain compliance with established Indicator Levels as required under Administrative Order Docket No. 16592. Groundwater monitoring data will also document the anticipated reduction in CVOC mass within the eastern portion of the BMR-Dexter CVOC Plume.

Shallow groundwater will not be monitored during the Groundwater Monitoring Program because no residual source of CVOCs to shallow groundwater has been identified in the area northwest of Block 38 West and east-southeast of the BMR-Dexter Property within the footprint of the BMR-Dexter CVOC Plume. Documentation supporting this finding is in preparation and will be provided to Ecology under separate cover.

Attachments: Figure 1, *South Lake Union Vicinity*
Figure 2, *Schematic of Groundwater Flow Concurrent Construction Dewatering*
Figure 3, *Historical Groundwater CVOC Results Groundwater Performance Monitoring Well Network*
Table 1, *Groundwater Monitoring Rationale*

EB/CS:mm

FIGURES

GROUNDWATER MONITORING PROGRAM
South Lake Union Block 38 West Property
Seattle, Washington

Farallon PN: 397-061

LEGEND

KING COUNTY PARCEL BOUNDARY

52 BLOCK DESIGNATION

N

0 150

SCALE IN FEET

NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

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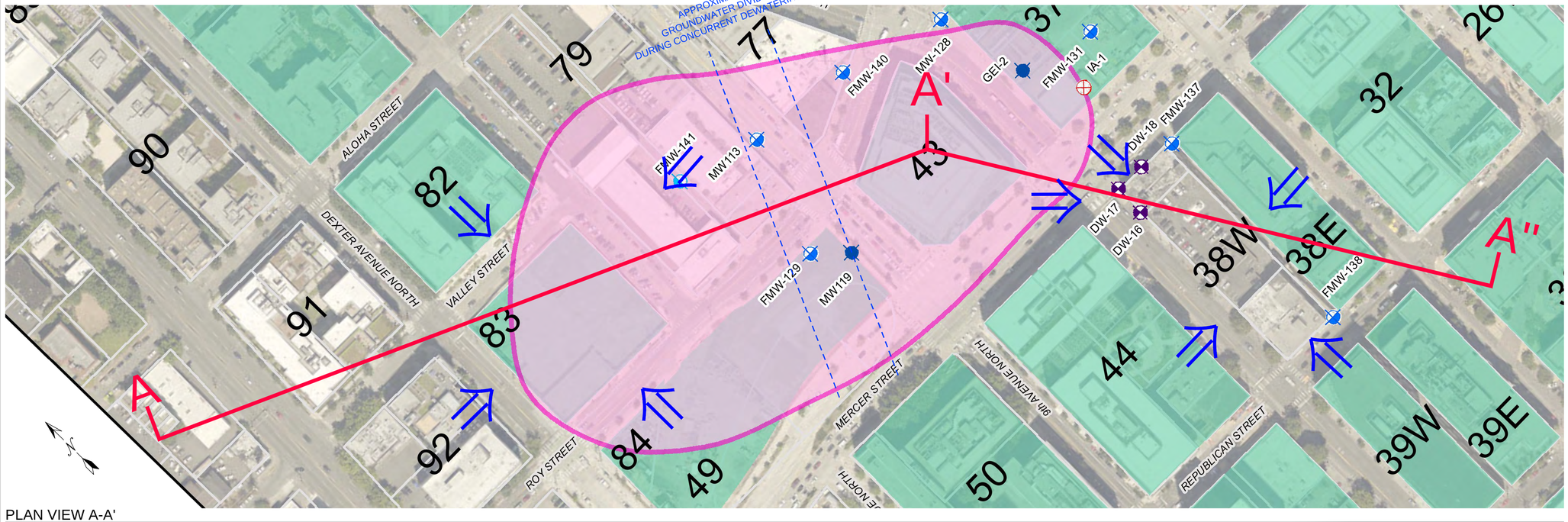
FIGURE 1

SOUTH LAKE UNION VICINITY
GROUNDWATER PERFORMANCE
MONITORING PROGRAM RATIONALE
BLOCK 38 WEST PROPERTY AREA
SEATTLE, WASHINGTON

FARALLON PN: 397-061

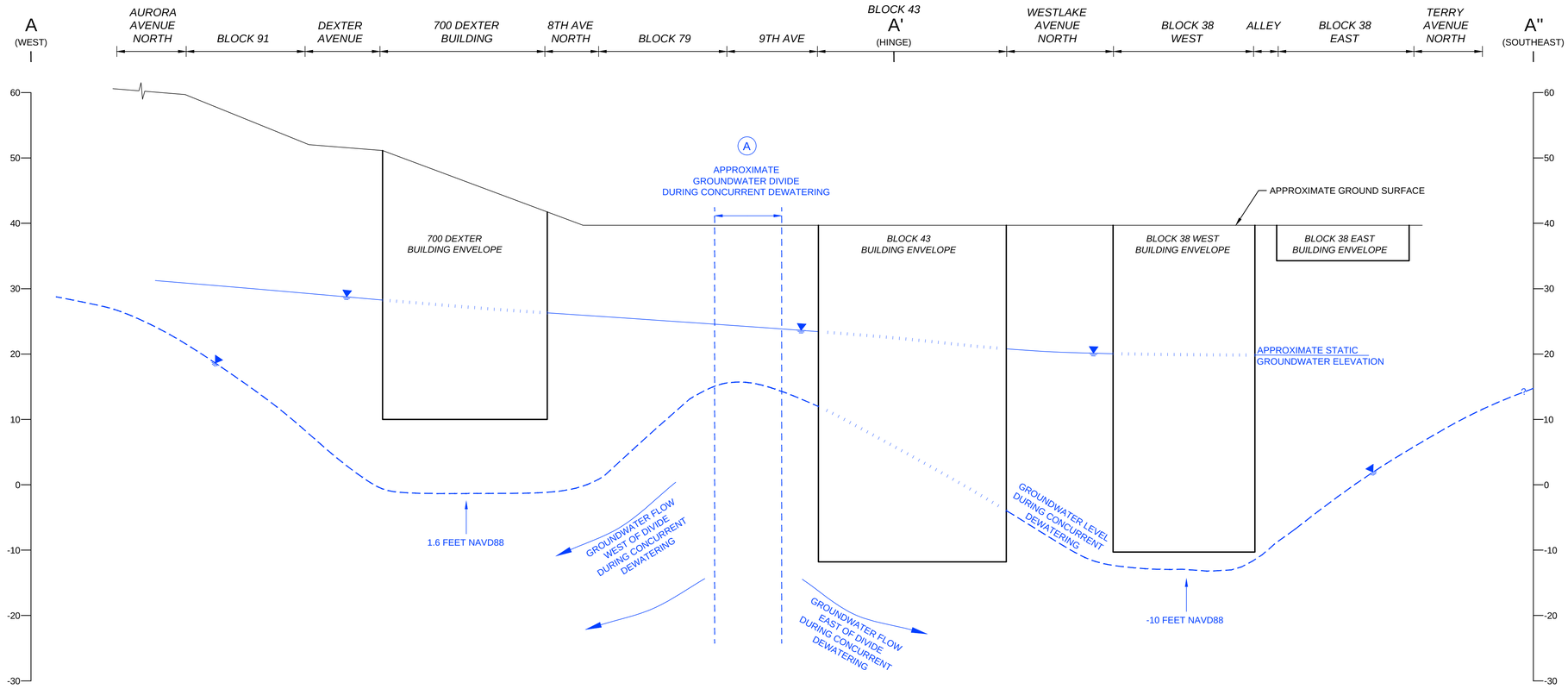
Drawn By: jjones | Checked By: EB | Date: 12/30/2019 | Disc Reference:

Path: \\edgefs02\GIS\Projects\397 VULCAN\061 Block 38 CVOCs\Mapfiles\008_GW_Monitoring\Figure-01_SLU_VicinityMap.mxd



PLAN VIEW A-A'

1" = 100'(H)



PROFILE VIEW A-A'

1" = 100'(H), 1" = 10'(V)

NOTE:
(A) LOCATION MAY VARY SLIGHTLY BASED ON PUMPING RATES AT BMR-DEXTER PROPERTY AND BLOCK 38 WEST PROPERTY.

LEGEND

- CURRENT KNOWN EXTENT OF BMR-DEXTER CVOC PLUME
- SHALLOW WATER-BEARING ZONE WELL
- INTERMEDIATE WATER-BEARING ZONE WELL
- INTERMEDIATE "A" WATER-BEARING ZONE WELL
- INTERMEDIATE "B" WATER-BEARING ZONE WELL
- DEEP OUTWASH AQUIFER WELL
- INTERCEPTION WELL
- DEWATERING WELL
- REDEVELOPED PROPERTY WITH CONFIRMED DEWATERING
- APPROXIMATE GROUNDWATER ELEVATION (STATIC CONDITIONS)
- APPROXIMATE GROUNDWATER ELEVATION DURING CONCURRENT DEWATERING AT BMR-DEXTER AND BLOCK 38 WEST PROPERTIES
- APPROXIMATE POTENTIOMETRIC SURFACE FOR GROUNDWATER WITHIN BUILDING ENVELOPE
- 52 BLOCK DESIGNATION
- A A' A'' LINE OF PROFILE
- APPROXIMATE GROUNDWATER FLOW DIRECTION

10' 0' 100'

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FIGURE 2

SCHEMATIC OF GROUNDWATER FLOW
CONCURRENT CONSTRUCTION DEWATERING
BLOCK 38 WEST AND BMR-DEXTER PROPERTIES
SEATTLE, WASHINGTON

FARALLON PN: 397-061

Drawn By: NM | Checked By: EB | Date: 12/30/2019 | Disk Reference: 397-061 X-Section

LAKE UNION

8th AVENUE NORTH

9th AVENUE NORTH

MW113
12/21/2012 |1.3|**440**|**5,500**|**150**
12/19/2013 |<1|**13**|**140**|**0.41**
6/25/2015 |<1|**19**|**670**|**17**
10/27/2015 |<1|4.5|**670**|**17**
2/3/2016 |<1|1.1|**1,500**|**13**
3/22/2017 |<0.199|**27.1**|**7,280**|**63.5**
6/16/2017 |0.522|**148**|**4,750**|**53.3**
4/11/2018 |**191**|**1,100**|**3,720**|**34.9**
1/30/2019 |<0.995|2.81|**6,330**|**34.8**
2/7/2019 |<0.199|1.77|**6,990**|**46.0**
11/11/2019 |<50|<50|**8,200**|**950**

FMW-141
7/26/2019 |<30|**2,800**|**6,200**|**820**
11/11/2019 |<20|<20|**3,500**|**2,900**

FMW-142
7/26/2019 |< 0.20|0.38|0.36|< 0.20

FMW-143
7/30/2019 |< 0.20|< 0.20|< 0.20|< 0.20

FMW-140
7/17/2019 |<2.0|<2.0|**280**|**320**
11/12/2019 |<4.0|<4.0|**310**|**510**

BLOCK 77

BLOCK 79 WEST

BLOCK 79 EAST

BROAD STREET

MW-128
1/13/2014 |<1|<1|**960**|**290**
4/22/2015 |<1|<1|**150**|**59**
10/20/2015 |<1|<1|7.0|**95**
2/2/2016 |<1|<1|**70**|**140**
3/29/2017 |<0.199|<0.153|7.16|**72.4**
6/21/2017 |<0.199|<0.153|**109**|**195**
4/9/2018 |<0.199|<0.153|3.07|**31.0**
12/30/2018 |<1.0|<1.0|5.0|**110**
11/11/2019 |<0.40|<0.40|1.4|**60**

IA-4
12/29/2018 |-14.84 ft|<0.20|<0.20|<0.20|<0.20
12/29/2018 |-28.84 ft|<0.20|<0.20|<0.20|<0.20
12/29/2018 |-42.84 ft|<0.20|<0.20|<0.20|<0.20
12/29/2018 |-56.84 ft|<0.20|<0.20|<0.20|<0.20
11/11/2019 |-0.84 ft|<0.20|<0.20|<0.20|<0.20
11/11/2019 |-30.84 ft|<0.20|<0.20|<0.20|<0.20
11/11/2019 |-60.84 ft|<0.20|<0.20|<0.20|<0.20

VALLEY STREET

FMW-129
5/23/2014 |0.40|0.57|**17**|**7.6**
10/20/2015 |**25**|**39**|**250**|<0.2
2/2/2016 |**13**|**61**|**240**|**0.330**
4/10/2017 |**194**|**492**|**1,420**|**0.885**
6/23/2017 |**81.1**|**182**|**474**|**0.413**
11/12/2019 |**79**|**130**|**340**|<2.0

WASHINGTON BUILDERS LLC PROPERTY

MW119
3/25/2013 |<1|<1|3.3|<0.2
12/19/2013 |<1|<1|2.5|**0.76**
4/21/2015 |**34**|**42**|**50**|**3.1**
6/17/2015 |4.9|**7.1**|**52**|**2.7**
10/20/2015 |**15**|**22**|**74**|**0.45**
2/2/2016 |**7.3**|**24**|**100**|**0.45**
3/29/2017 |**5.47**|**10.7**|**42.9**|**0.272**
6/28/2017 |**19.0**|**12.4**|5.99|<0.118
4/5/2018 |2.14|3.02|**18.3**|<0.118
1/21/2019 |1.24|<0.153|<0.0933|<0.118
11/11/2019 |3.7|**9.5**|10|<0.20

BLOCK 49

BLOCK 43

WESTLAKE AVENUE NORTH

GEI-2
3/24/2017 |<0.199|<0.153|2.25|**6.94**
6/23/2017 |<0.199|<0.153|**16.3**|**127**
12/29/2018 |<0.40|<0.40|6.7|**60**
11/11/2019 |<1.0|<1.0|**18**|**92**

TERRY AVENUE NORTH

FMW-131
9/2/2016 |< 0.20|< 0.20|**41**|**1.7**
3/24/2017 |< 0.199|< 0.153|**45.6**|**0.249**
6/23/2017 |< 0.199|< 0.153|3.61|**0.264**
12/18/2017 |< 0.20|< 0.20|0.61|< 0.20

IA-1
12/29/2018 |-15.41 ft|<0.20|<0.20|**43**|**36**
12/29/2018 |-29.41 ft|<0.20|<0.20|**46**|**40**
12/29/2018 |-43.41 ft|<0.20|<0.20|**48**|**41**
12/29/2018 |-57.41 ft|<0.20|<0.20|**48**|**37**
11/11/2019 |0.59 ft|<1.0|<1.0|**140**|**2.9**
11/11/2019 |-29.41 ft|<1.0|<1.0|**120**|**2.3**
11/12/2019 |-59.41 ft|<0.20|<0.20|6.9|**6.2**

BLOCK 37

BLOCK 31

MERCER STREET

DW-17
DW-18
DW-16

FMW-137
5/6/2019 |<0.20|<0.20|1.3|<0.20
7/8/2019 |<0.20|<0.20|1.3|<0.20
10/14/2019 |<0.20|<0.20|1.1|<0.20
11/11/2019 |<0.20|<0.20|1.3|<0.20

BLOCK 50

BLOCK 44

BLOCK 38 WEST

BLOCK 38 EAST

BLOCK 32

FMW-138
5/6/2019 |<0.20|<0.20|0.38|<0.20
7/8/2019 |<0.20|<0.20|0.34|<0.20
10/14/2019 |<0.20|<0.20|0.33|<0.20
11/11/2019 |<0.20|<0.20|0.37|<0.20

REPUBLICAN STREET

Pictometry, King County

LEGEND

- SHALLOW WATER-BEARING ZONE WELL
- INTERMEDIATE WATER-BEARING ZONE WELL
- INTERMEDIATE "A" WATER-BEARING ZONE WELL
- INTERMEDIATE "B" WATER-BEARING ZONE WELL
- DEEP OUTWASH AQUIFER WELL
- INTERCEPTION WELL
- DEWATERING WELL
- KING COUNTY PARCEL BOUNDARY

CONCENTRATIONS REPORTED AS: SAMPLE DATE | PCE | TCE | cis-1,2-DCE | VC
EXCEPT FOR WELLS IA-1 AND IA-4
IA-1 AND IA-4 REPORTED AS:
SAMPLE DATE | SAMPLE ELEVATION IN FEET NAVD88 | PCE | TCE | cis-1,2-DCE | VC
ANALYTICAL RESULTS IN MICROGRAMS PER LITER

BOLD = CONCENTRATIONS THAT EXCEED THE MTCA CLEANUP LEVEL
< = ANALYTE NOT DETECTED AT OR EXCEEDING THE LABORATORY REPORTING LIMIT LISTED
CVOC = CHLORINATED VOLATILE ORGANIC COMPOUND
PCE = TETRACHLOROETHENE
TCE = TRICHLOROETHENE
cis-1,2-DCE = cis-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION

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FIGURE 3

HISTORICAL GROUNDWATER CVOC RESULTS
GROUNDWATER PERFORMANCE MONITORING WELL NETWORK
BLOCK 38 WEST PROPERTY AREA
SEATTLE, WASHINGTON

FARALLON PN: 397-061

Drawn By: jjones | Checked By: EB | Date: 12/30/2019 | Disc Reference:
Path: Q:\Projects\397 VULCAN\061 Block 38 CVOCs\Mapfiles\008_GW_Monitoring\Figure-03_GW_CVOCs.mxd

TABLE

GROUNDWATER MONITORING PROGRAM
South Lake Union Block 38 West Property
Seattle, Washington

Farallon PN: 397-061

Table 1
Rationale Deep Outwash Aquifer Groundwater Performance Monitoring
South Lake Union Area Block 38 West Property
Seattle, Washington
Farallon PN: 397-061

Well No.	Well Screen Completion Depth (feet bgs)	Well Screen Completion Elevation (feet)	Well Classification	Selection Rationale
City Mega Block (Southwest of 9th Avenue North and Broad Street)				
MW119	35.0 to 45.0	2.74 to -7.26	Intermediate	Intermediate monitoring well located on a temporary southeasterly flow path within the predicted radius of influence of the Block 38 West construction dewatering system.
FMW-129	84.2 to 89.2	-45.56 to -50.56	Deep	Deep Outwash Aquifer monitoring well located on a temporary southeasterly flow path within the predicted radius of influence of construction dewatering system at Block 38 West. Monitoring well FMW-129 is anticipated to be beyond the radius of influence of the BMR-Dexter Property construction dewatering system during concurrent dewatering with Block 38 West.
Block 37 Property				
GEI-2	50.5 to 60.5	-21.12 to -31.12	Intermediate/Deep	Intermediate/Deep Outwash Aquifer monitoring well within the predicted radius of influence of the Block 38 West construction dewatering system. Groundwater will temporarily flow more directly south relative to static conditions.
MW128	60 to 70	-30.80 to -40.80	Deep	Deep Outwash Aquifer monitoring well within the predicted radius of influence of the Block 38 West construction dewatering system. Groundwater will temporarily flow more directly south relative to static conditions.
FMW-131	62.5 to 72.5	-34.65 to -44.65	Deep	Deep Outwash Aquifer monitoring well within the predicted radius of influence of the Block 38 West construction dewatering system. Groundwater flow direction during construction dewatering at Block 38 West will be similar to static conditions.
IA-1 [2]	32 to 92	0.59 to -59.41	Deep	Interim action well within the predicted radius of influence of the Block 38 West construction dewatering system. The screened interval of this well allows for reconnaissance sampling of Intermediate Water-Bearing Zone and Deep Outwash Aquifer groundwater proximate to Block 38 West. Groundwater flow direction during construction dewatering at Block 38 West will be similar to static conditions.
IA-4 [2]	32 to 92	-0.84 to -60.84	Deep	Interim action well within the predicted radius of influence of the Block 38 West construction dewatering system. The screened interval of this well allows for reconnaissance sampling of Intermediate Water-Bearing Zone and Deep Outwash Aquifer groundwater slightly beyond the northeastern boundary of the current footprint of the BMR-Dexter CVOC Plume.
Block 38 Property				
FMW-137	72.0 to 85.0	-44.9 to -57.9	Deep	Deep Outwash Aquifer monitoring well northeast-adjacent to the Block 38 West construction dewatering system.
FMW-138	90.0 to 100.0	-45.96 to -55.96	Deep	Deep Outwash Aquifer monitoring well southeast-adjacent to the Block 38 West construction dewatering system.
DW-16 [3]	24 to 64	10 to -30	Dewatering	Dewatering well at the northern end of the western edge of Block 38 West. Samples collected from this and adjacent dewatering wells are expected to quantify some of the highest relative impacts from the BMR-Dexter CVOC Plume, if observed.
DW-17 [3]	22 to 62	10 to -30	Dewatering	Dewatering well at the northwestern corner of Block 38 West. Samples collected from this and adjacent dewatering wells are expected to quantify the highest relative impacts from the BMR-Dexter CVOC Plume, if observed.
DW-18 [3]	21 to 61	10 to -30	Dewatering	Dewatering well on the northern portion of Block 38 West. Samples collected from this and adjacent dewatering wells are expected to quantify some of the highest relative impacts from the BMR-Dexter CVOC Plume, if observed.

Table 1
Rationale Deep Outwash Aquifer Groundwater Performance Monitoring
South Lake Union Area Block 38 West Property
Seattle, Washington
Farallon PN: 397-061

Well No.	Well Screen Completion Depth (feet bgs)	Well Screen Completion Elevation (feet)	Well Classification	Selection Rationale
Block 77 Property				
FMW-140	70.0 to 80.0	-38.0 to -48.0	Deep	Deep Outwash Aquifer monitoring well near the edge of the predicted radius of influence of the Block 38 West construction dewatering system during concurrent dewatering at the 700 Dexter Property. Block 38 West construction dewatering influence on groundwater flow direction is expected to be limited.
Block 79 Property				
FMW-141	47.6 to 57.5	-12.45 to -22.35	Intermediate	Intermediate Zone monitoring well within the radius of influence of the BMR-Dexter Property construction dewatering system and beyond the radius of influence of the Block 38 West construction dewatering system.
MW113	70.0 to 80.0	-36.80 to -46.80	Deep	Deep Outwash Aquifer monitoring well at the outer limit of the estimated radius of influence of the Block 38 West construction dewatering system during concurrent dewatering at the 700 Dexter Property. Block 38 West construction dewatering influence on groundwater flow direction is expected to be limited.

NOTES:

[1] Construction dewatering at Block 38 West is scheduled to begin in late December 2019.

[2] Low-flow samples to be collected at top, middle, and bottom of interim action well screen (60-foot total installed length).

[3] Groundwater collected from sampling port installed at well header during construction dewatering.

Intermediate = Intermediate Water-Bearing Zone

Deep = Deep Outwash Aquifer

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
City Mega Block (southwest of 9th Avenue North and Broad Street)						
FMW-129	84.2 to 89.2	-45.56 to -50.56	38.31	11/11/2019	21.81	16.50
				12/18/2019	21.90	16.41
				3/24/2020	27.41	10.90
				4/27/2020	29.19	9.12
				5/19/2020	29.42	8.89
				7/28/2020	29.05	9.26
				9/17/2020	30.06	8.25
				12/3/2020	29.45	8.86
				2/14/2022	20.30	18.01
MW-119	35.0 to 45.0	2.74 to -7.26	37.42	11/11/2019	20.74	16.68
				1/14/2020	22.51	14.91
				2/18/2020	25.60	11.82
				3/24/2020	28.36	9.06
				4/27/2020	29.24	8.18
				5/19/2020	29.53	7.89
				7/28/2020	30.07	7.35
				9/17/2020	32.21	5.21
				12/3/2020	29.40	8.02
				2/10/2021	24.85	12.57
				2/14/2022	18.83	18.59

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
Block 37 Property						
GEI-2	50.5 to 60.5	-21.12 to -31.12	29.38	11/11/2019	13.82	15.56
				12/18/2019	14.00	15.38
				1/14/2020	16.50	12.88
				2/17/2020	20.78	8.60
				3/24/2020	22.52	6.86
				4/27/2020	23.01	6.37
				6/29/2020	22.98	6.40
				7/29/2020	23.53	5.85
				8/26/2020	23.51	5.87
				9/17/2020	23.32	6.06
				12/3/2020	22.85	6.53
				2/10/2021	18.20	11.18
				2/14/2022	12.02	17.36

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
IA-1	32.0 to 92.0	0.59 to -59.41	32.59	11/11/2019	16.85	15.74
				1/14/2020	19.91	12.68
				2/17/2020	25.38	7.21
				3/24/2020	27.15	5.44
				4/27/2020	27.24	5.35
				6/29/2020	27.45	5.14
				7/28/2020	28.06	4.53
				8/26/2020	28.05	4.54
				9/17/2020	27.71	4.88
				12/3/2020	26.92	5.67
				2/10/2021	21.26	11.33
				2/14/2022	14.3	18.29
				5/16/2022	13.56	19.03
IA-4	32.0 to 92.0	-0.84 to -60.84	31.16	11/11/2019	14.35	16.81
				2/17/2020	19.61	11.55
				4/27/2020	21.81	9.35
				6/29/2020	21.25	9.91
				8/26/2020	22.05	9.11
				12/3/2020	21.74	9.42
				2/10/2021	18.11	13.05
				2/14/2022	12.91	18.25
				5/16/2022	12.04	19.12

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
MW-128	60 to 70	-30.80 to -40.80	28.59	11/11/2019	12.49	16.10
				2/17/2020	18.11	10.48
				4/27/2020	20.15	8.44
				6/29/2020	20.13	8.46
				8/26/2020	20.55	8.04
				12/3/2020	20.21	8.38
				2/10/2021	16.38	12.21
				2/14/2022	11.00	17.59
FMW-131	62.5 to 72.5	-34.65 to -44.65	27.85	11/11/2019	12.13	15.72
				12/18/2019	12.31	17.78
				2/17/2020	20.13	7.72
				4/27/2020	22.45	5.40
				6/29/2020	22.34	5.51
				8/26/2020	23.55	4.30
				12/3/2020	22.11	5.74
				2/10/2021	17.24	10.61
				2/14/2022	10.37	17.48

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
Block 38 Property						
FMW-137	72.0 to 85.0	-44.9 to -57.9	30.09	11/20/2018	13.02	17.07
				12/28/2018	12.74	17.35
				3/14/2019	12.56	17.53
				5/6/2019	12.08	18.01
				7/8/2019	12.25	17.84
				10/14/2019	12.95	17.14
				11/11/2019	14.04	16.05
				12/18/2019	14.16	15.93
				2/14/2022	12.85	17.24
FMW-138	90.0 to 100.0	-45.96 to -55.96	40.44	11/20/2018	24.50	15.94
				12/28/2018	24.38	16.06
				3/14/2019	24.14	16.30
				5/6/2019	23.80	16.64
				7/8/2019	23.84	16.60
				10/14/2019	24.04	16.40
				11/11/2019	24.55	15.89
				12/18/2019	24.51	5.58
				2/14/2022	24.31	5.78
				5/16/2022	24.00	6.09

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
Block 77 Property						
FMW-140	70.0 to 80.0	-38.29 to -48.29	31.71	11/11/2019	15.36	16.35
				12/18/2019	15.54	16.17
				1/14/2020	17.22	14.49
				2/17/2020	20.28	11.43
				3/24/2020	22.04	9.67
				4/27/2020	22.43	9.28
				7/28/2020	23.07	8.64
				9/17/2020	23.23	8.48
				12/3/2020	22.70	9.01
				2/10/2021	19.05	12.66
				2/14/2022	13.83	17.88

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
Block 79 Property						
FMW-141	47.5 to 57.5	-12.35 to -22.35	35.15	11/11/2019	18.63	16.52
				12/18/2019	18.84	16.31
				1/14/2020	20.03	15.12
				2/17/2020	22.42	12.73
				3/24/2020	24.47	10.68
				4/27/2020	25.19	9.96
				7/28/2020	25.51	9.64
				9/17/2020	25.66	9.49
				12/3/2020	24.79	10.36
				2/10/2021	21.30	13.85
				2/14/2022	16.45	18.70

Table F-2
Groundwater Elevations
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Location	Screened Interval (feet bgs)[1]	Screened Interval (feet NAVD88)[2]	Top of Casing Elevation (feet NAVD88)[2]	Monitoring Date	Depth to Water (feet)[3]	Water Level Elevation (feet NAVD88)[2]
MW-113	70.0 to 80.0	-36.80 to -46.80	32.90	11/11/2019	16.41	16.49
				1/14/2020	18.04	14.86
				2/17/2020	20.79	12.11
				3/24/2020	22.72	10.18
				4/27/2020	23.19	9.71
				5/19/2020	23.38	9.52
				7/28/2020	23.72	9.18
				9/17/2020	23.89	9.01
				12/3/2020	23.34	9.56
				2/10/2021	19.80	13.10
				2/14/2022	14.58	18.32

Notes:

[1]Depth in feet below ground surface.

[2]In feet North American Vertical Datum of 1988.

[3]In feet below top of well casing.

bgs = below ground surface

NS = not surveyed

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Monitoring Well Groundwater Samples													
City Mega Block (southwest of 9th Avenue North and Broad Street)													
FMW-129	84.2 to 89.2	-45.56 to -50.56	5/23/2014	Farallon	F-MW-129-052314	---	48.06[4]	0.40	0.57	**17**	< 0.20	**7.6**	2.2
			10/20/2015	SES	---	---	48.06[4]	**25**	**39**	**250**	< 1	< 0.2	---
			2/2/2016	SES	---	---	48.06[4]	**13**	**61**	**240**	< 1	**0.33**	727
			4/10/2017	PES	---	---	48.06[4]	**194**	**492**	**1,420**	5.05	**0.885** J	1,605
			6/23/2017	PES	---	---	48.06[4]	**81.1**	**182**	**474**	1.21	**0.413**	1,148
			5/1/2019	PES	---	---	48.06[4]	**101**	**166**	**372**	1.22	< 0.59	---
			7/16/2019	PES	---	---	48.06[4]	**159**	**84.1**	**272**	1.61	**0.296** J	919
			10/21/2019	PES	---	---	48.06[4]	**114**	**198**	**350**	1.61	**0.259** J	1,351
			11/12/2019	Farallon	FMW-129-111219	86.7	-48.06	**79**	**130**	**340**	< 2.0	< 2.0	---
			1/14/2020[5]	Farallon	FMW-129-011420	86.7	-48.06	**130**	**170**	**290**	< 2.0	< 2.0	---
				PES	---	---	48.06[4]	**113**	**170**	**385**	1.60	< 1.18	---
			2/18/2020	Farallon	FMW-129-021820	86.7	-48.06	**110**	**170**	**310**	< 2.0	< 2.0	---
			3/25/2020	Farallon	FMW-129-032520	86.7	-48.06	**88**	**140**	**290**	< 2.0	**2.6**	111.5
			4/27/2020	Farallon	FMW-129-042720	86.7	-48.06	**74**	**88**	**190**	< 1.0	< 1.0	---
			5/19/2020	Farallon	FMW-129-051920	86.7	-48.06	**18**	**42**	**120**	< 1.0	**6.5**	18.5
			7/28/2020	Farallon	MW-129-072820	86.7	-48.06	**5.4**	**11**	**100**	< 0.80	< 0.80	---
			9/17/2020	Farallon	FMW-129-091720	86.7	-48.06	**6.1**	**13**	**70**	< 0.40	**0.85**	82.4
			12/3/2020	Farallon	FMW-129-120320	86.7	-48.06	**9.0**	**14**	**57**	< 0.40	< 0.40	---
			2/10/2021	Farallon	MW-129-021021	86.7	-48.06	1.9	4.6	**31**	< 0.20	< 0.20	---
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16[7]**	**160[7]**	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
City Mega Block (southwest of 9th Avenue North and Broad Street) (continued)													
MW-119	35.0 to 45.0	2.74 to -7.26	3/25/2013	SES	---	---	-2.26[4]	< 1	< 1	3.3	< 1	< 0.2	---
			12/19/2013	SES	---	---	-2.26[4]	< 1	< 1	2.5	< 1	**0.76**	3.3
			4/21/2015	SES	---	---	-2.26[4]	**34**	**42**	**50**	< 1	**3.1**	16
			6/17/2015	SES	---	---	-2.26[4]	4.9	**7.1**	**52**	< 1	**2.7**	19
			10/20/2015	SES	---	---	-2.26[4]	**15**	**22**	**74**	< 1	**0.45**	164
			2/2/2016	SES	---	---	-2.26[4]	**7.3**	**24**	**100**	< 1	**0.45**	222
			3/29/2017	PES	---	---	-2.26[4]	**5.47**	**10.7**	**42.9**	0.334 J	**0.272** J	158
			6/28/2017	PES	---	---	-2.26[4]	**19.0**	**12.4**	5.99	0.167 J	< 0.118	---
			4/5/2018	PES	---	---	-2.26[4]	2.14	3.02	**18.3**	0.203 J	< 0.118	---
			1/21/2019	PES	---	---	-2.26[4]	1.24	< 0.153	< 0.0933	< 0.152	< 0.118	---
			11/11/2019	Farallon	MW-119-111119	40.0	-2.26	3.7	**9.5**	10	< 0.20	< 0.20	---
			1/14/2020	Farallon	MW119-011420	40.0	-2.26	4.8	**5.1**	7.4	< 0.20	< 0.20	---
			2/18/2020	Farallon	MW-119-021820	40.0	-2.26	1.3	2.5	6.6	< 0.20	< 0.20	---
			3/24/2020	Farallon	MW119-032420	40.0	-2.26	0.24	0.87	4.7	< 0.20	< 0.20	---
			4/27/2020	Farallon	MW-119-042720	40.0	-2.26	0.32	1.3	5.1	< 0.20	< 0.20	---
			5/19/2020	Farallon	MW-119-051920	40.0	-2.26	0.91	2.8	6.1	< 0.20	< 0.20	---
			7/28/2020	Farallon	MW-119-072820	40.0	-2.26	0.92	2.6	7.5	< 0.20	< 0.20	---
			9/17/2020	Farallon	MW-119-091720	40.0	-2.26	0.27	1.8	7.8	< 0.20	< 0.20	---
			12/3/2020	Farallon	MW-119-120320	40.0	-2.26	0.28	1.2	6.6	< 0.20	< 0.20	---
			2/10/2021	Farallon	MW-119-021021	40.0	-2.26	< 0.20	0.46	5.0	< 0.20	< 0.20	---
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16[7]**	**160[7]**	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 37 Property													
GEI-2	50.5 to 60.5	-21.12 to -31.12	3/24/2017	PES	---	---	-26.12[4]	< 0.199	< 0.153	2.25	< 0.152	**6.94**	0.3
			6/23/2017	PES	---	---	-26.12[4]	< 0.199	< 0.153	**16.3**	< 0.152	**127**	0.1
			12/29/2018	Farallon	GEI-2-122918	56.0	-26.62	< 0.40	< 0.40	6.7	< 0.40	**60**	0.1
			4/22/2019	PES	---	---	-26.12[4]	< 0.199	< 0.153	11.5	< 0.152	**57.7** J	0.2
			7/16/2019	PES	---	---	-26.12[4]	< 0.199	< 0.153	1.37	< 0.152	**46.4**	0.03
			10/21/2019	PES	---	---	-26.12[4]	< 0.199	< 0.153	**20.1**	< 0.152	**88.2**	0.2
			11/11/2019	Farallon	GEI-2-111119	56.0	-26.62	< 1.0	< 1.0	**18**	< 1.0	**92**	0.2
			1/14/2020	Farallon	GEI-2-011420	56.0	-26.62	< 0.20	< 0.20	2.0	< 0.20	**36**	0.1
			1/22/2020	PES	---	---	-26.12[4]	< 0.199	0.192 J	0.308 J	< 0.152	< 0.118	---
			2/17/2020	Farallon	GE1-2-021720	56.0	-26.62	< 0.20	< 0.20	5.6	< 0.20	**34**	0.2
			3/25/2020	Farallon	GEI-2-032520	56.0	-26.62	< 0.40	< 0.40	4.3	< 0.40	**52**	0.1
			4/27/2020	Farallon	GEI-2-042720	56.0	-26.62	< 0.40	< 0.40	3.2	< 0.40	**50**	0.1
			5/19/2020	Farallon	GEI-2-051920	56.0	-26.62	< 0.40	< 0.40	2.7	< 0.40	**55**	0.05
			6/29/2020	Farallon	GEI-2-062920	56.0	-26.62	< 0.20	< 0.20	1.6	< 0.20	**33**	0.05
			7/29/2020	Farallon	GEI-2-072920	56.0	-26.62	< 0.20	< 0.20	1.3	< 0.20	**46**	0.03
			8/26/2020	Farallon	GEI-2-082620	56.0	-26.62	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			9/17/2020	Farallon	GEI-2-091720	56.0	-26.62	< 0.40	< 0.40	1.0	< 0.40	**48**	0.02
			12/4/2020	Farallon	GEI-2-120420	56.0	-26.62	< 0.20	< 0.20	0.52	< 0.20	**21**	0.02
			2/11/2021	Farallon	GEI-2-021121	56.0	-26.62	< 0.20	< 0.20	0.43	< 0.20	**16**	0.03
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16**[7]	**160**[7]	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 37 Property (continued)													
IA-1	32.0 to 92.0	0.59 to -59.41	12/29/2018	Farallon	IA1-48-122918	48.0	-15.41	< 0.20	< 0.20	**43**	< 0.20	**36**	1.2
			12/29/2018	Farallon	IA1-62-122918	62.0	-29.41	< 0.20	< 0.20	**46**	< 0.20	**40**	1.2
			12/29/2018	Farallon	IA1-76-122918	76.0	-43.41	< 0.20	< 0.20	**48**	< 0.20	**41**	1.2
			12/29/2018	Farallon	IA1-90-122918	90.0	-57.41	< 0.20	< 0.20	**48**	< 0.20	**37**	1.3
			11/11/2019	Farallon	IA-1-111119-32.0	32.0	0.59	< 1.0	< 1.0	**140**	< 1.0	**2.9**	48.3
			11/11/2019	Farallon	IA-1-111119-62.0	62.0	-29.41	< 1.0	< 1.0	**120**	< 1.0	**2.3**	52.2
			11/12/2019	Farallon	IA-1-111219-92.0	92.0	-59.41	< 0.20	< 0.20	6.9	< 0.20	**6.2**	1.1
			1/14/2020	Farallon	IA-1-011420-32.0	32.0	0.59	< 0.40	< 0.40	**72**	< 0.40	**30**	2.4
			1/14/2020	Farallon	IA-1-011420-62.0	62.0	-29.41	< 1.0	< 1.0	**89**	< 1.0	**130**	0.7
			1/14/2020	Farallon	IA-1-011420-92.0	92.0	-59.41	< 1.0	< 1.0	**89**	< 1.0	**130**	0.7
			2/17/2020	Farallon	IA-1-021720-32.0	32.0	0.59	< 0.40	< 0.40	**45**	< 0.40	**3.1**	14.5
			2/17/2020	Farallon	IA-1-021720-62.0	62.0	-29.41	< 0.40	< 0.40	**49**	< 0.40	**3.5**	14.0
			2/17/2020	Farallon	IA-1-021720-92.0	92.0	-59.41	< 1.0	< 1.0	**100**	< 1.0	**100**	1.0
			3/25/2020	Farallon	IA-1-32.0-032520	32.0	0.59	< 0.20	< 0.20	**38**	< 0.20	**5.6**	6.8
			3/25/2020	Farallon	IA-1-62.0-032520	62.0	-29.41	< 0.40	< 0.40	**88**	< 0.40	**78**	1.1
			3/25/2020	Farallon	IA-1-92.0-032520	92.0	-59.41	< 0.40	< 0.40	**92**	< 0.40	**84**	1.1
			4/27/2020	Farallon	IA-1-32.0-042720	32.0	0.59	< 0.20	< 0.20	**32**	< 0.20	**1.3**	24.6
			4/27/2020	Farallon	IA-1-62-042720	62.0	-29.41	< 0.40	< 0.40	**73**	< 0.40	**36**	2.0
			4/27/2020	Farallon	IA-1-92-042720	92.0	-59.41	< 0.40	< 0.40	**62**	< 0.40	**39**	1.6
			5/19/2020	Farallon	IA-1-32.0-051920	32.0	0.59	< 0.20	< 0.20	**32**	< 0.20	**1.1**	29.1
			5/19/2020	Farallon	IA-1-62.0-051920	62.0	-29.41	< 0.40	< 0.40	**66**	< 0.40	**37**	1.8
			5/19/2020	Farallon	IA-1-92.0-051920	92.0	-59.41	< 0.40	< 0.40	**54**	< 0.40	**29**	1.9
			6/29/2020	Farallon	IA-1-32.0-062920	32.0	0.59	< 0.20	< 0.20	**22**	< 0.20	**0.87**	25.3
			6/29/2020	Farallon	IA-1-62.0-062920	62.0	-29.41	< 0.20	< 0.20	**39**	< 0.20	**14**	2.8
			7/1/2020	Farallon	IA1-92.0-07012020	92.0	-59.41	< 0.20	< 0.20	**36**	< 0.20	**13**	2.8
			7/29/2020	Farallon	IA-1-072920-32	32.0	0.59	< 0.20	< 0.20	**25**	< 0.20	**1.2**	20.8
			7/29/2020	Farallon	IA-1-072920-62	62.0	-29.41	< 0.20	< 0.20	**27**	< 0.20	**12**	2.3
			7/29/2020	Farallon	IA-1-072920-92	92.0	-59.41	< 0.20	< 0.20	**32**	< 0.20	**14**	2.3
			8/26/2020	Farallon	IA1-32.0-082620	32.0	0.59	< 0.20	< 0.20	**32**	< 0.20	**1.2**	26.7
			8/26/2020	Farallon	IA1-62.0-082620	62.0	-29.41	< 0.20	< 0.20	**37**	< 0.20	**14**	2.6
			8/26/2020	Farallon	IA1-92.0-082620	92.0	-59.41	< 0.20	< 0.20	**31**	< 0.20	**13**	2.4
			9/17/2020	Farallon	IA-1-32.0-091720	32.0	0.59	< 0.20	< 0.20	**35**	< 0.20	**1.1**	31.8
			9/17/2020	Farallon	IA-1-62.0-091720	62.0	-29.41	< 0.20	< 0.20	**26**	< 0.20	**11**	2.4
			9/17/2020	Farallon	IA-1-92.0-091720	92.0	-59.41	< 0.20	< 0.20	**24**	< 0.20	**11**	2.2
			12/4/2020	Farallon	IA1-32.0-120420	32.0	0.59	< 0.20	< 0.20	9.8	< 0.20	**0.58**	16.9
			12/4/2020	Farallon	IA1-62.0-120420	62.0	-29.41	< 0.20	< 0.20	13	< 0.20	**8.1**	1.6
			12/4/2020	Farallon	IA1-92.0-120420	92.0	-59.41	< 0.20	< 0.20	15	< 0.20	**9.6**	1.6
			2/11/2021	Farallon	IA1-32.0-021120	32.0	0.59	< 0.20	< 0.20	11	< 0.20	**0.75**	14.7
			2/11/2021	Farallon	IA1-62.0-021120	62.0	-29.41	< 0.20	< 0.20	11	< 0.20	**0.81**	13.6
			2/11/2021	Farallon	IA1-92.0-021120	92.0	-59.41	< 0.20	< 0.20	16	< 0.20	**12**	1.3
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16[7]**	**160[7]**	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
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Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 37 Property (continued)													
IA-4	32.0 to 92.0	-0.84 to -60.84	12/29/2018	Farallon	IA4-46-122918	46.0	-14.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/29/2018	Farallon	IA4-60-122918	60.0	-28.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/29/2018	Farallon	IA4-74-122918	74.0	-42.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/29/2018	Farallon	IA4-88-122918	88.0	-56.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			11/11/2019	Farallon	IA-4-111119-32.0	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			11/11/2019	Farallon	IA-4-111119-62.0	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			11/11/2019	Farallon	AI-4-111119-92.0	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/17/2020	Farallon	IA-4-021720-32.0	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/17/2020	Farallon	IA-4-021720-62.0	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/17/2020	Farallon	IA-4-021720-92.0	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			4/27/2020	Farallon	IA-4-32-042720	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			4/27/2020	Farallon	IA-4-62-042720	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			4/27/2020	Farallon	IA-4-92-042720	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			6/29/2020	Farallon	IA-4-32.0-062920	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			6/29/2020	Farallon	IA-4-62.0-062920	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			6/29/2020	Farallon	IA-4-92.0-062920	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			8/26/2020	Farallon	IA4-32.0-082620	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			8/26/2020	Farallon	IA4-62.0-082620	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			8/26/2020	Farallon	IA4-92.0-082620	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/4/2020	Farallon	IA4-32.0-120420	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/4/2020	Farallon	IA4-62.0-120420	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/4/2020	Farallon	IA4-92.0-120420	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/11/2021	Farallon	IA4-32.0-021121	32.0	-0.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/11/2021	Farallon	IA4-62.0-021121	62.0	-30.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/11/2021	Farallon	IA4-92.0-021121	92.0	-60.84	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
FMW-131	62.5 to 72.5	-34.65 to -44.65	9/2/2016	Farallon	---	---	-39.65[4]	< 0.20	< 0.20	**41**	< 0.20	**1.7**	24.1
			3/24/2017	PES	---	---	-39.65[4]	< 0.199	< 0.153	**45.6**	< 0.152	**0.249** J	183
			6/23/2017	PES	---	---	-39.65[4]	< 0.199	< 0.153	3.61	< 0.152	**0.264** J	14
			12/18/2017	Farallon	---	---	-39.65[4]	< 0.20	< 0.20	0.61	< 0.20	< 0.20	---
			4/22/2019	PES	---	---	-39.65[4]	< 0.199	< 0.153	10.8	< 0.152	0.195 J	55.4
			10/21/2019	PES	---	---	-39.65[4]	< 0.199	< 0.153	10.5	< 0.152	0.140 J	75.0
			1/22/2020	PES	---	---	-39.65[4]	< 0.199	< 0.153	15.1	< 0.152	0.162 J	93.2
			8/26/2020	Farallon	FMW-131-082620	68.0	-40.2	< 0.20	< 0.20	6.5	< 0.20	< 0.20	---
			12/4/2020	Farallon	FMW-131-120420	68.0	-40.2	< 0.20	< 0.20	3.5	< 0.20	< 0.20	---
			2/11/2021	Farallon	FMW-131-021121	68.0	-40.2	< 0.20	< 0.20	0.27	< 0.20	< 0.20	---
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16**[7]	**160**[7]	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
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Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 37 Property (continued)													
MW-128	60 to 70	-30.80 to -40.80	1/13/2014	SES	---	---	-35.80[4]	< 1	< 1	**960** E	< 1	**290** E	3.3
			4/22/2015	SES	---	---	-35.80[4]	< 1	< 1	**150**	< 1	**59**	2.5
			10/20/2015	SES	---	---	-35.80[4]	< 1	< 1	7.0	< 1	**95**	0.1
			2/2/2016	SES	---	---	-35.80[4]	< 1	< 1	**70**	< 1	**140**	0.5
			3/29/2017	PES	---	---	-35.80[4]	< 0.199	< 0.153	7.16	< 0.152	**72.4**	0.1
			6/21/2017	PES	---	---	-35.80[4]	< 0.199	< 0.153	**109**	< 0.152	**195**	0.6
			4/9/2018	PES	---	---	-35.80[4]	< 0.199	< 0.153	3.07	< 0.152	**31.0**	0.1
			12/30/2018	Farallon	MW-128-123018	65.0	-35.80	< 1.0	< 1.0	5.0	< 1.0	**110**	0.05
			11/11/2019	Farallon	MW-128-111119	65.0	-35.80	< 0.40	< 0.40	1.4	< 0.40	**60**	0.02
			2/18/2020	Farallon	MW-128-021820	65.0	-35.80	< 0.40	< 0.40	1.4	< 0.40	**54**	0.03
			4/27/2020	Farallon	MW-128-042720	65.0	-35.80	< 0.40	< 0.40	0.87	< 0.40	**51**	0.02
			6/29/2020	Farallon	MW-128-062920	65.0	-35.80	< 0.20	< 0.20	0.51	< 0.20	**34**	0.02
			8/26/2020	Farallon	MW-128-082620	65.0	-35.80	< 0.20	< 0.20	0.46	< 0.20	**29**	0.02
			12/4/2020	Farallon	MW-128-120420	65.0	-35.80	< 0.20	< 0.20	0.40	< 0.20	**46**	0.01
			2/10/2021	Farallon	MW-128-021021	65.0	-35.80	< 0.40	< 0.40	< 0.40	< 0.40	**55**	---
Block 38 Property													
DW-3	15 to 55	10 to -30	2/4/2020	Farallon	DW-3-020420	---	---	< 0.20	< 0.20	0.21	< 0.20	< 0.20	---
			2/24/2020	Farallon	DW-3-022420	---	---	< 0.20	< 0.20	0.42	< 0.20	< 0.20	---
			3/5/2020	Farallon	DW-3-030520	---	---	< 0.20	< 0.20	0.43	< 0.20	< 0.20	---
DW-4	15 to 55	10 to -30	2/4/2020	Farallon	DW-4-020420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/24/2020	Farallon	DW-4-022420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			3/5/2020	Farallon	DW-4-030520	---	---	< 0.20	< 0.20	0.27	< 0.20	< 0.20	---
DW-5	15 to 55	10 to -30	2/4/2020	Farallon	DW-5-020420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/24/2020	Farallon	DW-5-022420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			3/5/2020	Farallon	DW-5-030520	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
DW-11	30 to 70	10 to -30	3/12/2020	Farallon	DW-11-031220	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
DW-12	29 to 69	10 to -30	3/12/2020	Farallon	DW-12-031220	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
DW-13	28 to 68	10 to -30	3/12/2020	Farallon	DW-13-031220	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
DW-14	27 to 67	10 to -30	3/12/2020	Farallon	DW-14-031220	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
DW-15	26 to 66	10 to -30	3/12/2020	Farallon	DW-15-031220	---	---	< 0.20	< 0.20	< 0.20	< 0.20	**0.26**	---
			4/10/2020	Farallon	DW-15-041020	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			6/29/2020	Farallon	DW-15-062920	---	---	< 0.20	< 0.20	0.26	< 0.20	< 0.20	---
			7/29/2020	Farallon	DW-15-072920	---	---	< 0.20	< 0.20	0.56	< 0.20	**0.36**	1.6
			8/26/2020	Farallon	DW-15-082620	---	---	< 0.20	< 0.20	0.98	< 0.20	**0.58**	1.7
			9/17/2020	Farallon	DW-15-091720	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			12/3/2020	Farallon	DW-15-120320	---	---	< 0.20	< 0.20	0.78	< 0.20	**0.46**	1.7
			2/11/2021	Farallon	DW15-021121	---	---	< 0.20	0.69	**38**	< 0.20	**0.33**	115.2
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16**[7]	**160**[7]	**0.2**	---

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Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
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Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 38 Property (continued)													
DW-16	24 to 64	10 to -30	1/4/2020	Farallon	DW-16-010420	---	---	< 0.20	< 0.20	0.29	< 0.20	< 0.20	---
			1/14/2020	Farallon	DW-16-011420	---	---	< 0.20	< 0.20	1.8	< 0.20	**0.32**	5.6
			2/17/2020	Farallon	DW-16-021720	---	---	< 0.20	< 0.20	9.9	< 0.20	**2.1**	4.7
			3/5/2020	Farallon	DW-16-030520	---	---	< 0.20	< 0.20	**43**	< 0.20	**5.9**	7.3
			3/12/2020	Farallon	DW-16-031220	---	---	< 0.40	< 0.40	**62**	< 0.40	**4.7**	13.2
			4/10/2020	Farallon	DW-16-041020	---	---	< 1.0	< 1.0	**160**	< 1.0	**2.5**	64.0
			4/27/2020	Farallon	DW-16-042720	---	---	< 2.0	< 2.0	**220**	< 2.0	**2.2**	100.0
			5/19/2020	Farallon	DW-16-051920	---	---	< 2.0	< 2.0	**300**	< 2.0	< 2.0	---
			6/29/2020	Farallon	DW-16-062920	---	---	< 2.0	< 2.0	**350**	< 2.0	**2.0**	175.0
			7/29/2020	Farallon	DW-16-072920	---	---	< 2.0	< 2.0	**390**	2.8	**2.5**	156.0
			8/26/2020	Farallon	DW-16-082620	---	---	< 2.0	3.0	**430**	< 2.0	**2.3**	187.0
			9/17/2020	Farallon	DW-16-091720	---	---	< 2.0	3.1	**390**	< 2.0	**2.7**	144.4
			12/3/2020	Farallon	DW-16-120320	---	---	< 2.0	3.4	**270**	< 2.0	< 2.0	---
			2/11/2021	Farallon	DW16-021121	---	---	< 4.0	**6.9**	**800**	< 4.0	< 4.0	---
DW-17	22 to 62	10 to -30	1/4/2020	Farallon	DW-17-010420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			1/14/2020	Farallon	DW-17-011420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	**3.1**	---
			2/17/2020	Farallon	DW-17-021720	---	---	< 0.20	< 0.20	0.46	< 0.20	**12**	0.04
			3/5/2020	Farallon	DW-17-030520	---	---	< 0.20	< 0.20	1.3	< 0.20	**20**	0.1
			4/10/2020	Farallon	DW-17-041020	---	---	< 0.20	< 0.20	5.1	< 0.20	**23**	0.2
			4/27/2020	Farallon	DW-17-042720	---	---	< 0.20	< 0.20	9.8	< 0.20	**22**	0.4
			5/19/2020	Farallon	DW-17-051920	---	---	< 0.20	< 0.20	**17**	< 0.20	**27**	0.6
			6/29/2020	Farallon	DW-17-062920	---	---	< 0.40	< 0.40	**55**	< 0.40	**29**	1.9
			7/29/2020	Farallon	DW-17-072920	---	---	< 0.40	< 0.40	**94**	0.42	**43**	2.2
			8/26/2020	Farallon	DW-17-082620	---	---	< 1.0	< 1.0	**140**	< 1.0	**62**	2.3
			9/17/2020	Farallon	DW-17-091720	---	---	< 1.0	< 1.0	**180**	< 1.0	**72**	2.5
			12/3/2020	Farallon	DW-17-120320	---	---	< 1.0	< 1.0	**170**	< 1.0	**79**	2.2
			2/11/2021	Farallon	DW17-021121	---	---	< 2.0	< 2.0	**320**	< 2.0	**45**	7.1
DW-18A	21 to 61	10 to -30	1/4/2020	Farallon	DW-18A-010420	---	---	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			2/17/2020	Farallon	DW-18A-021720	---	---	< 0.20	< 0.20	< 0.20	< 0.20	**11**	---
			3/5/2020	Farallon	DW-18A-030520	---	---	< 0.20	< 0.20	1.6	< 0.20	**46**	0.03
			4/10/2020	Farallon	DW-18A-041020	---	---	< 0.40	< 0.40	15	< 0.40	**76**	0.20
			4/27/2020	Farallon	DW-18A-042720	---	---	< 0.50	< 0.50	**19**	< 0.50	**83**	0.23
			5/19/2020	Farallon	DW-18A-051920	---	---	< 0.40	< 0.40	**23**	< 0.40	**83**	0.28
			6/29/2020	Farallon	DW-18A-062920	---	---	< 0.40	< 0.40	**23**	< 0.40	**69**	0.33
			7/29/2020	Farallon	DW-18A-072920	---	---	< 0.40	< 0.40	**23**	< 0.40	**65**	0.35
			8/26/2020	Farallon	DW-18A-082620	---	---	< 0.40	< 0.40	**25**	< 0.40	**55**	0.45
			9/17/2020	Farallon	DW-18A-091720	---	---	< 0.40	< 0.40	**27**	< 0.40	**53**	0.51
			12/3/2020	Farallon	DW-18A-120320	---	---	< 0.20	< 0.20	**21**	< 0.20	**25**	0.84
			2/11/2021	Farallon	DW18A-021121	---	---	< 0.20	< 0.20	**28**	< 0.20	**22**	1.27
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16**[7]	**160**[7]	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 38 Property (continued)													
FMW-137	72.0 to 85.0	-44.9 to -57.9	11/20/2018	Farallon	FMW-137-112018	80.0	-52.9	<0.20	<0.20	1.2	<0.20	<0.20	---
			12/28/2018	Farallon	FMW-137-121818	80.0	-52.9	<0.20	<0.20	1.1	<0.20	<0.20	---
			5/6/2019	Farallon	FMW-137-050619	80.0	-52.9	< 0.20	< 0.20	1.3	< 0.20	< 0.20	---
			7/8/2019	Farallon	FMW-137-070819	80.0	-52.9	< 0.20	< 0.20	1.3	< 0.20	< 0.20	---
			10/14/2019	Farallon	FMW-137-101419	79.0	-51.9	< 0.20	< 0.20	1.1	< 0.20	< 0.20	---
			11/6/2019	PES	---	---	-51.4[4]	< 0.199	< 0.153	1.27	< 0.152	< 0.118	---
			11/11/2019	Farallon	FMW-137-111119	78.5	-51.4	< 0.20	< 0.20	1.3	< 0.20	< 0.20	---
			1/22/2020	PES	---	---	-51.4[4]	< 0.199	< 0.153	1.99	< 0.152	< 0.118	---
FMW-138	90.0 to 100.0	-45.96 to -55.96	11/20/2018	Farallon	FMW-138-112018	95.0	-50.96	<0.20	<0.20	0.29	<0.20	<0.20	---
			12/28/2018	Farallon	FMW-138-122818	95.0	-50.96	<0.20	<0.20	0.34	<0.20	<0.20	---
			5/6/2019	Farallon	FMW-138-050619	95.0	-50.96	< 0.20	< 0.20	0.38	< 0.20	< 0.20	---
			7/8/2019	Farallon	FMW-138-070819	95.0	-50.96	< 0.20	< 0.20	0.34	< 0.20	< 0.20	---
			10/14/2019	Farallon	FMW-138-101419	95.0	-50.96	< 0.20	< 0.20	0.33	< 0.20	< 0.20	---
			11/11/2019	Farallon	FMW-138-111119	95.0	-50.96	< 0.20	< 0.20	0.37	< 0.20	< 0.20	---
Block 77 Property													
FMW-140	70.0 to 80.0	-38.29 to -48.29	7/17/2019	Farallon	FMW-140-071719	75.0	-43.0	< 2.0	< 2.0	**280**	< 2.0	**320**	0.9
			10/31/2019	PES	---	---	-43.0[4]	< 0.199	< 0.153	0.160 J	< 0.152	**189**	0.001
			11/12/2019	Farallon	FMW-140-111219	75.0	-43.0	< 4.0	< 4.0	**310**	< 4.0	**510**	0.6
			1/14/2020	Farallon	FMW-140-011420	75.0	-43.0	< 4.0	< 4.0	**340**	< 4.0	**460**	0.7
			1/22/2020	PES	---	---	-43.0[4]	< 0.199	< 0.153	**406**	0.729	**527**	0.8
			2/18/2020	Farallon	FMW-140-021820	75.0	-43.0	< 4.0	< 4.0	**280**	< 4.0	**530**	0.5
			3/25/2020	Farallon	FMW-140-032520	75.0	-43.0	< 2.0	< 2.0	**100**	< 2.0	**290**	0.3
			4/27/2020	Farallon	MW-140-042720	75.0	-43.0	< 1.0	< 1.0	**33**	< 1.0	**130**	0.3
			5/19/2020	Farallon	FMW-140-051920	75.0	-43.0	< 1.0	< 1.0	16	< 1.0	**130**	0.1
			7/29/2020	Farallon	MW-140-072920	75.0	-43.0	< 1.0	< 1.0	9.7	< 1.0	**170**	0.1
			9/17/2020	Farallon	FMW-140-091720	75.0	-43.0	< 0.40	< 0.40	**25**	< 0.40	**43**	0.6
			12/4/2020	Farallon	FMW-140-120420	75.0	-43.0	< 0.20	< 0.20	3.3	< 0.20	**18**	0.2
			2/10/2021	Farallon	FMW-140-021021	75.0	-43.0	< 0.20	< 0.20	0.72	< 0.20	**3.2**	0.2
FMW-142	37.5 to 42.5	-4.63 to -9.63	7/26/2019	Farallon	FMW-142-072619	40.0	-7.1	< 0.20	0.38	0.36	< 0.20	< 0.20	---
			10/31/2019	PES	---	---	-7.13[4]	< 0.199	< 0.153	< 0.0933	< 0.152	< 0.118	---
			1/22/2020	PES	---	---	-7.13[4]	< 0.199	< 0.153	< 0.0933	< 0.152	< 0.118	---
FMW-143	23.0 to 28.0	9.99 to 4.99	7/30/2019	Farallon	FMW-143-073019	25.5	7.5	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	---
			10/31/2019	PES	---	---	7.5[4]	< 0.199	< 0.153	< 0.0933	< 0.152	< 0.118	---
			1/22/2020	PES	---	---	7.5[4]	< 0.199	< 0.153	< 0.0933	< 0.152	< 0.118	---
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16[7]**	**160[7]**	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
Performance Monitoring Program
Seattle, Washington
Farallon PN: 397-061

Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 79 Property													
FMW-141	47.5 to 57.5	-12.35 to -22.35	7/26/2019	Farallon	FMW-141-072619	52.5	-17.35	< 30	**2,800**	**6,200**	< 30	**820**	7.6
			10/30/2019	PES	---	---	-17.35[4]	< 0.199	2.18 J	**1,200** J	7.13 J	**1,760**	0.7
			10/30/2019[8]	PES	---	---	-17.35[4]	< 0.199	**12.7** J	**2,250** J	10.5 J	**1,710**	1.3
			11/11/2019	Farallon	FMW-141-111119	52.5	-17.35	< 20	< 20	**3,500**	< 20	**2,900**	1.2
			1/14/2020[5]	Farallon	FMW-141-011420	52.5	-17.35	< 4.0	< 4.0	**250**	< 4.0	**380**	0.7
				PES	---	---	-17.35[4]	< 0.995	2.91	**414**	1.98 J	**532**	0.8
			2/17/2020	Farallon	FMW-141-021720	52.5	-17.35	< 2.0	< 2.0	**280**	< 2.0	**240**	1.2
			3/24/2020	Farallon	FMW-141-032420	52.5	-17.35	< 10	< 10	**1,200**	< 10	**820**	1.5
			4/27/2020	Farallon	MW-141-042720	52.5	-17.35	< 2.0	**6.5**	**440**	2.1	**490**	0.9
			5/19/2020	Farallon	FMW-141-051920	52.5	-17.35	< 20	< 20	**2,400**	< 20	**910**	2.6
			7/28/2020	Farallon	MW-141-072820	52.5	-17.35	< 10	< 10	**8,100**	20	**780**	10.4
			9/17/2020	Farallon	FMW-141-091720	52.5	-17.35	< 4.0	< 4.0	**600**	< 4.0	**620**	1.0
			12/3/2020	Farallon	FMW-141-120320	52.5	-17.35	< 1.0	< 1.0	**68**	< 1.0	**190**	0.4
			2/10/2021	Farallon	FMW-141-021021	52.5	-17.35	< 1.0	< 1.0	**120**	< 1.0	**180**	0.7
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16**[7]	**160**[7]	**0.2**	---

Table F-3
Groundwater Analytical Results for CVOCs
Deep Outwash Aquifer Groundwater
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Seattle, Washington
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Sample Location	Screened Interval (feet bgs)[1]	Screened Interval (feet msl)[2]	Sample Date	Sampled By	Sample Identification	Sample Depth (feet bgs)[1]	Sample Elevation (feet NAVD88)[2]	Analytical Results (micrograms per liter)[3]					cDCE/Vinyl Chloride Ratio
								PCE	TCE	cDCE	tDCE	Vinyl Chloride	
Block 79 Property (continued)													
MW-113	70.0 to 80.0	-36.80 to -46.80	12/21/2012	SES	---	---	-41.80[4]	1.3 i	**440**	**5,500**	4.1	**150**	36.7
			12/19/2013	SES	---	---	-41.80[4]	< 1	**13**	**140**	< 1	**0.41**	341
			6/25/2015	SES	---	---	-41.80[4]	< 1	**19**	**670**	< 1	**17**	39
			10/27/2015	SES	---	---	-41.80[4]	< 1	4.5	**670**	1.2	**17**	39
			2/3/2016	SES	---	---	-41.80[4]	< 1	1.1	**1,500**	2.2	**13**	115
			3/22/2017	PES	---	---	-41.80[4]	< 0.199	**27.1**	**7,280**	25.4	**63.5**	115
			6/16/2017	PES	---	---	-41.80[4]	0.522	**148**	**4,750**	28.2	**53.3**	89
			4/11/2018	PES	---	---	-41.80[4]	**191**	**1,100**	**3,720**	21.3	**34.9**	107
			1/30/2019	PES	---	---	-41.80[4]	< 0.995	2.81	**6,330**	22.8	**34.8**	182
			2/7/2019	PES	---	---	-41.80[4]	< 0.199	1.77	**6,990**	25.7	**46.0**	152
			11/11/2019	Farallon	MW-113-111119	75.0	-41.80	< 50	< 50	**8,200**	< 50	**950**	8.6
			1/14/2020	Farallon	MW113-011420	75.0	-41.80	< 50	< 50	**8,000**	< 50	**1,400**	5.7
			2/18/2020	Farallon	MW-113-021820	75.0	-41.80	< 50	< 50	**9,600**	< 50	**1,800**	5.3
			3/24/2020	Farallon	MW113-032420	75.0	-41.80	< 20	< 20	**4,100**	< 20	**200**	20.5
			4/27/2020	Farallon	MW-113-042720	75.0	-41.80	< 20	< 20	**3,500**	< 20	**94**	37.2
			5/19/2020	Farallon	MW-113-051920	75.0	-41.80	< 20	< 20	**3,700**	< 20	**110**	33.6
			7/28/2020	Farallon	MW-113-072820	75.0	-41.80	**170**	**1,300**	**2,300**	10	**82**	28.0
			9/17/2020	Farallon	MW-113-091720	70.0	-36.80	**390**	**1,500**	**1,900**	< 10	**45**	42.2
			12/3/2020	Farallon	MW-113-120320	75.0	-41.80	**480**	**800**	**540**	< 4.0	**6.4**	84.4
			2/10/2021	Farallon	MW-113-021021	75.0	-41.80	2.7	**8.4**	**26**	< 0.20	< 0.20	---
MTCA Cleanup Levels for Groundwater[6]								**5**	**5**	**16[7]**	**160[7]**	**0.2**	---

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

— denotes information is unknown.

[1]In feet below ground surface.

[2]In feet North American Vertical Datum of 1988.

[3]Analyzed by U.S. Environmental Protection Agency Method 8260.

[4]Actual sample depth unknown; assumed mid-point of screened interval.

[5]Split sample collected by Farallon and PES and analyzed at different laboratories.

[6]Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

[7]MTCA Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater, updated May 2019, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

[8]Duplicate sample results.

bgs = below ground surface
cDCE = cis-1,2-dichloroethene
CVOC = chlorinated volatile organic compounds
E = result exceeded calibration range of instrument and is an estimate
Farallon = Farallon Consulting, L.L.C.
i = result may be due to carryover from previous sample injection at lab
J = result is an estimate
NA = not available
NS = not surveyed
PCE = tetrachloroethene
PES = PES Environmental, Inc.
SES = SoundEarth Strategies, Inc.
TCE = trichloroethene
tDCE = trans-1,2-dichloroethene

Rows highlighted in green indicate samples were collected during dewatering at Block 43 (11/2013 - 12/2014), Block 37 [pit] and Block 38 West (10/2019 - present), or the interim action at Block 37 (4/2017 - 12/2017)

APPENDIX G
MIDDOUR CONSULTING LLC GROUNDWATER CONTROL DESIGN

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Groundwater Control Plan
Block 38
Seattle, Washington

October 17, 2018

Prepared for

GLY Construction

200 112th Avenue NE, Ste. 300

Bellevue, WA 98004

MIDDOUR CONSULTING LLC

14241 NE Woodinville Duvall Rd, PMB 226
Woodinville, WA 98072
(425) 864-2719

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INTRODUCTION

This report presents our Groundwater Control Plan and recommendations for the Block 38 project in Seattle Washington. GLY Construction (GLY) is the general contractor for the project and we understand the shoring, and dewatering services will be performed by subcontractors. We understand that temporary construction dewatering will be required to successfully install the shoring system and complete foundation construction. Our understanding of the excavation and shoring methods is based on conversations with GLY.

SITE AND PROJECT DESCRIPTION

The project site is located south of Lake Union on city block 38 which is bound by Mercer Street to the north, an alley to the east, Republican Street to the south, and Westlake Avenue North to the west. Buildings previously occupied portions of the site but will be demolished prior to construction. As with most urban projects, buried utilities are located in the streets that border the project site. The existing ground surface of the site slopes from about elevation 40 feet in the south end to about elevation 31 feet in the north end.

The Block 38 project consists of a multi-story building over a four level below-grade parking structure. The excavation for the parking structure will extend about 39 to 49 feet below existing grade and will be retained using solider pile and lagging shoring methods in conjunction with four rows of tiebacks. The bottom of footing for the majority of the foundation is elevation -8.0 feet though the elevator cores will likely extend a few feet below the mass excavation subgrade.

The geotechnical and hydrogeological information for the project was provided in the October 17, 2018 Geotechnical Engineering Services report prepared by GeoEngineers. Temporary shoring plans for the excavation were prepared by Ground Support LLC. We understand the excavation is scheduled to begin in the 2018/2019 winter and continuous construction dewatering will be required until sufficient structural weight of the building is constructed.

SOIL AND GROUNDWATER CONDITIONS

The geotechnical report provides a discussion of the site soil and groundwater conditions as determined from thirteen soil borings advanced 10 to 63 feet below existing grade and several soil borings from other surrounding geotechnical investigations. The soils at the site generally consist of fill, wood

waste, peat/organic silt, recent granular and fine-grained deposits, and glacially consolidated granular soils.

The fill soils are about 5 to 20 feet thick which includes the wood waste deposits. The fill soils consist of loose to very dense silty sand that contains gravel, cobbles and boulders and the wood waste contains wood debris to wood chips. The peat and organic silt deposits are up to 8 feet thick and typically occur below the fill soils and wood waste except for discrete locations where they are absent. The recent deposits are 3 to 17 feet thick and consist of loose to dense sand with varying silt content and soft to medium stiff silt. Underlying the recent deposits, glacially consolidated soils were encountered and consisted predominately of cohesionless sand with varying amounts of gravel and silt though layers of silt were encountered in some of the soil borings. The silt content of the cohesionless sand varies across the site but general consists of silty sand (SM) and sand with silt (SP-SM) to the explored depths. The glacially consolidated silt layers were not encountered in all of the soil borings as such the layers are discontinuous but typically were encountered between elevation 0 and -15 feet.

Groundwater levels measured in observation wells with screen intervals constructed in the recent deposits indicate the groundwater elevation was about 18 to 19 feet in August 2018 whereas observation wells with screen intervals constructed in the glacially consolidated soils indicate the groundwater elevation was 16 feet in August 2018. Based on the soils encountered in the soil borings, the deeper glacially consolidated soils may be partially confined by the overlying fine-grained soils and/or the higher water level in the fine-grained soils may be due to a greater capillary fringe. GeoEngineers estimates the static water level in the area to be about elevation 20 feet prior to significant construction dewatering in the South Lake Union area. GeoEngineers recommends a design groundwater elevation of 20 feet should be used for design of the permanent below-grade walls and mat foundations.

The geotechnical investigation did not perform any on site testing to characterize the hydraulic properties of the aquifer underlying the site nor were any gradation tests performed to estimate the hydraulic conductivity. Middour Consulting performed a pumping test for the Block 44 project which was located on the west side of Westlake Avenue North. The pumping test was performed in dewatering well located on the south side of the site on the sidewalk along Republican Street; the dewatering well was screened in the glacially consolidated granular soils. Analysis of the drawdown data using the Jacobs Method estimates the transmissivity to be 2.1 ft^2/min and $1.6x10^{-5}$ for storativity which is unitless. The storativity value derived from the pumping test is reflective of a confined aquifer response. Analysis of the recovery data using the Theis Recovery Method estimates the transmissivity to be 1.8 ft^2/min.

CONCEPTUAL GROUNDWATER CONTROL APPROACH

As described in the geotechnical report and briefly summarized above, the proposed excavation will encounter saturated soils at about elevation 18 to 19 feet. The majority of the saturated soils above elevation 0 feet on the east side of the site and above elevation 5 feet on the west side are fine-grained silt/clay, peat, organic silt, and wood waste. These soil types do not readily yield groundwater and generally the cost associated with implementing active groundwater control measures doesn't justify the minimal decrease in moisture content; the "dewatered" soils which are nearly saturated still require additional costs to excavate and haul off site. Unless the project team would like to explore groundwater control options for these soils, the GWCP assumes these soils will be excavated at the natural moisture content though some drainage may occur by dewatering the aquifer beneath these soils.

Based on the relatively coarse nature and thickness of the glacially consolidated aquifer as well as the successful performance of several dewatering systems in the area, groundwater control can be accomplished by a system of large diameter dewatering wells installed around the perimeter of the excavation. However, some of the soil borings encountered silt layers between elevation 0 and -15 feet which will remain saturated and/or perch groundwater above these soils. If the fine-grained soil layers are laterally continuous or encompass a significant area, additional wells and/or sump pumping may be required to control the perched groundwater if the layers are laterally extensive and exist above subgrade.

DEWATERING SYSTEM DESIGN CALCULATIONS

Dewatering system design calculations were performed to estimate potential discharge rates, the number of wells, and the spacing between wells required to lower the groundwater level two feet below subgrade. Dewatering calculations were performed using a computer spreadsheet model that accounts for well interference among multiple pumping wells and aquifer boundary conditions using the principle of superposition and image well theory. The spreadsheet model calculates the net drawdown from all pumping and image wells through a predetermined section of the aquifer by solving the Theis non-equilibrium equation for drawdown using the radius associated with each pumping and image well.

Soil and groundwater parameters used in the dewatering design calculations were derived from the project geotechnical report or were estimated from previous experience if not contained in the geotechnical report and are listed below:

- The aquifer is unconfined but locally it may be semi-confined to confined.
- Groundwater elevation is 16 feet for the glacially consolidated aquifer
- Aquifer thickness 40 feet
- Aquifer Transmissivity range 0.5 to 2.0 ft^2/min
- Target dewatering elevation -10.0 feet; 2 feet below subgrade
- Specific yield is 0.15 (unitless)

Based on the transmissivity range, the spacing between wells could be up to 75 feet on-center but due to the presence of silt layers below elevation 0 feet, the well spacing was reduced to about 60 feet on-center. Design calculations using the soil and groundwater parameters listed above indicate eighteen dewatering wells installed at the locations shown on Figure 1 will lower groundwater levels down to the target dewatering elevation for the main excavation though additional groundwater control measures may be required to dewater perched water if the silt layers above subgrade are laterally extensive.

Based on the average transmissivity value of 1.5 ft^2/min, the total discharge from the system of wells is estimated to be about 800 gpm after one week of operation and 540 gpm after one month of operation. The drawdown or cone of depression derived from the spreadsheet model is shown on Figure 2 which displays drawdown profiles parallel and perpendicular to the excavation.

DRAWDOWN ANALYSIS

Operation of the dewatering system will lower the piezometric level of the glacially consolidated aquifer and the drawdown may extend beneath subsurface and above ground structures and/or mobilize existing groundwater contaminate plumes. The drawdown profile shown on Figure 3 shows the lateral extent of drawdown projected from the west side of the excavation after one month of operation, assuming uniform aquifer conditions and properties. The spreadsheet model assumes homogeneous and isotropic subsurface conditions as such, the actual drawdown cone may deviate from our estimate depending on the actual subsurface properties. The cone of depression will continue to expand after one month of operation however, predicting the distance and amount of drawdown becomes increasingly difficult as the cone of depression encounters undocumented soils and aquifer conditions. Middour Consulting has not assessed the potential for dewatering induced settlement or mobilization of groundwater contaminate plumes nor has Middour Consulting implemented any engineering controls to

limit the amount of drawdown. Middour Consulting's scope of work did not include these evaluations and Middour Consulting assumes no liability for impacts due to lowering of groundwater levels. We recommend geotechnical engineering and environmental disciplines review this plan to evaluate potential adverse effects due to lowering of groundwater levels.

DEWATERING SYSTEM CONSTRUCTION RECOMMENDATIONS

We recommend the dewatering/shoring subcontractor and/or GLY monitor the soldier pile installation to determine the presence/absence of silt layers elevation 0 and -8 feet and report this information to Middour Consulting. Should significant areas encounter a silt layer at a specific elevation, a vacuum wellpoint system or sump pumping will be required to remove perched groundwater that seeps through the shoring wall.

Dewatering Wells: Boreholes should be drilled using bucket auger drilling methods and should be 30- to 36-inch-diameter. ***Drilling additives and/or slurry to maintain borehole wall stability shall not be used; maintaining a water head and/or casing the borehole are appropriate methods.*** Well casings and screen should be 12-inch diameter Schedule 40 PVC. Based on the visual soil descriptions from the soil borings and previous experience in the area, well screens should consist of 30-slot screen size. For well screen lengths and bottom completion elevations refer to Table 1 and well construction details are provided on Figure 4.

We recommend that Middour Consulting monitor the initial drilling, well construction, and well development to verify site conditions. Subsequent wells should be logged and sampled by the driller. GLY or the dewatering subcontractor should notify Middour Consulting if subsurface conditions differ from those described in this report and/or those observed during drilling the first dewatering well. General locations of the dewatering wells are provided on Figure 1; more detailed locations are provided in Table 1.

Sand Pack: The available data indicate a dewatering well sand pack consisting of Cal Portland 8700 or equivalent should optimize retention of the formation and well yield. The gradation of the proposed sand pack is listed on the table in Figure 4. Well and seal construction should be consistent with WAC 173-160.

Development: Development is important to improve the hydraulic connection with the aquifer and provide a clean dewatering effluent with time. We recommend that each dewatering well be developed immediately upon completion. Development methods should utilize flow-surging and over-

pumping until the discharge requirement is achieved. Development data should be documented to demonstrate that additional development would produce limited improvement.

Pumps: Pumps that are capable of operating in dry well conditions should be provided in each well. Initially pumps should be capable of providing up to 100 gpm under 70 feet of total dynamic head (TDH).

Header and Conveyance Piping: The main header and conveyance piping should be constructed using 12-inch-diameter PVC or HDPE pipe. The piping configuration should be located on the behind the dewater wells (i.e. away from the excavation) to minimize the potential for damage during excavation.

GENERAL SYSTEM REQUIREMENTS

Power Supply: A continuous main power supply from portable generators or line power is required for all dewatering systems. We recommend that a backup power source is available on site in the event of a power failure from the main power supply.

Observation Wells: GeoEngineers will provide the number and locations of the observation wells. We recommend the boreholes be drilled using air rotary or rotary wash drilling methods and should be a minimum 8-inch-diameter. Well casings and screen should be 2-inch diameter flush threaded Schedule 40 PVC. The well screen should be 20-slot with the screen interval from elevation -10 to -20 feet. The sand pack should consist of Cal Portland 8720 or equivalent.

System Performance and Water Level Monitoring: We recommend measuring water levels in the observation wells daily for a week prior to operating the dewatering system to establish baseline water levels. Groundwater levels in the dewatering wells and observation wells should be measured daily for the first week of operation and reported to Middour Consulting to assess the system performance. Drop tubes in the dewatering wells may be required to obtain accurate water levels if there is water cascading down the well screen.

Operation: The dewatering system should operate a minimum of two weeks prior to excavation below the static groundwater level. Visual observations of the discharge should be made several times a day during excavation, to monitor for increased turbidity levels. Middour Consulting should be contacted if the performance of the dewatering system changes significantly. This may include pumping rates that differ significantly from rates presented in this report, the occurrence of a sudden change in pumping rates or groundwater levels, or the occurrence of turbidity levels that exceed discharge limits.

The dewatering system should be operated continuously until sufficient structural weight, as determined by the resident structural engineer, is constructed to counteract groundwater lateral and uplift forces.

Discharge Water Quality: Dewatering discharge will be routed to an onsite water quality treatment system; refer to the WaterTectonics submittal for more details.

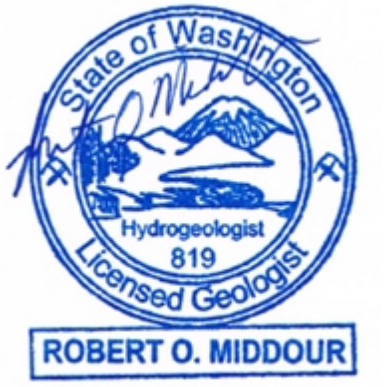
Well Decommissioning: The dewatering wells should be decommissioned in accordance with WAC 173-160 upon completion of dewatering activities.

LIMITATIONS

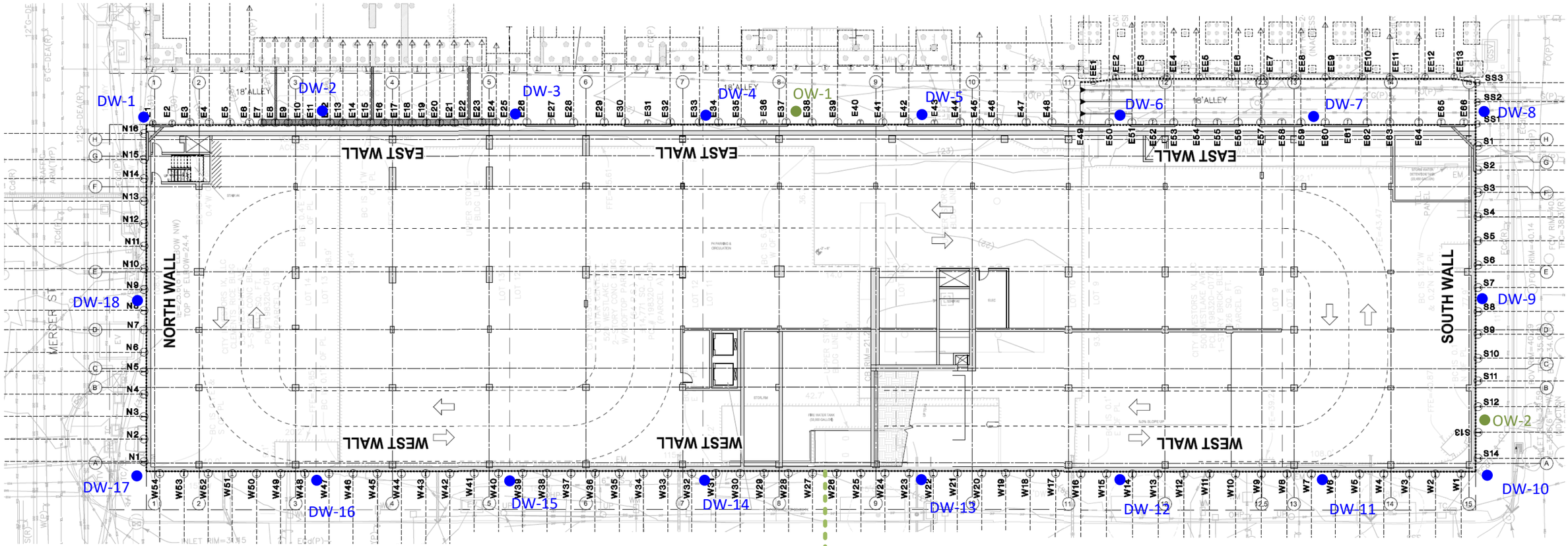
This Groundwater Control Plan has been prepared for the exclusive use of GLY Construction for their proposed work on the Block 38 project in Seattle Washington. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Middour Consulting LLC. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Middour Consulting, shall be at the user's sole risk. Middour Consulting warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

MIDDOUR CONSULTING LLC

Robert O. Middour, L.HG.
Principal Hydrogeologist



Well ID	Approximate Pile Location	Ground Surface Elevation (ft)	Bottom Well Elevation (ft)	Well Depth (ft)	Screen Length (ft)
DW-1	N16 / E1	31	-30	61	40
DW-2	E11 / E12	28	-30	58	40
DW-3	E25 / E26	25	-30	55	40
DW-4	E33 / E34	25	-30	55	40
DW-5	E42 / E43	25	-30	55	40
DW-6	E50 / E51	25	-30	55	40
DW-7	E59 / E60	25	-30	55	40
DW-8	SS1 / SS2	41	-30	71	40
DW-9	S7 / S8	41	-30	71	40
DW-10	S14 / W1	40	-30	70	40
DW-11	W6 / W7	40	-30	70	40
DW-12	W14 / W15	39	-30	69	40
DW-13	W22 / W23	38	-30	68	40
DW-14	W31 / W32	37	-30	67	40
DW-15	W39 / W40	36	-30	66	40
DW-16	W47 / W48	34	-30	64	40
DW-17	W54 / N1	32	-30	62	40
DW-18	N8 / N9	31	-30	61	40



NOTES:

1) Locations of the dewatering wells are approximate, see Table 1 for exact locations (i.e. pile numbers). Locations can be moved to avoid conflicts with construction methods and/or utilities; new locations should be reviewed by Middour Consulting.

2) GeoEngineers to determine number and location of observation wells.

3) See Figure 4 for dewatering well construction details.

See Figure 3
For Drawdown Profile

MIDDOUR CONSULTING LLC
groundwater control for underground construction

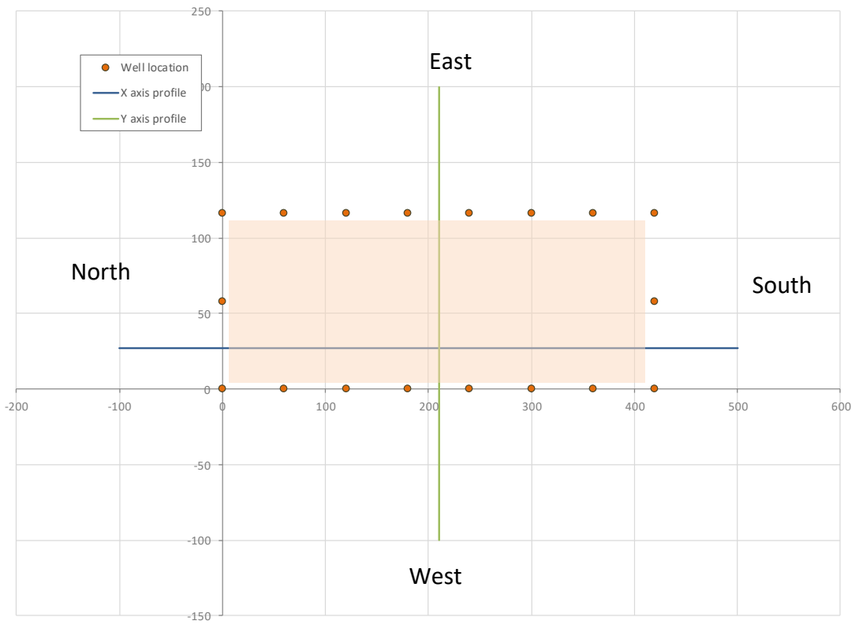
● DEWATERING WELL LOCATIONS

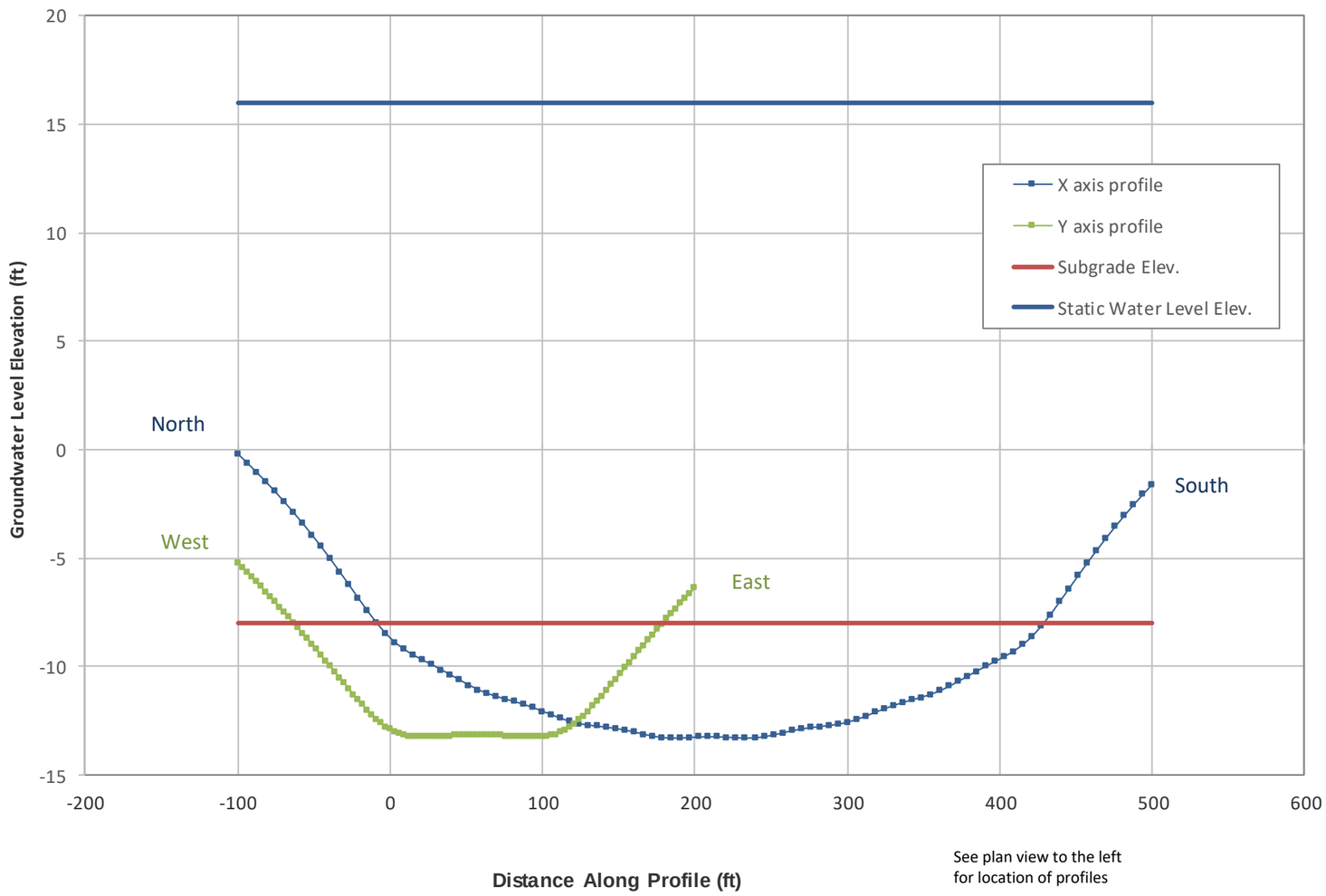
● OBSERVATION WELL LOCATIONS

FIGURE 1
Dewatering System Layout Plan

BLOCK 38 GWCP | Seattle, WA
Project No. 18046002.01 | October 16, 2018

Plan View





See plan view to the left for location of profiles

NOTES

1) Drawdown profiles representative of a transmissivity value of 1.5 ft^2/min and a pumping duration of 2 weeks.

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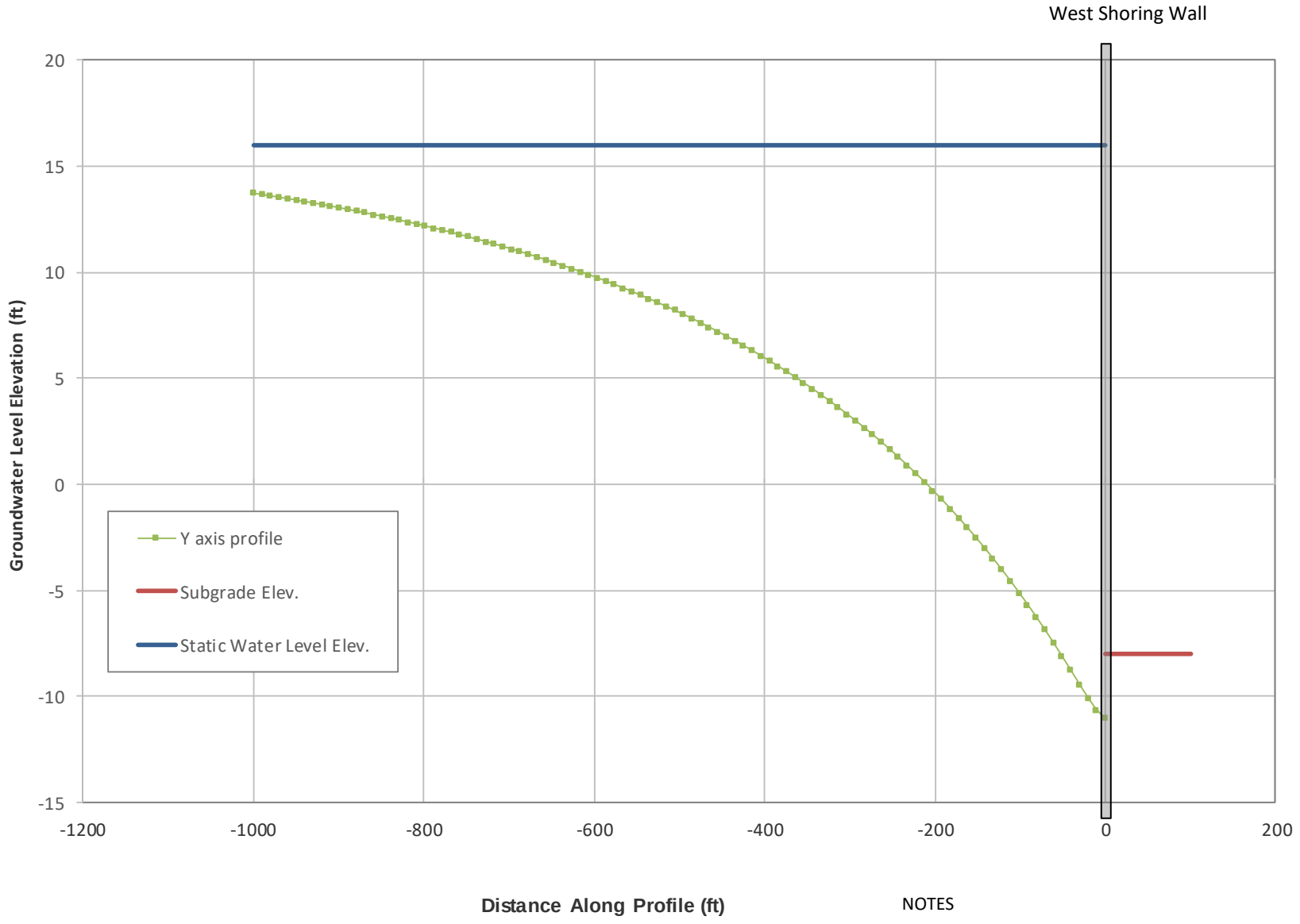
groundwater control for underground construction

FIGURE 2
Excavation Drawdown Profiles
BLOCK 38 GWCP | Seattle, WA
Project No. 18046002.01 | October 16, 2018



NOTES

1) Drawdown profile representative of a transmissivity value of 1.5 ft^2/min and a pumping duration of 1 month.

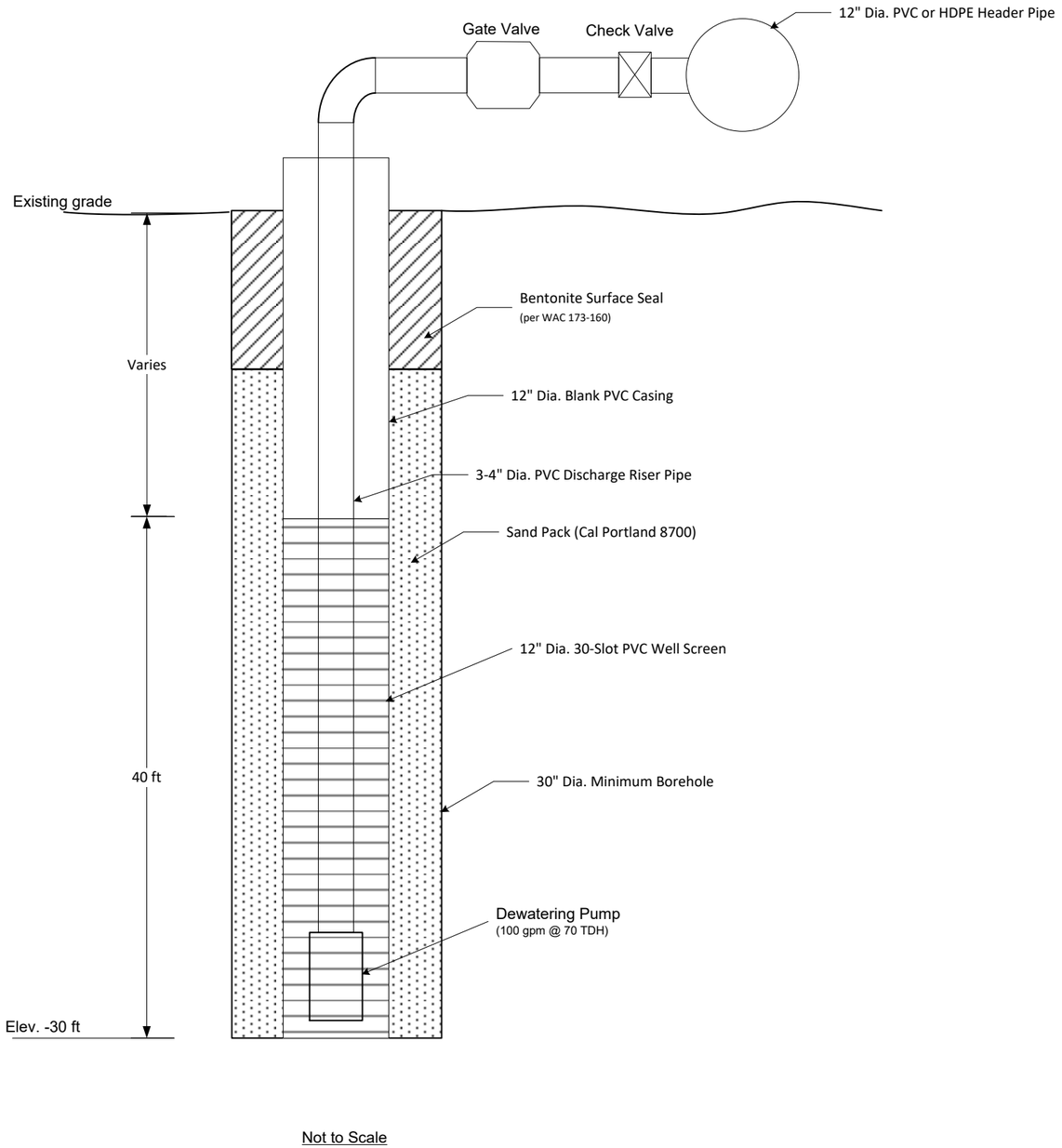
MIDDOUR CONSULTING LLC
groundwater control for underground construction

FIGURE 3

Drawdown vs Distance Profile

BLOCK 38 GWCP | Seattle, WA

Project No. 18046002.01 | October 16, 2018



Not to Scale

NOTES:

Dewatering Wells: Boreholes should be drilled using bucket auger drilling methods and should be 30- to 36-inch-diameter. **Drilling additives and/or slurry to maintain borehole wall stability shall not be used; maintaining a water head and/or casing the borehole are appropriate methods.** Well casings and screen should be 12-inch diameter Schedule 40 PVC. Based on the visual soil descriptions from the soil borings and previous experience in the area, well screens should consist of 30-slot screen size. For well screen lengths and bottom completion elevations refer to Table 1. We recommend that Middour Consulting monitor the initial drilling, well construction, and well development to verify site conditions. Subsequent wells should be logged and sampled by the driller. GLY or the dewatering subcontractor should notify Middour Consulting if subsurface conditions differ from those described in this report and/or those observed during drilling the first dewatering well. General locations of the dewatering wells are provided on Figure 1; more detailed locations are provided in Table 1.

Sand Pack: The available data indicate a dewatering well gravel pack consisting of Cal Portland 8700 or equivalent shall optimize retention of the formation and well yield. The gradation of the proposed gravel pack is listed on the table below. Well and seal construction shall be consistent with WAC 173-160.

Development: Development is important to improve the hydraulic connection with the aquifer and provide a clean dewatering effluent with time. Each dewatering well shall be developed immediately upon completion. Development methods shall utilize flow-surging and over-pumping until the discharge requirement is achieved. Development data shall be documented to demonstrate that additional development would produce limited improvement.

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The dewatering system should be operated continuously until sufficient structural weight, as determined by the resident structural engineer, is constructed to counteract groundwater lateral and uplift forces.

Well Decommissioning: The dewatering wells should be decommissioned in accordance with WAC 173-160 upon completion of dewatering activities.

Sand Pack Gradations

Sive Size	Grain Size		Cal Portland (8700)		Cal Portland (8720)	
No.	(mm)	(thousandths)	% Finer	% Retained	% Finer	% Retained
3/8	9.51	374.4	100	0	100	0
No. 4	4.75	187.0	65	35	99	1
No. 8	2.38	93.7	4	96	79	21
No. 16	1.19	46.9	3	97	49	51
No. 30	0.595	23.4	1	99	23	77
No. 50	0.297	11.7	0.6	99.4	5	95
No. 100	0.149	5.9	0.4	99.6	0.8	99.2
No. 200	0.074	2.9	0.2	99.8	0.3	99.7

MIDDOUR CONSULTING LLC
groundwater control for underground construction

FIGURE 4
Dewatering System Construction Details
BLOCK 38 GWCP | Seattle, WA
Project No. 18046002.01 | October 16, 2018

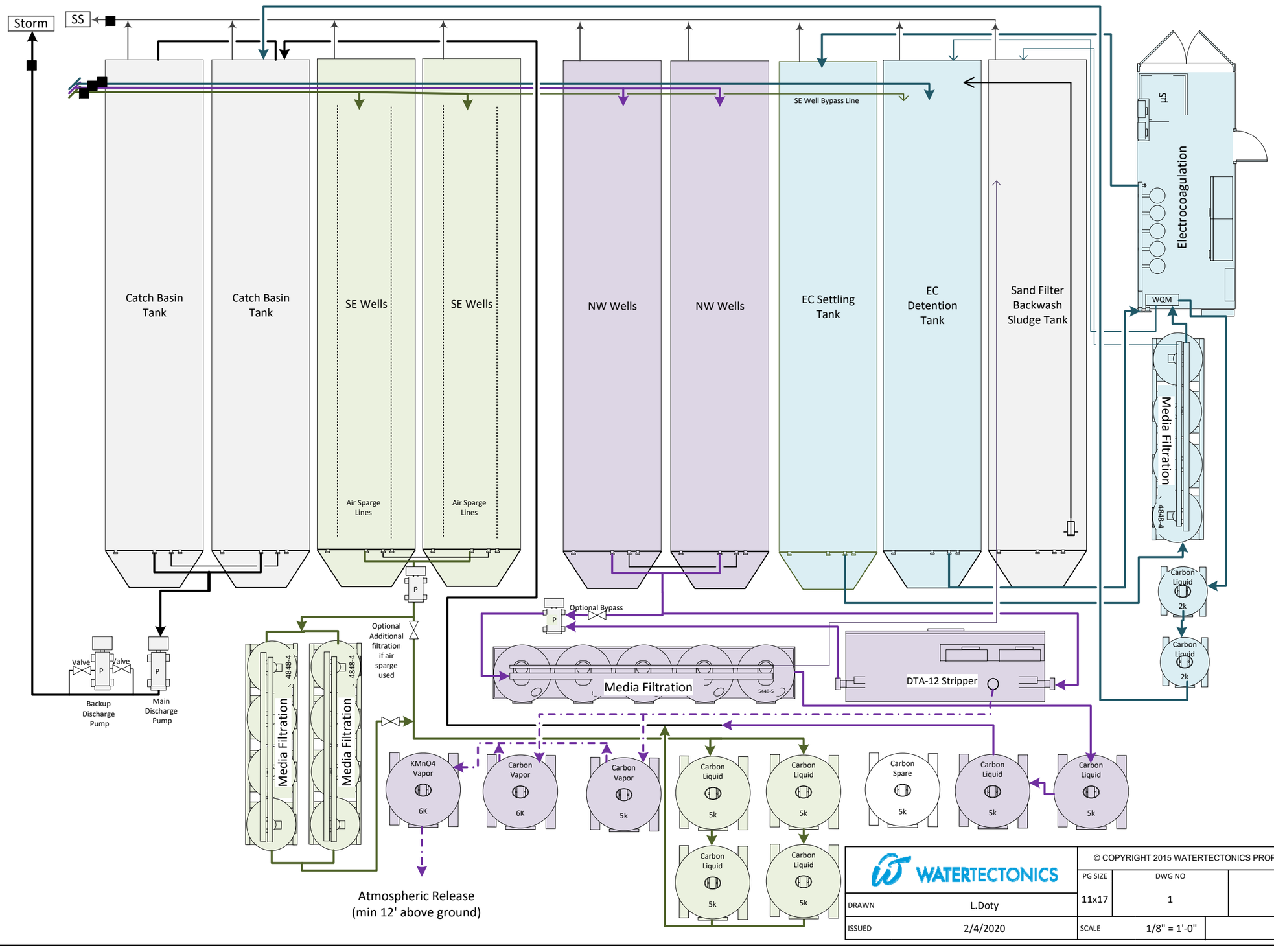
APPENDIX H
WATERTECTONICS WATER TREATMENT SYSTEM DESIGN

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

GLY – Block 38 Equipment Layout

WATERTECTONICS



WATERTECTONICS	PG SIZE: 11x17	DWG NO: 1	PROJECT NAME: GLY(B38) — REV: 0
DRAWN: L.Doty			
ISSUED: 2/4/2020	SCALE: 1/8" = 1'-0"		SHEET: 1 of 1

APPENDIX I
UST01 AND UST02 DECOMMISSIONING RECORDS

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Construction Group International, LLC
19407 144th Avenue NE, Building D
Woodinville, WA 98072
*(425)487-2618 * (425)487-2619*

Environmental * Demolition * Waterproofing * Coatings

Washington License #CONSTIGI953NA

Billing Summary

Customer:	Vulcan	**Date:**	3/3/2020
Attn:	Raymond Burdick	**Project Name:**	Block 38 Development UST Removal, Seattle, WA
Address:	505 -5th Ave S, Suite 900, Seattle, Wa 98104	**Job #:**	U20065
Phone:	206-342-2451	**P.O.#**	10120-00044
Fax:	206-342-3000	**Other #:**	

We hereby submit the following itemized cost breakdown and description of proposed work:

Below are the itemized T&M costs for the Underground Storage Tank(s) remediation & removal on the above-mentioned project.

Removed (2) 1200-gal & 2500-gal bunker oil tanks, approximately10' in depth. General Contractor on site to provide excavator for tank removal. Locates, soil sampling, and reporting to regulatory agencies (DOE).

Item or Function	Qty	Rate	Labor	Material	Equipment	Disposal	Total
Mobilization	2	500	1,000.00				$1,000.00
UST Labor - Licensed Decommissioner	50	125	6,250.00				$6,250.00
Project Manager	2	95	190.00				$190.00
Excavator - Provide by GC on site.							
Small tools (fire extinguisher, no smoking signs, visqueen, chop saw, etc)	2	600		1,200.00			$1,200.00
Tank Pump and Rinse, Vac Truck & Operator	10	140			1,400.00		$1,400.00
Wash Water Disposal	3600	0.65				2,340.00	$2,340.00
Seattle Fire Dept Permit	2	414		828.00			$828.00
Marine Chemist, Gas Tank Inert	2	1545	3,090.00				$3,090.00
UST Haul Away	2	250	1,250.00		500.00		$1,750.00
Tank Destruction	2	695				1,390.00	$1,390.00
TOTALS							***$19,438.00***

Total Cost	***$19,438.00***
Overhead/Profit Included	***$0.00***
Sales Tax 10.1%	***$1,963.24***
TOTAL AMOUNT	***$21,401.24***

***Note: This Quotation Response is valid for thirty (30) days. Payment terms are net thirty (30) days from date of invoice, with interest accruing at 1.5% per month on all outstanding balances. All costs associated with debt collection shall be born by*

Mark A. Marcell

Mark A. Marcell - Construction Group International, LLC

Mark A. Marcell - President

Printed Name and Title

Authorized Signature

Printed Name and Title

Date

George D. Blair - Northwest Marine Chemist, Inc.
P.O. Box 7084, Tacoma, WA 98417
Office: 253-752-0149 Fax:
Email: gbcmc637@gmail.com

MARINE CHEMIST CERTIFICATE

Serial 637-01078

ECI	GLY/CGI	Jan 27, 2020
Survey Requested by	Vessel Owner Agent	Date
Tank Farm	Underground Storage Tank	500 N. Westlake
Vessel	Type of Vessel	Specific Location of Vessel
HFO as Fuel	O_2, LEL, Visual, VOC	10:46
Last Three 3 Loadings	Tests Performed	Time Survey Completed

Inspected Spaces:
Group 1. 1-1800 Gal. UST

Safety Designations:
ATMOSPHERE SAFE FOR WORKERS
SAFE FOR LIMITED HOT WORK
LIMITATIONS:
Specific Location: *At job site.*
Hot Work Type: *This tank has been pressure washed free of any flammable residues, and is safe for excavation and transportation. Tests of residues show no ignition when exposed to propane torch.*

Test Results	**% O_2**	**% LEL**	**VOC**
Inspected spaces group 1	20.8%	<1%	< 1 ppm

Limits of Detection
0.1 ppm VOC

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person or the authority having jurisdiction as applicable in support of work prior to entry or recommencement of work.

QUALIFICATIONS: Transfer of ballast, cargo, fuel or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this certificate.

STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFP 306, Subsections 4.3.1 through 4.3.6)

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere shall be at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry shall not be permitted.

ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.

SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not be capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire; or they are inerted. Ship's fuel tanks, tube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.

SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable; and the nature or type of hot work shall be limited or restricted.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot is not permitted.

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Authorized Representative	ECI	Jan 27, 2020	Signed Marine Chemist	637
	Company	Date		CMC No.

eci Environmental Services
Practical Environmental Compliance Solutions
Offices In: Anchorage | Tacoma | Portland

January 27, 2020
ECI Project No.: 0520-26

Underground Storage Tank Decommissioning Certification

This is a statement of Underground Storage Tank Decommissioning provided by EcoCon, Inc. (ECI). ECI states this decommissioning has occurred under the supervision of an ICC Certified UST Decommissioner following the local and state rules and regulations as defined by the Uniform Fire Code (UFC) and Washington Administrative Code (WAC). Following Northwest Marine Chemist and Seattle Fire Department certification, the UST was excavated and transported off site to be cut up then disposed at a local metal recycling company.

Project Client:	Construction Group International
Project Name:	Block 38 - Bunker Oil UST #1
Project Address:	500 Westlake Ave. N., Seattle, WA
Type of Decommissioning:	Excavation and removal from sub-surface
UST Installation Date:	Unknown (pre 1980)
UST Decommissioning Date:	1/27/2020
Permit Issuance Date:	1/27/2020
UST #:	Tank #1
UST(s) Dimensions:	4.0 x 12 feet (Approximate) – 1 UST
UST(s) Total Gallons:	1200 Gallons (Approximate)
UST(s) Construction:	Steel – Single Wall Construction
Certified UST Decommissioner:	**Brad Reilly**
Certification Number:	**8289423 – Exp: 2/14/2020**

Brad N. Reilly

January 28, 2020
Date

Your Seattle Fire Department

APPLICATION FOR TEMPORARY PERMIT

Code 7908 Commercial Tank Removal/Decommissioning

Permit Fee:

Date Issued: 1/23/2020

TO BE COMPLETED BY PERMIT APPLICANT **Tank(s) must be removed from site on the same day as permit is issued!**

BUSINESS NAME: ECI Environmental

MAILING ADDRESS: P.O. Box 153 SUITE:

CITY: Fox Island STATE: WA ZIP: 98333

JOBSITE ADDRESS: 500 Westlake Avenue

CONTACT PERSON: Brad Reilly PHONE NUMBER: (206) 779-0050

Number of Tank(s): 1 Tank Size(s): 1800 gallon ☐ Aboveground tank

Product(s) Previously Contained: Bunker Oil ■ Underground tank

■ Removal (Marine Chemist inspection and certificate required for all tanks regardless of size or contents)

☐ Abandonment-in-Place (Marine Chemist certificate required for tanks previously containing Class I flammable liquids and/or unknowns)

Hot work being conducted: ■ No ☐ Yes (If yes, a separate hot work permit is required)

Permit applications may be submitted in person weekdays from 8:00 a.m. to 4:30 p.m., or mailed to:

Seattle Fire Department
Fire Marshal's Office – Permits
220 Third Ave S, 2nd Floor
Seattle, WA 98104-2608

To pay with a Visa or Master Card, email this completed application to us,
THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT.
Tel: (206) 386-1450
E-mail: permits@seattle.gov

Call 206-386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.
TANKS MAY BE REMOVED/DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION
NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT!

Permission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached conditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, and federal, state UST Decommisioner **THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED.**

I understand the conditions of this permit and will ensure all tank removal/decommissioning operations are conducted accordingly.
I acknowledge that I received an inspection by a Seattle Fire Department inspector today.

Brad Reilly
Print Name

Signature

UST Decommissioner
Title

Special permit conditions: ***Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-600)***

FMO USE:
Check No.: _____
Receipt No.: _____
Application ID#: _____

APPROVED BY:
Inspector: _____ SFD ID# _____
Name of Marine Chemist _____ Certificate # _____
Date: _____

(01/19)

COMMERCIAL TANK REMOVAL/DECOMMISSIONING PERMIT CONDITIONS

1. Two (2) portable fire extinguishers each having a minimum rating of 40 BC shall be on site within 50 feet of the operation. Fire extinguishers shall be inspected, approved and certified annually.

2. Rope or ribbon barricades located at least 10 feet from the tank shall surround every outdoor storage tank removal or decommissioning operation or the operation shall be enclosed in a fenced yard.

3. "No Smoking" signs shall be posted in readily visible locations.

4. No hot work is allowed on a tank system prior to issuance of this permit and the tank is certified "Safe for Hot Work" by a Certified Marine Chemist. Hot work means any activities involving riveting, welding, burning, brazing, soldering, heating, chopping, grinding, ripping, drilling, cutting with a chop saw or "Sawzall", abrasive blasting, use of powder-actuated tools or similar spark-producing operations, crushing or mechanically shearing to facilitate opening for cleaning, disposal, scrapping for recycling purposes.

5. A separate temporary Seattle Fire Department permit (Code 4913) or a validation number assigned in conjunction with an annual hot work permit (Code 4911 or 4912) is required prior to any hot work operations.

6. Permits may cover multiple tanks located at the same address. If additional tanks are to be removed or abandoned at later dates, separate permits shall be obtained. Each address location requires a separate permit application regardless of whether multiple address locations are physically next to one another.

7. Additional fees will be charged if inspectors are required to work other than normal business hours. (Normal business hours are Monday through Friday, 8:00 a.m. to 4:30 p.m.)

8. No excavation of an underground tank is permitted prior to inspection by the Seattle Fire Marshal's Office.
   Exception: Removal of the top layer of asphalt or concrete only with no removal of dirt, pea gravel or soil over the underground storage tank. Further excavation may be allowed by a Seattle Fire Department Special Hazards Unit Inspector prior to the initial inspection depending on conditions and if the tank has been inerted by a Marine Chemist who is present on site. The name of the inspector and the time permission was given shall be made available at time of inspection.

9. Prior to inspection, to ensure tanks and connected piping are completely free of all flammable or combustible liquids, a receipt or certificate must be on site indicating the tanks have been pumped and rinsed by an approved company. Product and rinse water must be disposed of in an approved manner.

10. For tanks being decommissioned in place that previously contained Class I liquids, a Certified Marine Chemist certificate must be issued and available on site for inspection certifying that the tank has been properly inerted prior to filling.

11. No tank shall be filled prior to an inspection by the Seattle Fire Marshal's Office.

12. Tanks being decommissioned in place must be filled with a lean concrete mixture. Filling with foam is prohibited.

13. A Marine Chemist's certificate verifying the tank has been properly inerted or is otherwise certified "Safe for Hot Work" shall be issued and available on site for inspection for each underground and aboveground tank being removed regardless of the product previously contained.

14. If tanks are being removed, the tanks' atmosphere must be inert using one of the following approved methods:
    - Dry ice (pellets or chunks of solid CO_2). Minimum 40 lbs per 1000 gallons of tank capacity is recommended.
    - Compressed CO_2 gas in cylinders (Note: This method may only be performed by a Certified Marine Chemist).
    - Purging with air (gas-freeing) using Venturi tube apparatus, with proper bonding and grounding and after the tank has been pumped and rinsed by an approved company.

15. A maximum reading of less than 6% of oxygen must be obtained prior to the removal of the tanks if CO_2 or another inert gas, as approved by the Marine Chemist, is used to inert the tank or, a reading of 0% LEL must be obtained prior to removal of the tank if the air-purging (Venturi air moving devices) method is used.

16. All local, state and federal regulations for confined space entry shall be complied with prior to entering an underground storage tank.

17. Tanks with baffles to prevent movement of liquid must be certified gas-freed or inerted by a Certified Marine Chemist or a Petroleum Industry Safety Engineer regularly engaged in that business prior to removal.

18. Tanks being removed must be removed from the site and relocated to a remote, approved facility on the same day that the permit is issued.

19. During the hot work operations, digging, excavating, hauling or transport of petroleum storage tanks that have not been cleaned and gas-freed, tanks must be inerted to less than 6% oxygen. All openings are to be cap closed and secured except for one 1/8" hole drilled through a cap. These tanks are to be sprayed painted with "INERTED, DO NOT ENTER" or "INERTED WITH CO_2, NOT SAFE FOR WORKERS".

BILL OF LADING
PRODUCT TRANSPORT MANIFEST

Nº 31005

MARINE VACUUM SERVICE, INC.
24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240
FAX NUMBER 206-763-8084
TRUCK NUMBER _____ DATE 1/27/20

TO
DESTINATION
NAME Marine Vacuum Service, Inc.
STREET 1516 South Graham Street
CITY/STATE Seattle, WA 98108

FROM
SHIPPER
NAME CGI Construction
STREET 500 Westlake Ave N
CITY/STATE Seattle, WA

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
1-1500	UST for disposal	

RECEIVER _____ SLUDGE DATE 1/27/20 SHIPPER _____ DATE 1/27/2020

NOTE: Cleaned 1/27

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as dangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

George D. Blair - Northwest Marine Chemist, Inc.
P.O. Box 7084, Tacoma, WA 98417
Office: 253-752-0149 Fax:
Email: gbcmc637@gmail.com

MARINE CHEMIST CERTIFICATE

Serial 637-01081

ECI	GLY/CGI	Feb 7, 2020
Survey Requested by	Vessel Owner Agent	Date
Tank Farm	Underground Storage Tank	500 N. Westlake
Vessel	Type of Vessel	Specific Location of Vessel
HFO as Fuel	O_2, LEL, Visual, VOC	12:50
Last Three 3 Loadings	Tests Performed	Time Survey Completed

Inspected Spaces:
Group 1. 12-2,500 Gal. UST

Safety Designations:
ATMOSPHERE SAFE FOR WORKERS
SAFE FOR LIMITED HOT WORK
LIMITATIONS:
Specific Location: *At job site.*
Hot Work Type: *This tank has been pressure washed free of any flammable residues, and is safe for excavation and cleaning in place. Tests of residues show no propagated flame when exposed to propane torch. Sparks will not ignite residues.*

Instructions
Maintain firewatch with charged extinguisher at ready during excavation operations.

Test Results	% O_2	% LEL	VOC
Inspected spaces group 1	20.8%	<1%	10 ppm

Limits of Detection
0.1 ppm VOC

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person or the authority having jurisdiction as applicable in support of work prior to entry or recommencement of work.

QUALIFICATIONS: Transfer of ballast, cargo, fuel or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this certificate.
STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFP 306, Subsections 4.3.1 through 4.3.6)
ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere shall be at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.
NOT SAFE FOR WORKERS: In the compartment or space so designated, entry shall not be permitted.
ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are specified.
SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not be capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire; or they are inerted. Ship's fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.
SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable; and the nature or type of hot work shall be limited or restricted.
NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot is not permitted.

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Authorized Representative	Company	Date	Signed Marine Chemist	CMC No.
	ECI	Feb 7, 2020		637

eci Environmental Services
Practical Environmental Compliance Solutions
Offices In: Anchorage | Tacoma | Portland

February 10, 2020
ECI Project No.: 0520-26-02

Underground Storage Tank Decommissioning Certification

This is a statement of Underground Storage Tank Decommissioning provided by EcoCon, Inc. (ECI). ECI states this decommissioning has occurred under the supervision of an ICC Certified UST Decommissioner following the local and state rules and regulations as defined by the Uniform Fire Code (UFC) and Washington Administrative Code (WAC). Following Northwest Marine Chemist and Seattle Fire Department certification, the UST was excavated and transported off site to be cut up then disposed at a local metal recycling company.

Project Client:	Construction Group International
Project Name:	Block 38 - Bunker Oil UST #2
Project Address:	500 Westlake Ave. N., Seattle, WA
Type of Decommissioning:	Excavation and removal from sub-surface
UST Installation Date:	Unknown (pre 1980)
UST Decommissioning Date:	2/07/2020
Permit Issuance Date:	2/07/2020
UST #:	Tank #1
UST(s) Dimensions:	5.0 x 16 feet (Approximate) – 1 UST
UST(s) Total Gallons:	2500 Gallons (Approximate)
UST(s) Construction:	Steel – Single Wall Construction
Certified UST Decommissioner:	**Brad Reilly**
Certification Number:	**8289423 – Exp: 2/14/2020**

Brad N. Reilly

February 10, 2020
Date

ECI | Environmental Services
Phone: (253) 921-7059 | Fax: (253) 369-6228 | brad@alleci.com

Your
Seattle
Fire Department

APPLICATION FOR TEMPORARY PERMIT

Code 7908 Commercial Tank Removal/Decommissioning

Permit Fee:

Date Issued: 02/06/2020

TO BE COMPLETED BY PERMIT APPLICANT

Tank(s) must be removed from site on the same day as permit is issued!

BUSINESS NAME: ECI Environmental

MAILING ADDRESS: P.O. Box 153 SUITE:

CITY: Fox Island STATE: WA ZIP: 98333

JOBSITE ADDRESS: 500 Westlake Avenue

CONTACT PERSON: Brad Reilly PHONE NUMBER: (206) 779-0050

Number of Tank(s): 1 Tank Size(s): 2200 ☐ Aboveground tank

Product(s) Previously Contained: Bunker Oil ■ Underground tank

■ Removal (Marine Chemist inspection and certificate required for all tanks regardless of size or contents)

☐ Abandonment-in-Place (Marine Chemist certificate required for tanks previously containing Class I flammable liquids and/or unknowns)

Hot work being conducted: ■ No ☐ Yes (If yes, a separate hot work permit is required)

Permit applications may be submitted in person weekdays from 8:00 a.m. to 4:30 p.m., or mailed to:

Seattle Fire Department
Fire Marshal's Office – Permits
220 Third Ave S, 2nd Floor
Seattle, WA 98104-2608

To pay with a Visa or Master Card, email this completed application to us,
THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT.
Tel: (206) 386-1450
E-mail: permits@seattle.gov

Call 206-386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.
TANKS MAY BE REMOVED/DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION
NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT!

Permission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached conditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, and federal, state, and local regulations. **THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED.**

I understand the conditions of this permit and will ensure all tank removal/decommissioning operations are conducted accordingly. I acknowledge that I received an inspection by a Seattle Fire Department inspector today.

Brad Reilly (Print Name) | (Signature) | UST Decommissioner (Title)

Special permit conditions: ***Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-600)***

FMO USE:

Check No.: _____
Receipt No.: _____
Application ID#: _____

APPROVED BY:

Inspector: _____ SFD ID# _____
Name of Marine Chemist _____ Certificate # _____
Date: _____

(01/19)

COMMERCIAL TANK REMOVAL/DECOMMISSIONING PERMIT CONDITIONS

1. Two (2) portable fire extinguishers each having a minimum rating of 40 BC shall be on site within 50 feet of the operation. Fire extinguishers shall be inspected, approved and certified annually.

2. Rope or ribbon barricades located at least 10 feet from the tank shall surround every outdoor storage tank removal or decommissioning operation or the operation shall be enclosed in a fenced yard.

3. "No Smoking" signs shall be posted in readily visible locations.

4. No hot work is allowed on a tank system prior to issuance of this permit and the tank is certified "Safe for Hot Work" by a Certified Marine Chemist. Hot work means any activities involving riveting, welding, burning, brazing, soldering, heating, chopping, grinding, ripping, drilling, cutting with a chop saw or "Sawzall", abrasive blasting, use of powder-actuated tools or similar spark-producing operations, crushing or mechanically shearing to facilitate opening for cleaning, disposal, scrapping for recycling purposes.

5. A separate temporary Seattle Fire Department permit (Code 4913) or a validation number assigned in conjunction with an annual hot work permit (Code 4911 or 4912) is required prior to any hot work operations.

6. Permits may cover multiple tanks located at the same address. If additional tanks are to be removed or abandoned at later dates, separate permits shall be obtained. Each address location requires a separate permit application regardless of whether multiple address locations are physically next to one another.

7. Additional fees will be charged if inspectors are required to work other than normal business hours. (Normal business hours are Monday through Friday, 8:00 a.m. to 4:30 p.m.)

8. No excavation of an underground tank is permitted prior to inspection by the Seattle Fire Marshal's Office.
   Exception: Removal of the top layer of asphalt or concrete only with no removal of dirt, pea gravel or soil over the underground storage tank. Further excavation may be allowed by a Seattle Fire Department Special Hazards Unit Inspector prior to the initial inspection depending on conditions and if the tank has been inerted by a Marine Chemist who is present on site. The name of the inspector and the time permission was given shall be made available at time of inspection.

9. Prior to inspection, to ensure tanks and connected piping are completely free of all flammable or combustible liquids, a receipt or certificate must be on site indicating the tanks have been pumped and rinsed by an approved company. Product and rinse water must be disposed of in an approved manner.

10. For tanks being decommissioned in place that previously contained Class I liquids, a Certified Marine Chemist certificate must be issued and available on site for inspection certifying that the tank has been properly inerted prior to filling.

11. No tank shall be filled prior to an inspection by the Seattle Fire Marshal's Office.

12. Tanks being decommissioned in place must be filled with a lean concrete mixture. Filling with foam is prohibited.

13. A Marine Chemist's certificate verifying the tank has been properly inerted or is otherwise certified "Safe for Hot Work" shall be issued and available on site for inspection for each underground and aboveground tank being removed regardless of the product previously contained.

14. If tanks are being removed, the tanks' atmosphere must be inert using one of the following approved methods:
    - Dry ice (pellets or chunks of solid CO_2). Minimum 40 lbs per 1000 gallons of tank capacity is recommended.
    - Compressed CO_2 gas in cylinders (Note: This method may only be performed by a Certified Marine Chemist).
    - Purging with air (gas-freeing) using Venturi tube apparatus, with proper bonding and grounding and after the tank has been pumped and rinsed by an approved company.

15. A maximum reading of less than 6% of oxygen must be obtained prior to the removal of the tanks if CO_2 or another inert gas, as approved by the Marine Chemist, is used to inert the tank or, a reading of 0% LEL must be obtained prior to removal of the tank if the air-purging (Venturi air moving devices) method is used.

16. All local, state and federal regulations for confined space entry shall be complied with prior to entering an underground storage tank.

17. Tanks with baffles to prevent movement of liquid must be certified gas-freed or inerted by a Certified Marine Chemist or a Petroleum Industry Safety Engineer regularly engaged in that business prior to removal.

18. Tanks being removed must be removed from the site and relocated to a remote, approved facility on the same day that the permit is issued.

19. During the hot work operations, digging, excavating, hauling or transport of petroleum storage tanks that have not been cleaned and gas-freed, tanks must be inerted to less than 6% oxygen. All openings are to be cap closed and secured except for one 1/8" hole drilled through a cap. These tanks are to be sprayed painted with "INERTED, DO NOT ENTER" or "INERTED WITH CO_2, NOT SAFE FOR WORKERS".

BILL OF LADING
PRODUCT TRANSPORT MANIFEST

N° 38928

MARINE VACUUM SERVICE, INC.
24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240
FAX NUMBER 206-763-8084
TRUCK NUMBER _____ DATE 2-7-20

TO
DESTINATION
NAME Marine Vacuum Service, Inc
STREET 1516 South Graham Street
CITY/STATE Seattle, WA 98108

FROM
SHIPPER
NAME CGI Construction
STREET 500 westlake Ave. N
CITY/STATE Seattle WA

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
1 UST.	1800 Gal Tank (Empty)	
	SLUDGE	

RECEIVER DR. Roy
DATE 2-7-20
SHIPPER X
DATE

NOTE: * Drop off 1 UST Tank for Disposal.

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as dangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

APPENDIX J
VAPOR BARRIER SPECIFICATIONS

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

DRAGO® WRAP VAPOR INTRUSION BARRIER
SUMMARY OF PERMEATION AND ATTENUATION TESTING

BACKGROUND

From October 2015 through August 2018, Drago Wrap Vapor Intrusion Barrier was subjected to a series of diffusion and sorption tests to obtain the film's diffusion, partitioning, and permeation characteristics. This testing was designed and overseen by an expert in the permeation of volatile organic compounds (VOCs) at a prominent university. The results of this testing, combined with further modeling and analysis, have been used to empirically determine the attenuation efficacy of Drago Wrap against various hydrocarbons and chlorinated solvents. The purpose of this document is to briefly discuss the theory behind diffusive vapor intrusion (VI); summarize and explain the robust testing protocol utilized; and relay the results of the testing and analysis.

CHEMICALS TESTED

Drago Wrap has been tested with regard to permeation of the following chemicals: Trichloroethylene (TCE); Perchloroethylene (PCE); the BTEX family: Benzene, Toluene, Ethylbenzene, Xylene; Dichloromethane; 1,4 Dichlorobenzene; Methyl tert-butyl ether (MTBE) and Naphthalene. This list was chosen based on a survey of the most often found chemicals on brownfield projects.

THEORY

The practical purpose behind obtaining permeation, diffusion, and partitioning coefficients is to apply them to the equations governing mass flux per Fick's laws during design of VI mitigation systems. The following briefly explains the theory and physics behind Fick's First Law.

The diffusion coefficient, D_g (units expressed in [m^2/s]), is the parameter defining the membrane's resistance to the diffusive mass flux [g/m^2s] transported within the membrane as governed by Fick's First Law:

$$f = -D_g \frac{dc_g}{d_z} \qquad \text{(Eq. 1)}$$

due to a concentration gradient dc_g/d_z [g/m^4] in the membrane layer. If the contaminant source is an aqueous solution adjacent to the membrane, the concentration of the contaminant in the membrane can be related to that in the fluid (at equilibrium) by the partitioning coefficient, S_{gf} (where S_{gf} is analogous to a Henry's coefficient). It is given by Equation 2 and depends on the solubility of the contaminant in the material:

$$S_{gf} = \frac{c_g}{c_f} \qquad \text{(Eq. 2)}$$

where c_f is the concentration of the contaminant in the fluid, adjacent to and in equilibrium with, the concentration, c_g, in the membrane.

Thus, the mass flux (f) from the fluid on one side of the membrane to the fluid on the other side (at steady state) is given by:

$$f = S_{gf} D_g \frac{dc_g}{d_z} = \frac{P_g}{l} \Delta C \qquad \text{(Eq. 3)}$$

where l is the thickness of the film/membrane, and ΔC is the difference in concentration between the two sides of the film/membrane at steady state, and the product of the two parameters (S_{gf} D_g) is called the permeation coefficient, P_g (m^2/s):

$$P_g = S_{gf} D_g \quad \text{(Eq. 4)}$$

It can be gleaned from Equations 1-4 that the diffusion coefficient, D_g, is not enough to characterize the film's mass transfer properties for contaminants moving from below the membrane to above it. Diffusive mass transfer through an intact geomembrane is a 3-step process: partitioning into the geomembrane; diffusion through the geomembrane; and partitioning out of the geomembrane. Both D_g and S_{gf} (or simply P_g) must be known in order to effectively utilize Fick's steady state mass transfer equations. Therefore, to allow for full and complete analysis, Drago Wrap's permeation was fully characterized with all three values (permeation, diffusion, and partitioning coefficients) for each chemical tested. Those values are contained in Table 2. It is also imperative to understand the differences in methodologies between lab and site-specific field-testing setups. If such differences exist, the addition of the phase transition coefficient between water and air, Henry's coefficient (H), may also be required in the analysis. A deeper discussion on accounting for these differences is beyond the scope of this summary. Please contact the Stego Industries' Technical Department for additional assistance.

TESTING METHODOLOGY

Two types of tests and subsequent modeling have been employed in characterizing Drago Wrap's relevant characteristics: diffusion testing, sorption testing, and the finite layer modeling and analysis program, POLLUTE v7 (Rowe and Booker 2004).

The diffusion testing setup used stainless steel double-compartment cells (Figure 1), such that source and receptor volumes were separated by the Drago Wrap membrane. The cell was screwed together, with the membrane secured using two Viton rings (Figure 2) to prevent the loss of contaminant at the connection between each compartment and the membrane. Both the source and receptor were filled with double deionized (DDI) water, and a septum was inserted into the sampling ports to prevent losses. A stock solution of contaminants was added to the source compartment to form a dilute aqueous solution with a known concentration. Before assembly, and after disassembly, the mass of the membrane was recorded.

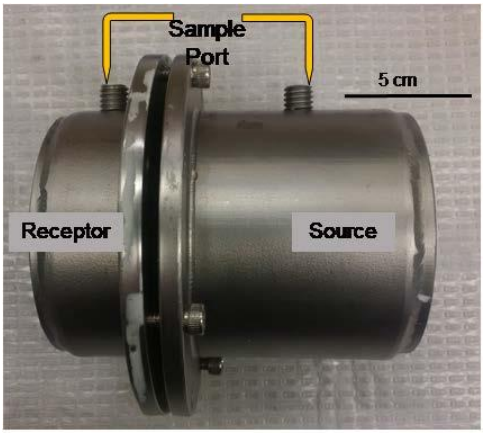


Figure 1: Double Compartment Cell

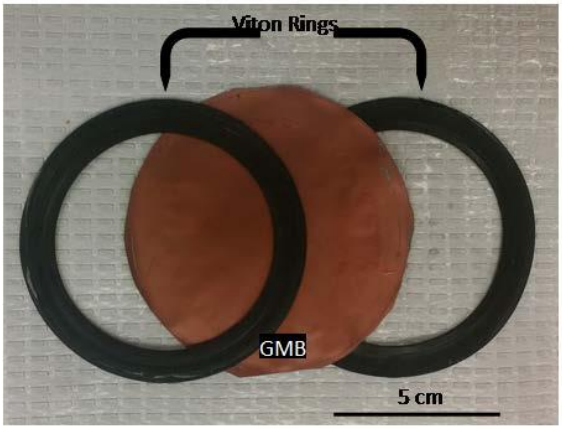


Figure 2: Membrane and Viton Rings

Sorption testing was also performed to directly measure the partitioning coefficients for each chemical. The sorption testing was conducted using 20-ml vials where a specimen was placed in double deionized water. The mass of the specimen was recorded beforehand. The vials were filled with double deionized water so that there was no airspace in the vial. Known masses of contaminants were added and 50 µl samples were taken daily from the vials for analysis and replaced with double deionized water until equilibrium was reached. The chemical analysis of these specimens was performed in the same manner as chemical analysis of the diffusion tests. This analysis is described in Appendix B.

The results from the diffusion and sorption tests were transduced and analyzed using the finite layer modeling and analysis program, POLLUTE v7, to create the results seen in Table 2.

In addition to whole-film testing, the discrete layers that make up Drago Wrap were tested to determine their respective permeation, diffusion and partitioning coefficients. The results obtained from the mathematical modeling of these tests do not necessarily equate to the values obtained from whole-film permeation testing. In other words, the full membrane benefits from a synergistic effect: the whole is greater than the sum of its parts. Due to its unique design, the testing demonstrated a very important feature to Drago Wrap: its ability to degrade chlorinated solvents like TCE. The results show about a 50-day half-life for TCE when the membrane is installed in its intended orientation. The results in Table 2 come from the most conservative approach to analyzing the results and do not consider these synergies.

RESULTS

As described earlier, the values displayed in Table 2 result from a conservative approach to the analysis of data generated from several phases and years of testing, and subsequent numerical modeling. The preferred methodology for obtaining accurate results requires an aqueous-to-aqueous testing scenario. Table 2 depicts these results. There exist scenarios where mass flux design with Drago Wrap requires additional consideration of phase-change analysis beyond what is offered in Table 2. Please contact the Stego Industries' Technical Department for assistance should the need arise.

Table 1 – Descriptions of the Tested Chemicals

Chemical	Abbreviation	Family	Use
Benzene	Btex	Aromatic Hydrocarbon	Gasoline byproduct
Toluene	bTex	Aromatic Hydrocarbon	Gasoline byproduct
Ethylbenzene	btEx	Aromatic Hydrocarbon	Gasoline byproduct
M&P-Xylenes	bteX	Aromatic Hydrocarbon	Gasoline byproduct
O-Xylene	bteX	Aromatic Hydrocarbon	Gasoline byproduct
Trichloroethylene	TCE	Chlorinated Hydrocarbon	Dry Cleaning and Solvent
Tetrachloroethylene	PCE	Chlorinated Hydrocarbon	Dry Cleaning and Solvent
Methyl tert-butyl ether	MTBE	Oxygenate	Octane-increasing additive to fuel
Dichloromethane	DCM	Chlorinated Hydrocarbon	Paint Stripper, Decaffeinate, Aerosol propellant
Naphthalene	Naphthalene	Polycyclic Aromatic Hydrocarbon	Fumigant, Pyrotechnics, Wetting Agent
1,4-Dichlorobenzne	1,4-DCB	Chlorinated Hydrocarbon	Pesticide, Disinfectant, Deodorant

Table 2 – Aqueous Coefficients

Chemical	Diffusion, D_g [x 10^{-15} m^2/s]	Partitioning, S_{gf} [-]	Permeation, P_g [x 10^{-13} m^2/s]
Benzene	2.6	171	4.5
Toluene	1.5	339	5.1
Ethylbenzene	0.41	764	3.1
M&P-Xylenes	0.4	743	2.9
O-Xylene	0.4	670	2.7
TCE	3.9	251	9.8
PCE	1.1	610	6.6
MTBE	1	1	0.01
DCM	0.95	475	4.5
Naphthalene	0.014	1710	0.25
1,4-DCB	0.94	760	7.1

CONCLUSION

Drago Wrap has proven to be a superior barrier to standard geomembranes like HDPE (by a factor of about 10 to 200 – See Appendix A) for all contaminants where comparisons could be made to HDPE and has remarkably low values for BTEX, TCE; PCE; MTBE; Naphthalene; DCM; and 1,4 DCB with permeation coefficients of the order of magnitude of 10^{-13} – 10^{-14} m^2/s. In addition, the testing has shown that chlorinated solvents experience degradation while permeating through the membrane with a half-life of 50 days for TCE when the film is correctly oriented relative to the contaminant source.

APPENDIX A – COMPARISON TO HDPE (WHERE AVAILABLE)

	Permeation Coefficients- 20-mil Drago Wrap			Permeation Coefficients – 80-mil HDPE[1]			
	D_g (m^2/s)	S_{gf} (-)	P_g (m^2/s)	D_g (m^2/s)	S_{gf} (-)	P_g (m^2/s)	Ratio (P_{gDrago}/P_{gHDPE})
Benzene	$2.6x10^{-15}$	171	$4.5x10^{-13}$	$3.5x10^{-13}$	30	$1.05 x10^{-11}$	23
Toluene	$1.5x10^{-15}$	339	$5.1x10^{-13}$	$3.0 x10^{-13}$	100	$3.0 x10^{-11}$	60
Ethylbenzene	$4.1x10^{-16}$	764	$3.0x10^{-13}$	$1.8 x10^{-13}$	285	$5.1 x10^{-11}$	170
m&p-Xylenes	$4.0x10^{-16}$	743	$2.9x10^{-13}$	$1.7 x10^{-13}$	347	$5.9 x10^{-11}$	200
o-Xylene	$4.0x10^{-16}$	670	$2.7x10^{-13}$	$1.5 x10^{-13}$	240	$3.6 x10^{-11}$	130
TCE	$3.9x10^{-15}$	251	$9.8x10^{-13}$	$4.0 x10^{-13}$	85	$3.4 x10^{-11}$	35
PCE	$1.1x10^{-15}$	610	$6.6x10^{-13}$	-	-	-	-
MTBE	$1.0x10^{-15}$	1	$1.0x10^{-15}$	-	-	-	-
DCM	$9.5x10^{-16}$	475	$4.5x10^{-13}$	$6.5 x10^{-13}$	6	$3.9 x10^{-12}$	9
Naphthalene	$1.4x10^{-17}$	1710	$2.5x10^{-14}$	-	-	-	-
1,4-DCB	$9.4 x10^{-16}$	760	$7.1x10^{-13}$	-	-	-	-

[1]Sangam & Rowe (2001)

APPENDIX B– CHEMICAL ANALYSIS

The cells were sampled at regular time intervals. During each sampling event, 10 ul to 100 ul was removed from the cell, and that volume was replaced with DDI water so there was no airspace in the cell.

The samples were added to a vial containing 0.4 ml of methanol, 0.01 ml internal standard, and water was added so the total fluid volume in the vial was 1.6 ml. A Solid Phase Micro Extraction (SPME) fiber was inserted into vial headspace and the volatile compounds sorbed onto the fiber. This fiber was analyzed using gas chromatography (GC), and results compared to a certified laboratory standard calibration curve for the contaminant in question. Two types of detectors were used (depending on the cell in question); namely, a mass selective detector and a flame ionization detector. A quality assurance certified lab standard (from a different source to the calibration standards) was assessed during each sampling event.

All laboratory testing was conducted in a Canadian Association for Laboratory Accreditation (CALA) lab and followed CALA methods. This means that rigorous quality assurance practices were followed during chemical analysis. CALA frequently reviews the methods used and the accreditation is renewed every two years.

REFERENCES

Rowe, R. K., and Booker, J. R. (2004). "POLLUTE V.7 - 1D Pollutant Migration through a Non-homogenous Soil." GAEA Environmental Engineering Ltd.

Sangam, H. P., and Rowe, R. K. (2001). "Migration of dilute aqueous organic pollutants through HDPE geomembranes." Geotextiles and Geomembranes, 19(6), 329–357.

DRAGO® WRAP VAPOR INTRUSION BARRIER
RESISTANCE TO DEGRADATION – ADDITIONAL CONSIDERATIONS

Drago Wrap Vapor Intrusion Barrier, and the technologies that underlie this game-changing vapor intrusion protection product, has undergone extensive testing to determine its ability to attenuate VOCs and other relevant material properties. These tests exposed Drago Wrap to a host of deleterious chemicals that may exist at or below a project site, including various petroleum distillates, chlorinated solvents, etc. The results of these tests are positive and telling; they show that Drago Wrap is extremely impermeable to a wide range of chemical vapors and, more importantly for our current considerations, maintains such impermeability over the course of years of exposure to these deleterious compounds.

While the results of such testing speak extensively to Drago Wrap's ability to resist degradation in extreme exposure conditions, we wished to pursue multiple exposure scenarios to further increase the confidence project team members should have in Drago Wrap as a critical component of the vapor intrusion systems they utilize on their projects. The following pages detail these measures. The conclusions indicate that there were no significant changes in mass or volume of Drago Wrap when exposed to direct contact with soils contaminated with benzene, toluene, ethylbenzene, xylene (collectively known as BTEX), trichloroethylene (TCE), perchloroethylene (PCE, or tetrachloroethylene), cis-1,2-dichloroehtylne (C-DCE), trans-1,2-dichloroehtylene (T-DCE), and sulfates. Additionally, we tested the post-exposure samples to determine their tensile strength (ASTM E882) and permeance to water vapor (F1249), and we observed that Drago Wrap maintains its ability to meet each corresponding performance threshold for high-performance water vapor barriers: for D882, Drago Wrap remains a Class A Vapor Barrier per ASTM E1745; for F1249, Drago Wrap maintains a permeance well below 0.01 perms.

If additional questions remain regarding any aspect of Drago Wrap, please be sure to contact the Stego Technical Department. We are happy to help and look forward to the opportunity to provide an effective and economical solution to your barrier needs.

Regards,

Dan Marks CSI CDT LEED Green Associate
Technical Director | Stego Industries, LLC
O: (949) 325-2035| F: (949) 325-2062
danmarks@stegoindustries.com

SETUP

To simulate a hydrocarbon contaminated brownfield site, a senior chemist at a research and testing lab prepared contaminated water to contain 1,000 ppb of each benzene, toluene, ethylbenzene, and xylene (BTEX). Two liters of this mixture were placed in a chamber, 49 cm x 23.5 cm wide by 27 cm tall. ASTM C778 standard 20-30 sand was added to the vessel until it was 5 cm above the original water line. At this level, the sand was damp with no free-standing water. Drago Wrap samples were placed on top of the damp sand, and the entire surface of the membrane were weighted down with sand-filled plastic bags to ensure full contact of the Drago Wrap with the damp sand. The test vessel was covered and sealed. After 30 days of exposure under ambient laboratory conditions (21-25°C), the samples were removed for evaluation.

Simply stated:
We took relatively large amounts of often-seen hydrocarbons resulting from fuel spills and old service station sites and put them into a water table just 2 inches below a sample of Drago Wrap. This can be considered an extreme situation in that water tables are not typically that close to the slab and vapor barrier membrane. After a 30-day exposure, the mass and volume changes were analyzed, and we subsequently tested the material for its water vapor permeance rating and tensile strength.

RESULTS

Mass and Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *"All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the BTEX-exposed coupons were not significantly different from the changes for the control-exposed coupons."*

Conclusion: In other words, Drago Wrap mass and volume were not significantly affected by the BTEX exposure.

Tensile Strength

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 30-day extreme BTEX solvent exposure, the results were 50.2 lbf/in and 49.6 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 48.5 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: BTEX exposure has little to no effect on Drago Wrap's physical integrity in below-slab applications.

Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the BTEX solution (0.00733 perms) increased minimally compared to the control (0.00614 perms), both staying well below the threshold of 0.01 perms.

Conclusion: BTEX exposure had minimal effect on Drago Wrap's ability to retard water vapor.

SETUP

To simulate a dry-cleaning brownfield site, a senior chemist at a research and testing lab prepared contaminated water to contain 3,600 ppb perchloroethylene (PCE), 12,500 PPB trichloroethylene (TCE), 16,200 PPB CIS-1,2-dichloroethylene (C-DCE), AND 1,700 PPB trans-1,2-dichlorothylene (T-DCE). Two liters of this mixture were placed in a chamber, 49 cm x 23.5 cm wide and 27 cm tall. ASTM C778 standard 20-30 sand was added to the vessel until it was 5 cm above the original water line. At this level, the sand was damp with no free-standing water. Drago Wrap samples were placed on top of the damp sand, and the entire surface of the vapor barrier was weighted down with sand-filled plastic bags to ensure full contact of the Drago Wrap with the damp sand. The test vessel was covered and sealed. After 30 days of exposure under ambient laboratory conditions (21-25°C), the samples were removed for evaluation.

Simply stated:
We took an actual soils report from an old dry cleaning site and recreated the conditions, roughly. In the actual scenario the water table was 20 feet below the vapor barrier. In our setup, we created a contaminated water table just 2 *inches* below Drago Wrap. After a 30-day exposure, the mass and volume changes were analyzed, and we subsequently tested the material for its water vapor permeance rating and tensile strength.

RESULTS

Mass and Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *"All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the chlorinated solvent-exposed coupons were not significantly different from the changes for the control-exposed coupons."*

Conclusion: Drago Wrap's mass and volume were not significantly affected by the chlorinated solvent exposure.

Tensile Strength

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 30-day extreme chlorinated solvent exposure, the results were 51.2 lbf/in and 49.7 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 48.5 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: Chlorinated solvent exposure has little to no effect on Drago Wrap's physical integrity in below-slab applications.

Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the BTEX solution (0.00713 perms) increased minimally compared to the control (0.00614 perms), both staying well below the threshold of 0.01 perms.

Conclusion: Chlorinated solvent exposure had minimal effect on Drago Wrap's ability to retard water vapor.

SETUP

To simulate the worst possible sulfate exposure, a senior chemist at a research and testing lab prepared water contaminated with 10,000 PPM of SO4 (sulfate.) This sulfate concentration was chosen because it was rated as "very severe" (the highest or worst classification) by UC Berkeley professors conducting research for the Caltrans Long Life Pavement Rehabilitation Strategy (LLPRS) Program. The Chemist took this worst-case scenario concentration and soaked samples of Drago Wrap in it for 28 days. Upon removal, the samples were analyzed for changes in mass and volume, and subsequently the exposed product was tested to determine its tensile strength and water vapor permeance rate.

RESULTS

Mass & Volume

The chemist conducted mass and volume measurements before and after exposure. The following comes directly from her report: *"All of the test coupons exhibited slight changes in mass and volume, no matter what their exposure conditions were. Statistical analysis by the two-tailed t-test showed that the changes for the sulfate-exposed coupons were not significantly different from the changes for the control-exposed coupons."*

Conclusion: In other words, Drago Wrap's mass and volume were not significantly affected by the sulfate exposure.

Tensile

Samples were sent by the lab to our in-house lab and tested per ASTM E882 in both the machine and transverse directions. After the 28-day extreme sulfate exposure, the results were 49.6 lbf/in and 52.3 lbf/in for machine and transverse directions respectively. These results were not significantly different than the water-exposed control samples (48.7 lbf/in, 50.8 lbf/in) or the unexposed samples (48.5 lbf/in, 46.8 lbf/in). For another point of comparison, consider that to be labeled as Class A per ASTM E1745, new-material tensile need only test at 45 lbf/in.

Conclusion: Sulfate exposure has little to no effect on Drago Wrap's physical integrity in below-slab applications.

Water Vapor Permeance

The testing lab then sent exposed and control samples to our in-house lab where they were subsequently tested per ASTM F1249. The results were very positive. The permeance of the sample exposed to the sulfate solution (0.00734 perms) increased minimally compared to the control (0.00698 perms), both staying well below the threshold of 0.01 perms.

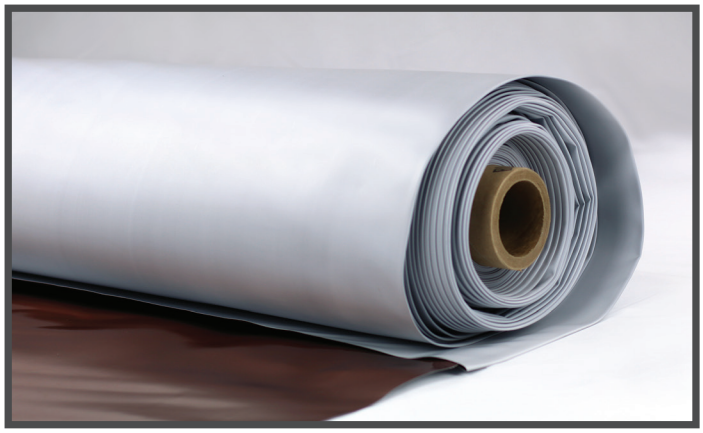
Conclusion: Sulfate exposure had no significant effect on Drago Wrap's ability to retard water vapor.

DRAGO® WRAP
VAPOR INTRUSION BARRIER

A STEGO TECHNOLOGY, LLC INNOVATION | VAPOR RETARDERS 07 26 00, 03 30 00 | VERSION: 2/22/2019

1. PRODUCT NAME

DRAGO WRAP VAPOR INTRUSION BARRIER



2. MANUFACTURER

c/o Stego® Industries, LLC*
216 Avenida Fabricante, Suite 101
San Clemente, CA 92672
Sales, Technical Assistance
Ph: (877) 464-7834
Fx: (949) 257-4113
www.stegoindustries.com

3. PRODUCT DESCRIPTION

USES: Drago Wrap is specifically engineered to attenuate volatile organic compounds (VOCs) and serve as a below-slab moisture vapor barrier.

COMPOSITION: Drago Wrap is a multi-layered plastic extrusion that combines uniquely designed materials with only high grade, prime, virgin resins.

ENVIRONMENTAL FACTORS: Drago Wrap can be used in systems for the control of various VOCs including hydrocarbons, chlorinated solvents, radon, methane, soil poisons, and sulfates.

4. TECHNICAL DATA

TABLE 4.1: PHYSICAL PROPERTIES OF DRAGO WRAP VAPOR INTRUSION BARRIER

PROPERTY	TEST	RESULTS
Under Slab Vapor Retarders	ASTM E1745 – Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	ASTM E1745 Compliant
Water Vapor Permeance	ASTM F1249 – Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.0069 perms
Push-Through Puncture	ASTM D4833 – Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products	183.9 Newtons
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	53.5 lbf/in
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.0073 perms 0.0070 perms 0.0062 perms 0.0081 perms
Hydrocarbon Attenuation Factors	Contact Stego Industries' Technical Department	
Chlorinated Solvent Attenuation Factors	Contact Stego Industries' Technical Department	
Methane Transmission Rate	ASTM D1434 – Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting	7.0 GTR** (mL(STP)/m^2*day)
Radon Diffusion Coefficient	K124/02/95	9.8 x 10^{-14} m^2/second
Thickness		20 mil
Roll Dimensions		14' x 105' or 1,470 ft^2
Roll Weight		150 lb

Note: perm unit = grains/(ft^2*hr*in-Hg) ** GTR = Gas Transmission Rate

Continued...
Note – legal notice on page 2.

DRAGO® WRAP
VAPOR INTRUSION BARRIER

5. INSTALLATION

UNDER SLAB: Unroll Drago Wrap over a tamped aggregate, sand, or earth base. Overlap all seams a minimum of 12 inches and tape using Drago® Tape. All penetrations must be sealed using a combination of Drago Wrap and Drago Accessories.

Review Drago Wrap's complete installation instructions prior to installation.

6. AVAILABILITY & COST

Drago Wrap is available nationally through our network of building supply distributors. For current cost information, contact your local Drago distributor or Stego Industries' Sales Representative.

7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. Stego Technology, LLC does offer a limited warranty on Drago Wrap. Please see www.stegoindustries.com/legal.

8. MAINTENANCE

Store Drago Wrap in a dry and temperate area.

9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

Contact Number: (877) 464-7834
Website: www.stegoindustries.com

10. FILING SYSTEMS

- www.stegoindustries.com

DRAGO® WRAP LIMITED WARRANTY
ISSUER: STEGO TECHNOLOGY, LLC ("Stego Tech")

This Drago Wrap Limited Warranty ("the Warranty") commences on the Effective Date and applies to Drago Wrap Vapor Intrusion Barrier (for the purposes of this Warranty "Drago Wrap").

Stego Tech recommends installation of Drago Wrap per ASTM E1643, its published installation instructions, and in accordance with all site-specific recommendations of the project's design team. Drago Wrap is specifically engineered to be installed in conjunction with its proprietary accessories, including Drago® Tape, DragoTack™ Tape, Drago® Sealant, and Drago® Sealant Form. Additionally, to avoid puncturing Drago Wrap and comply with ASTM E1643, Stego Tech recommends utilizing the Beast® Screed system of vapor barrier-safe accessories.

WARRANTY TERMS AND CONDITIONS

1 DRAGO WRAP WARRANTY

Stego Tech recognizes the most current version of ASTM E1745 (at the time of the material purchase) as the governing standard specification for under-slab vapor retarders. Subject to the limitations set forth below, for the Life of the Building™ Stego Tech warrants that Drago Wrap:

(a) meets all of the requirements for its designated ASTM E1745 classification;
(b) has been tested in accordance with each of the following ASTM test methods:
  i. ASTM E1745 – *Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs*
  ii. ASTM F1249 – *Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor*
  iii. ASTM D1709 – *Test Methods for Impact Resistance of Plastic Film by Free-Falling Dart Method*
  iv. ASTM D882 – *Test Method for Tensile Properties of Thin Plastic Sheeting*
  v. ASTM E154 – *Sections 8, 11, 12, 13 – Permeance After Conditioning* [1]
  vi. ASTM D1434 – *Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting*
  vii. ASTM D4833 – *Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products*
(c) will be free from Manufacturing Composition Defects;
(d) eligible for input on project-specific installation best practices by a Stego Tech-authorized representative during the preconstruction phase upon reasonable notice, in-person or remotely; and
(e) eligible for Site Review by a Stego Tech-authorized representative, in-person or digitally, for input on installation prior to concrete placement upon reasonable notice.
(f) will meet or exceed its published product literature for **a period not less than two (2) years from the Date of Installation.**

This Warranty is the sole Warranty given by Stego Tech or its Affiliates as to Drago Wrap. All installations or uses of Drago Wrap automatically activate this Warranty. If you do not wish to be bound by the terms of this Warranty, please return the Drago Wrap for a full Refund. Otherwise, all installations will be presumed to have agreed to the terms herein.

2 NOTICE AND CLAIMS

Any Claim pursuant to this Warranty must be Certified and must be made within sixty (60) days of the date discovered or the date it should reasonably have been discovered in order for Stego Tech to evaluate the Claim and replace the Drago Wrap. Claims may be made at any time during the Life of the Building. Such replacement (or at Stego Tech's option, Refund of the verified purchase price) shall be your sole and exclusive remedy for any such Claim.

[1] Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.

Continued...
Note - legal notice on last page.

3 WARRANTY AND CONDITIONS TO COVERAGE

This Warranty excludes any defect or damage caused by: (a) faulty or improper installation of the Drago Wrap, including the failure to comply with published specification and installation recommendations in effect at the time of installation; (b) improper use, storage or site conditions (e.g noncompliance with the terms of the Drago Wrap Material Safety Data Sheet); (c) any below-concrete slab or similar activity, and any other maintenance, repair, alteration or new installation to the Building that occurs after the completion of the original installation that impacts the Drago Wrap; (d) damage caused by non-Stego Tech materials; (e) factors beyond the reasonable control of Stego Tech or its Affiliates, including, but not limited to, natural disasters such as lightning, floods, windstorms, seismic disturbances, hurricanes, tornadoes, or impact of foreign objects or other violent storms or casualty; (f) damage resulting from any form of misuse, abuse or negligence; (g) structural defects or failures in the Building to which the Drago Wrap is installed.

Your sole remedy under this Warranty is, at Stego Tech's option: (a) Refund of the purchase price paid; or (b) replacement of so much of the Drago Wrap as Stego Tech deems necessary.

4 WARRANTY EXCLUSIONS

Except where prohibited by law, this Warranty and the remedies expressly stated herein are the exclusive warranties and remedies provided to you with respect to the Drago Wrap and supersede any prior, contrary or additional representations, whether oral or written. No representative, distributor, dealer or any other person is authorized to make, or makes any warranty, representation, condition or promise with respect to the Drago Wrap. ALL OTHER WARRANTIES ARE DISCLAIMED AND EXCLUDED – WHETHER EXPRESS, IMPLIED, OR STATUTORY – INCLUDING ANY **WARRANTY OF MERCHANTABILITY**, ANY **WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE**, AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE.

In no event shall Stego Tech or its Affiliates be liable for any incidental, special, indirect, consequential damages, including but not limited to lost income or loss of use. This exclusion applies regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, or strict liability in tort or any other legal or equitable theory.

5 SEVERANCE

If any provision in this Warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect, and the invalid provision shall be modified or partially enforced to the maximum extent permitted by law to effectuate the purpose of the Warranty.

6 DISPUTE RESOLUTION

It is the intention of the parties to use their reasonable best efforts to informally resolve, where possible, any dispute, claim, demand or controversy arising out of the performance of this Warranty by mutual negotiation and cooperation. In the event that the parties are unable to informally resolve a dispute, the Parties agree that such disputes shall be completely and finally settled by submission to arbitration before a single arbitrator under the Judicial Arbitration and Mediation Services (JAMS) Arbitration Rules then in effect. Good faith mediation shall be a condition precedent to initiating arbitration. Unless the parties agree otherwise, the arbitration shall take place in Orange County, California, U.S.A. The award of the arbitrator shall be in writing, shall be final and binding upon the parties, shall not be appealed from or contested in any court and may, in appropriate circumstances, include injunctive relief. Judgment on such award may be entered in any court of appropriate jurisdiction, or application may be made to that court for a judicial acceptance of the award and an order of enforcement, as the party seeking to enforce that award may elect. The prevailing party shall be entitled to recover its attorney fees and costs. This Agreement shall be governed in all respects by the laws of the State of California without regard to the conflict of law provisions thereof. Neither party will consolidate, or seek class treatment for any action unless previously agreed to in writing by all parties.

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Note - legal notice on last page.

DEFINITIONS

"***Affiliates***" means Stego Tech affiliated entities, partners, joint venturers, suppliers, vendors, subcontractors, representatives, and agents.

"***Applicable Date***" means the Limited Warranty applies to material sold on or after January 1, 2018.

"***Building***" means the building above which Drago Wrap was installed, as verified by Stego Tech.

"***Certified***" means that you have investigated whether a breach of this Warranty occurred and obtained and provided a qualified inspector report confirming evidence exists of such a Defect. Stego Tech reserves the right to independently verify any Claims.

"***Claim***" means a claim for relief under the Warranty.

"***Date of Installation***" means the date Drago Wrap was installed, as verified by Stego Tech.

"***Effective Date***" means date of first sale as verified.

"***Life of the Building***" means the duration of which the building originally installed atop of the Drago Wrap is in good and working condition.

"***Manufacturing Composition Defect***" means any condition of the Drago Wrap that does not meet the material's intended design and is disclosed to Stego Tech during the Life of the Building.

"***Refund***" means Stego Tech providing a monetary return in the amount verified to be the cost of the Drago Wrap subject to the Claim.

"***Site Review***" means a review of representative portions of the Drago Wrap installation (digitally or in-person, when possible, and as determined by Stego Tech authorized representative) prior to concrete placement to help ensure compliance with governing installation standard, ASTM E1643, Stego Tech's installation instructions, and/or, if applicable, the design team's recommendations (e.g. contract documents). Site Reviews are not a full site inspection.

"***Stego Tech***" means Stego Technology, LLC, a California limited liability company with its principal place of business located at 216 Avenida Fabricante, #101, San Clemente, California 92672. Stego Industries, LLC is the exclusive representative of Drago Wrap and accessory products, owned by Stego Technology, LLC, a wholly independent company.

"***Warranty***" means this Drago Wrap Limited Warranty.

DRAGO® WRAP SAFETY DATA SHEET

Revision Date: July 30, 2018 | Date of Issue: June 1, 2017 | Version Number: 2.0

SECTION 1: IDENTIFICATION

Product Identifier
Product Name: Drago Wrap

Intended Use of the Product
Vapor Intrusion Barrier

Company Name, Address, and Telephone of the Responsible Party
Stego Technology, LLC or C/O Stego® Industries, LLC*
216 Avenida Fabricante #101
San Clemente, CA 92672

Emergency Telephone Number
Emergency Number: 1 (800) 424-9300 (24 Hrs.) CHEMTREC
Main Contact Number: (877) 464-7834

SECTION 2: HAZARDS IDENTIFICATION

Classification: This product is not classified as hazardous in accordance with 29 C.F.R. § 1910.1200.
Signal word: None.
Pictogram(s): None.
Hazard statement(s): None.
Precautionary statement(s): None.
Hazards not otherwise classified: Polymer film can burn if exposed to excessive temperatures beyond the normal use of the product.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% by WT.
Copper	Proprietary*	<10%*

The selections marked with an '*' are proprietary and considered to be Trade Secrets. This is the reason that they are listed as such, or provided as a range.

SECTION 4: FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Inhalation: Not a respirable film. If exposed to fumes from combustion, move subject to fresh air; if breathing is difficult, give oxygen and get medical attention; if victim has stopped breathing, give artificial respiration and get medical attention.
Eye Contact: Not a probable route of exposure. If exposed to fumes from overheating or from combustion, move subject to fresh air. Flush with plenty of water; if irritation continues, get medical attention.
Skin Contact: No treatment necessary. For thermal burns, cool molten materials with water and get medical attention.
Ingestion: Not a probable route of exposure.

Continued...
Note - legal notice on page 5

Revision Date: July 30, 2018 | Date of Issue: June 1, 2017 | Version Number: 2.0

SECTION 5: FIRE-FIGHTING MEASURES

Unusual Hazards: Polymer film can burn if exposed to excessive temperature beyond the normal use of the product.
Extinguishing Agents: Use extinguishing media appropriate for surrounding fire: carbon dioxide, foam, dry chemical, and water fog.
Personal Protective: Equipment unnecessary unless resin is burned, which is not an intended use of the product. If resin is burning, wear self-contained breathing apparatus (pressure-demand MSHAINIOSH approved or equivalent) and full protective gear.

Note: See Section 10 for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: None necessary.
Procedures: None necessary.

SECTION 7: HANDLING AND STORAGE

Storage Conditions: Cool, dry storage recommended. Indoor storage recommended.
Avoid storing films in areas containing aromatic hydrocarbons, halogenated compounds, chlorinated compounds, oxidative agents, solvents or other known polyethylene solubilizers, prodegradants, as they may impact the product performance and/or service life.
Handling Procedures: Avoid direct sunlight. Avoiding direct UV exposure of product. Avoid contact with incompatible materials.
Installation Temperature Range: Below 110°F (ambient). Please also see technical and safety data sheets for accessory products installation/application temperature ranges.
In-Service Temperature Range: Below 85°F (soil and slab temperature, beginning 28 days following slab placement). Please also see technical and safety data sheets for accessory products installation/application temperature ranges.
Exposure to Ultraviolet Radiation/Weather Events: The amount of time between when Stego Wrap is installed and when concrete is placed or other complete protection from sunlight and weather events is provided should be minimized while not exceeding 7 days.

Please review the remainder of the SDS and this wrap's technical data sheet for storage and additional information. If any of the conditions cited above pose a problem for the typical installation of Drago Wrap, please contact Stego Industries for additional information and solutions.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	OSHA PEL	ACGIH TWA
Copper	0.1 mg/m^3 (Cu fume)	0.2 mg/m^3 (Cu fume)

Respiratory Protection: None required during handling. Local exhaust to remove fumes from heat sealing and hot wire cutting areas of packaging or bag converting for worker comfort.
Eye Protection: None necessary.
Hand Protection: None necessary.
Engineering Controls (Ventilation): Use local exhaust ventilation when routinely heat sealing this product. Recommended ventilation is with a minimum capture velocity of 100 ft/min. (30 m/min.) at the point of vapor evolution. Refer to the current edition of *Industrial Ventilation: A Manual of Recommended Practice* published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Continued...
Note - legal notice on page 5

Revision Date: July 30, 2018 | Date of Issue: June 1, 2017 | Version Number: 2.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES *Continued...*

General Physical Form: Solid plastic film.

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Plastic film
Color:	Copper and Gray
State:	Solid
Odor Characteristics:	None
Odor Threshold:	None
pH:	Not Applicable
Melting Point/Freezing Point:	Not Applicable
Initial Boiling Point and Boiling Point Range:	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability (solid, gas):	Not Applicable
Upper flammability:	Not Applicable
Lower Flammability:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Relative Density:	Not Applicable
Solubility:	Not Applicable
Partition Coefficient: n-octanol/water:	Not Applicable
Auto ignition-temperature:	Not Applicable
Decomposition temperature:	>325°C (617°F)
Viscosity:	Not Applicable

SECTION 10: STABILITY AND REACTIVITY

Instability: This material is considered stable. Thermal decomposition is dependent on time and temperature.

HAZARDOUS DECOMPOSITION PRODUCTS

Substance	Condition
Hydrocarbons	Combustion by-product
Carbon Monoxide	Combustion by-product
Carbon Dioxide	Combustion by-product
Copper Fume	Combustion by-product

Hazardous Polymerization: Product will not undergo hazardous polymerization. Product does not decompose at ambient temperatures.
Incompatibility: Lead azide and lead stiphanate commonly used in high explosive detonators react violently with copper.
Reactivity: Reacts and binds with polar gases such as Hydrogen sulfide (H_2S), Ozone (0_3), Carbonyl sulfide (COS), Sulfur Dioxide ($S0_2$), Hydrogen chloride (HCI), Formic Acid, Acetic Acid.
Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

Continued...
Note - legal notice on page 5

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SECTION 11: TOXICOLOGICAL INFORMATION

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

Acute Data: No Toxicity data are available for this material.

PRIMARY ROUTES OF EXPOSURE

Skin Contact: Only if burned.
Eye Contact: Only if burned.
Respiratory Contact: Only if burned.

ACUTE EFFECTS OF EXPOSURE

Ingestion: Not a probable route of exposure.
Inhalation: No inhalation risk unless product is heated to point of burning, which in normal applications does not occur. Fumes from combustion are unlikely to be produced during heat shrinking. Local ventilation should be used for comfort. Testing data shows copper/polymer particulate count at approximately 0.007mg/m^3, which is well below OSHA PEL of 0.1 mg/m^{3+}.
Eye Contact: No eye exposure risk during all product usage except during heating if plastic is heated to point of combustion, which does not occur during the intended use of the product. Fumes from combustion, which have a low toxicity, may be produced during hot wire cutting or heat sealing. Fumes are unlikely to be produced during heat shrinking when used as directed.
Skin Contact: Not irritating when used as directed. Hot polymer created during heat shrinking, wire cutting, or heat sealing, may produce thermal bums.
Chronic Effects of Exposure: None known when used as directed.
Carcinogenicity: None known when used as directed.

SECTION 12: ECOLOGICAL INFORMATION

This material is insoluble in water and not expected to present any environmental problems in normal application, however areas containing aromatic hydrocarbons, halogenated compounds, chlorinated compounds, pH extremities, oxidative agents, solvents or other known polyethylene solubilizers, prodegradants, etc. may impact the product performance and/or service life.

SECTION 13: DISPOSAL CONSIDERATIONS

Procedure: Reclaim if feasible. If product can't be reclaimed, no special requirements are necessary; dispose of as ordinary solid waste. Pick up film for good "housekeeping" and to prevent a slipping hazard. Incineration or landfill in compliance with federal, state and local regulations. *Since regulations vary, consult applicable regulations or authorities before disposal.*

SECTION 14: TRANSPORT INFORMATION

US DOT Hazard Class: Not regulated.

Continued...
Note - legal notice on page 5

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SECTION 15: REGULATORY INFORMATION

Workplace Classification: This product is not considered hazardous under the OSHA Hazard Communication Standard (29 C.F.R. § 1910.1200).
CERCLA Information (40 C.F.R. 302.4): Because of the form in which copper is contained within the resin, releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
Waste Classification: When this product becomes a waste, it is classified as a non-hazardous waste under criteria of the Resource Conservation and Recovery Act (40 C.F.R. 261).

SECTION 16: OTHER INFORMATION

HAZARD RATING
Health: 0 | Flammability: 1 | Reactivity: 0 | Special Hazards: None
Scale: 4 = Extreme | 3 = High | 2 = Moderate | 1 = Slight | 0 = Insignificant
National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material, but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.
Rating are based on internal supplier's guidelines, and they are intended for internal use only.

ABBREVIATIONS
ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit

Disclaimer: The information contained herein relates only to the specific material identified. Stego Technology, LLC believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Stego Technology, LLC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

Please read the product statements for all Drago® products by navigating here:
http://www.stegoindustries.com/legal

DRAGO® WRAP
VAPOR INTRUSION BARRIER

INSTALLATION INSTRUCTIONS

Engineered protection to create a ***healthy*** built environment.

DRAGO® WRAP VAPOR INTRUSION BARRIER
INSTALLATION INSTRUCTIONS

IMPORTANT: Please read these installation instructions completely, prior to beginning any Drago Wrap installation. The following installation instructions are generally based on ASTM E1643 – *Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs*. There are specific instructions in this document that go beyond what is stated in ASTM E1643 to take into account vapor intrusion mitigation. If project specifications call for compliance with ASTM E1643, then be sure to review the specific installation sections outlined in the standard along with the techniques referenced in these instructions.

UNDER-SLAB INSTRUCTIONS:

1. Drago Wrap has been engineered to be installed over a tamped aggregate, sand, or earth base. It is not typically necessary to have a cushion layer or sand base, as Drago Wrap is tough enough to withstand rugged construction environments.

NOTE: Drago Wrap must be installed with the gray facing the subgrade.

Fig.1: UNDER-SLAB INSTALLATION

2. Unroll Drago Wrap over the area where the slab is to be placed. Drago Wrap should completely cover the concrete placement area. All joints/seams should be overlapped a minimum of 12 inches and taped using Drago® Tape. (Fig. 1). If additional protection is needed, install DragoTack™ Tape in between the overlapped seam in combination with Drago Tape on top of the seam.

NOTE: The area of adhesion should be free from dust, dirt, moisture, and frost to allow maximum adhesion of the pressure-sensitive tape. Ensure that all seams are taped with applied pressure to allow for maximum and continuous adhesion of the pressure-sensitive Drago Tape. Adhesives should be installed above 40°F. In temperatures below 40°F, take extra care to remove moisture/frost from the area of adhesion.

3. ASTM E1643 requires sealing the perimeter of the slab. Extend vapor retarder over footings and seal to foundation wall or grade beam at an elevation consistent with the top of the slab or terminate at impediments such as waterstops or dowels. Consult the structural and environmental engineer of record before proceeding.

Fig.2a: SEAL TO PERIMETER WALL

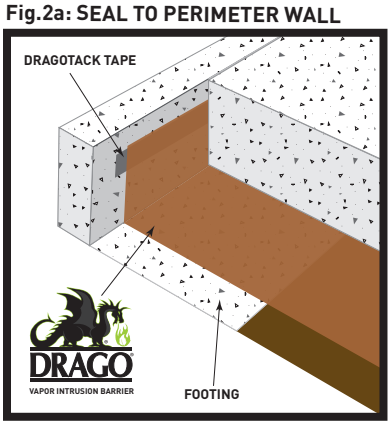
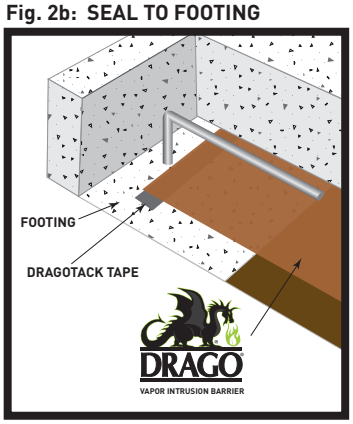


Fig. 2b: SEAL TO FOOTING



SEAL TO PERIMETER WALL OR FOOTING WITH DRAGOTACK TAPE: (Fig. 2a and 2b)

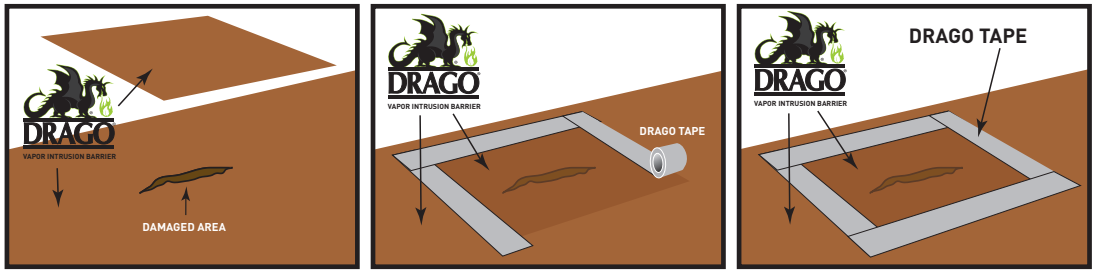
- **a.** Make sure area of adhesion is free of dust, dirt, debris, moisture, and frost to allow maximum adhesion.
- **b.** Remove release liner on one side and stick to desired surface.
- **c.** When ready to apply Drago Wrap, remove the exposed release liner and press firmly against DragoTack Tape to secure.
- **d.** If a mechanical seal is needed, fasten a termination bar over the top of the Drago Wrap inline with the DragoTack Tape.

NOTE: If sealing to the footing, the footing should receive a hand float finish to allow for maximum adhesion.

Continued ...

4. In the event that Drago Wrap is damaged during or after installation, repairs must be made. Cut a piece of Drago Wrap to a size and shape that covers any damage by a minimum of 6 inches in all directions. Clean all adhesion areas of dust, dirt, moisture, and frost. Tape down all edges using Drago Tape. (Fig. 3)

Fig. 3: SEALING DAMAGED AREAS



5. **IMPORTANT: ALL PENETRATIONS MUST BE SEALED.** All pipe, ducting, rebar, and block outs should be sealed using Drago Wrap, Drago Tape, and/or Drago® Sealant and Drago® Sealant Form. (Fig. 4a). Drago accessories should be sealed directly to the penetrations.

Fig. 4a: PIPE PENETRATION SEALING

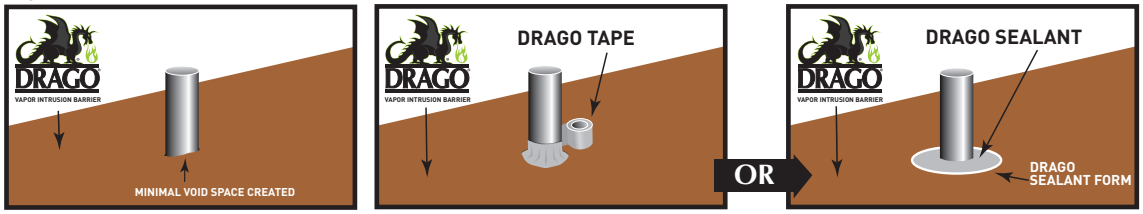
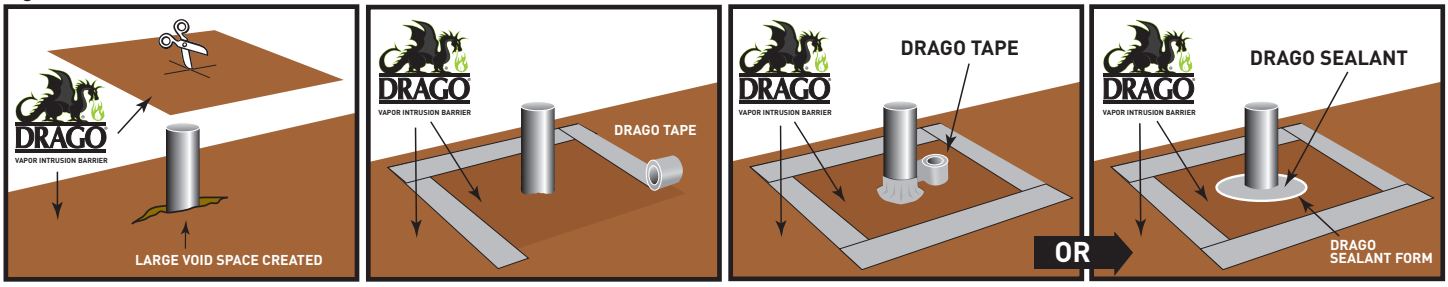


Fig. 4b: DETAIL PATCH FOR PIPE PENETRATION SEALING



DETAIL PATCH FOR PIPE PENETRATION SEALING: (Fig. 4b)

a. Install Drago Wrap around pipe penetrations by slitting/cutting material as needed. Try to minimize void space created.

b. If Drago Wrap is close to pipe and void space is minimized, proceed to step d.

c. If void space exists, then
   i. Cut a detail patch to a size and shape that creates a 6-inch overlap on all edges around the void space at the base of the pipe.
   ii. Cut an "X" slightly smaller than the size of the pipe diameter in the center of the detail patch and slide tightly over pipe.
   iii. Tape the edges of the detail patch using Drago Tape.

d. Seal around the base of the pipe using Drago Tape and/or Drago Sealant and Drago Sealant Form.
   i. If Drago Sealant is used to seal around pipe, make sure Drago Wrap is flush with the base of the penetration prior to pouring Drago Sealant.

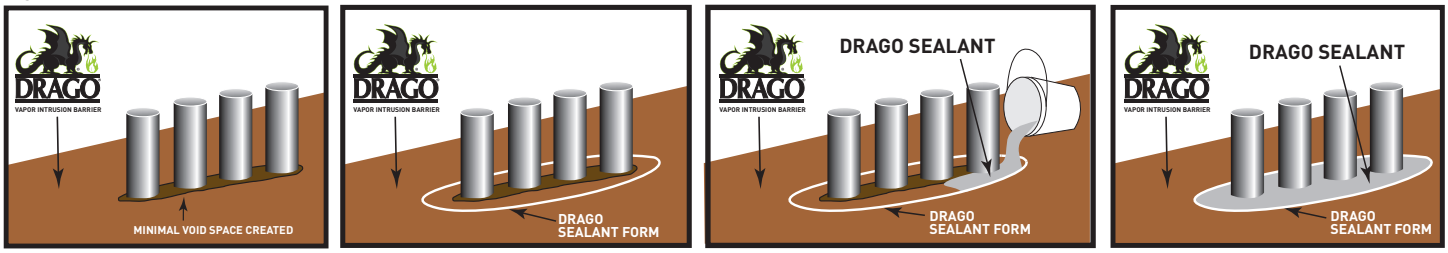
Continued ...

MULTIPLE PIPE PENETRATION SEALING: (Fig. 5)

NOTE: Multiple pipe penetrations in close proximity may be most efficiently sealed using Drago Wrap, Drago Sealant, and Drago Sealant Form for ease of installation.

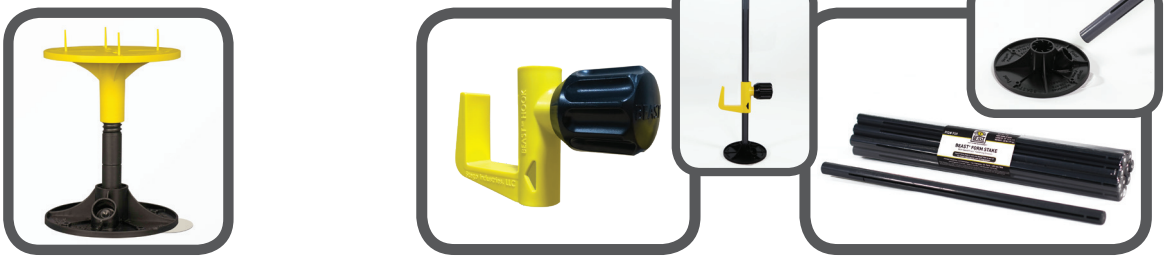
a. Cut a hole in Drago Wrap such that the membrane fits over and around the base of the pipes as closely as possible, ensuring that it is flush with the base of the penetrations.
b. Install Drago Sealant Form continuously around the entire perimeter of the group of penetrations and at least 1 inch beyond the terminating edge of Drago Wrap.
c. Pour Drago Sealant inside of Drago Sealant Form to create a seal around the penetrations.
d. If the void space between Drago Wrap and the penetrations is not minimized and/or the base course allows for too much drainage of sealant, a second coat of Drago Sealant may need to be poured after the first application has cured.

Fig. 5: MULTIPLE PIPE PENETRATION SEALING



BEAST® CONCRETE ACCESSORIES - VAPOR BARRIER SAFE

Stego Industries* recommends the use of BEAST vapor barrier-safe concrete accessories, to help eliminate the use of non-permanent penetrations in Drago Wrap installations.



BEAST® SCREED

Improve efficiency and maintain concrete floor levelness with the BEAST SCREED SYSTEM!

BEAST® HOOK

Locate it and lock it down!

BEAST® FORM STAKE

The Stego barrier-safe forming system that prevents punctures in the vapor barrier.

IMPORTANT: AN INSTALLATION COMPLETED PER THESE INSTRUCTIONS SHOULD CREATE A MONOLITHIC MEMBRANE BETWEEN ALL INTERIOR INTRUSION PATHWAYS AND VAPOR SOURCES BELOW THE SLAB AS WELL AS AT THE SLAB PERIMETER. THE UNDERLYING SUBBASE SHOULD NOT BE VISIBLE IN ANY AREA WHERE CONCRETE WILL BE PLACED. IF REQUIRED BY THE DESIGN ENGINEER, ADDITIONAL INSTALLATION VALIDATION CAN BE DONE THROUGH SMOKE TESTING.

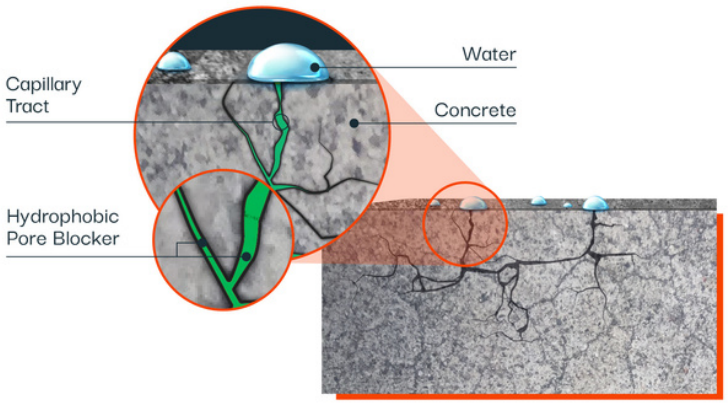
NOTE: While Drago Wrap installation instructions are based on ASTM E1643 - *Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs,* these instructions are meant to be used as a guide, and do not take into account specific job site situations. Consult local building codes and regulations along with the building owner or owner's representative before proceeding. If you have any questions regarding the above-mentioned installation instructions or products, please call us at 877-464-7834 for technical assistance. While Stego Industries' employees and representatives may provide technical assistance regarding the utility of a specific installation practice or Stego product, they are not authorized to make final design decisions.

Hycrete, Inc.
14 Spielman Road
Fairfield, NJ 07004
201.386.8110

DATA SHEET

Hycrete Endure WP

For Maximum Waterproofing Protection in Concrete Mixes



PRODUCT DESCRIPTION

Hycrete Endure WP (formerly W1000), Hycrete's patented flagship concrete waterproofing admixture, dramatically reduces water ingress through concrete. Ordinary concrete absorbs water and dissolved salts through its network of pores, leading to water infiltration and corrosion of steel reinforcement. Hycrete Endure WP reduces absorption to 1% or lower and forms a protective coating around steel reinforcement. Less water and fewer chlorides are able to penetrate the concrete and the reinforcement has enhanced protection from corrosion. Hycrete Endure WP delivers consistent and reliable performance and is easy to use. Hycrete Endure WP is an environmentally responsible, Cradle to Cradle™ certified product. Using Hycrete Endure WP allows owners and builders to have the comfort of knowing their investment /project remains secure against one of nature's most damaging elements ...water.

USES AND APPLICATIONS

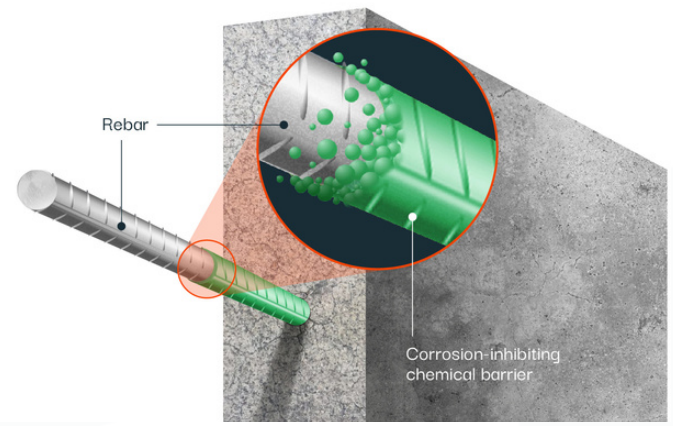
- Included in Hycrete360; see separate data sheet for Hycrete360.
- Extra protection for walls and slabs
- Above and below grade construction
- Water containment reservoirs
- Sewage and water treatment plants
- Secondary containment structures
- Underground vaults
- Tilt-up panel walls
- Pre-cast components
- Architectural water features and fountains
- Bridges, dams and highway infrastructure
- Aquatic centers, marinas and zoos
- Swimming pools

KEY BENEFITS

- Maximum waterproofing protection in concrete: less than 1% water absorption
- Corrosion protection; protective coating formed around steel reinforcement
- Neutral concrete set time performance, even in high fly ash and GGBS (slag) mixes
- Resists hydrostatic pressure
- Can heal cracks up to 0.4mm
- Consistent performance and verifiable dosage
- Easy to use; no additional labor required
- Safe to use

PRODUCT FEATURES

- Cradle to Cradle™ certified by MBDC
- NSF/ANSI 61 - approved for use in potable water tanks
- Compatible with standard admixture metering equipment
- ISO 14021 compliant - recycled content in accordance with Type II environmental labeling; applicable for LEED Materials and Resources Credit
  4.1/4.2 - Recycled Content



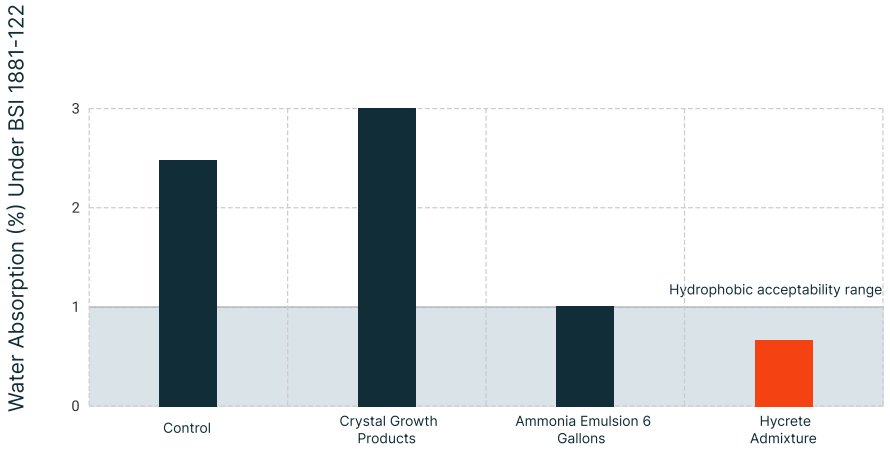
Hycrete, Inc.
14 Spielman Road
Fairfield, NJ 07004
201.386.8110

PRODUCT PERFORMANCE*

Water absorption	BSI 1881-122	Less than 1% absorption
Permeability/hydrostatic pressure	DIN 1048 BS EN 12390-8	Passes DIN 1048; up to 70% reduction in permeability
Crack healing	ASTM C597	Concrete with Hycrete fosters faster and 100% complete healing compared to untreated control
Set time	ASTM C403	Set neutral
Drying shrinkage	ASTM C157	Neutral to the control
Slump	ASTM C143	Neutral
Workability	N/A	Excellent
Effect on concrete color	N/A	None
Compressive strength	ASTM C39	Water/cement ratios may need to be lowered to account for possible, minor strength decreases associated with some materials. Perform trial mixes.
Potable water	NSF/ANSI 61	Approved for use in potable water tanks 50,000 gallons or greater and pipes 84" in diameter and greater
Adhesion	ASTM C1583, ASTM C1072, ASTM D3359	Neutral; no adverse effect on bond with concrete

*All benefits and results are based on actual test results. Results may vary according to concrete mix designs, Hycrete Endure WP dosage, or other factors.

WATERPROOFING PERFORMANCE



South Carolina independent Lab Testing: 40/60 Structural Mix, 0.40 W/C 611
Type I-II Cement Polycarboxylate Superplasticizer

Hycrete, Inc.
14 Spielman Road
Fairfield, NJ 07004
201.386.8110

GENERAL PROPERTIES AND CHARACTERISTICTS

Physical characteristics: Form: Liquid Specific gravity: 1.05 Chloride content: Nil pH: 8.5	**Compatibility:** • Most concrete admixtures • Most Portland cements or replacements including fly ash and GGBS (slag) • Shotcrete mixes and application • Most surface-applied sealants and external membrane protection systems
Recommended dosage: 1.0 U.S. gallon per cubic yard of concrete (5.0 liters per cubic meter)	
Usage guidelines: • Superplasticizer at the manufacturer's recommended rate and appropriate for the placement requirements of the project. • Cementitious Content: The cementitious content of concrete containing Hydrophobic Concrete Admixture will not be less than 550 lbs/yd3 (325 kg/m3) with up to 15% fly ash or 50% slag maximum. • Water-Cement Ratio: 0.42 maximum. Water content of Hydrophobic Concrete Admixture and other admixtures to be included in the water-to cementitious ratio.	
Packaging: 1 gallon bottles; 5 gallon pails; 55 gallon drums; 275 gallon totes; bulk tanker delivery	
Storage and handling: Store above 32°F (0°C) and below 120 °F (48 °C). Slight flocculation can occur over time due to pH reductions. Such flocculation does not affect product performance	

Notes

- For air-entrained concrete mixes speak to your local Hycrete Rep for proper mix design.
- User should perform trial mixes prior to placement and make necessary adjustments to the mix design as needed.
- If considering dosages other than recommended dosage contact Technical Services before use.

Safety

- Hycrete Endure WP (formerly W1000) is a water-based material and should not be swallowed or come into contact with skin or eyes. Wear suitable protective gloves and goggles. If material comes in contact with the skin, wash immediately with soap and water. In case of contact with eyes, rinse immediately with sufficient water and seek medical support. If swallowed, seek immediate medical attention. For further information please consult the Material Safety Data Sheet.

Related Documents

- Hycrete Mixing Instructions
- Hycrete Material Safety Data Sheet – Hycrete Endure WP
- For air-entrained concrete mixes speak to your local Hycrete Rep for proper mix design.

Hycrete, Inc.| 14 Spielman Rd | Fairfield, NJ 07004 USA | Phone: (+1) 201.386.8110 | Fax: (+1) 201.386.8155 | www.hycrete.com

1002002-DEC22

APPENDIX K
REMEDIAL INVESTIGATION SAMPLING AND ANALYSIS SUMMARY TABLES

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Table K-1
Scope of Work and Rationale
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location	Rationale	Scope	Analytes and Methods
UST Product Line Borings West- and North-Adjacent to Northwestern Corner of the Block 38 West Property	Evaluate the lateral extent of ORO and cPAHs in soil west and north of the mass excavation soil sampling grid M1 located in the northwestern corner of the Block 38 West Property.	1) Advance one boring up to a depth of 15 feet bgs, corresponding to an elevation of 10 feet NAVD88. Boring FB-20 was advanced in February 2022 to evaluate conditions north-adjacent to the northwestern corner of the Block 38 West Property. 2) Collect soil samples at elevations of 20, 17, 15, and/or 10 feet NAVD88. 3) Abandon borings with bentonite chips and concrete or asphalt to match surrounding grade.	Soil samples will be analyzed for one or more of the following analytes (see Table J-1A): 1) DRO and ORO by NWTPH-Dx; 2) cPAHs by EPA 8270D SIM; and 3) Naphthalenes by EPA 8270.
Monitoring Wells in the Shallow Water-Bearing Zone	Evaluate the lateral extent of COPCs in the Shallow Water-Bearing Zone and evaluate groundwater flow conditions around the new building foundation.	1) Advance four monitoring wells to approximate elevation 5 feet NAVD88. Monitoring wells FMW-154 through FMW-156 were completed with a 5-foot screen interval from elevation 15 to 10 feet NAVD88. Remaining SWBZ monitoring wells will be completed with a 15-foot screen interval from elevation 20 to 5 feet NAVD88. 2) Complete borings as monitoring wells; develop monitoring wells once groundwater returns to steady state conditions. 3) Survey monitoring wells top of casing elevations at all wells in NAVD88 once top of casing and monument are set. 4) Conduct four quarterly groundwater monitoring events from a network of seven SWBZ monitoring wells following termination of concurrent construction dewatering events that occurred at the Block 38 West Property and in the nearby South Lake Union area, and once groundwater returns to steady state conditions. During the first groundwater monitoring event barium will be analyzed from four monitoring wells (FMW-A, FMW-154 through FMW-156. Mercury will be analyzed from monitoring well FMW-155. 5) Measure groundwater elevations quarterly to evaluate groundwater flow conditions from a network of seven monitoring wells.	Soil samples will be analyzed from monitoring well locations FMW-C, FMW-D, and FMW-F for one or more of the following analytes (see Table J-1A): 1) DRO and ORO by NWTPH-Dx; and 2) Naphthalenes by EPA 8270. Groundwater will be analyzed for the following (see Table J-1B): 1) GRO by NWTPH-Gx; 2) DRO and ORO by NWTPH-Dx; 3) Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260D; 4) Naphthalenes by EPA 8270; and 5) Metals (barium and mercury).
Monitoring Wells in the Intermediate Water-Bearing Zone	Evaluate the lateral extent of DRO and ORO in the Intermediate Water-Bearing Zone and evaluate groundwater flow conditions.	1) Advance three monitoring wells to approximate elevation -13 to -15 feet NAVD88. Complete with 10-foot screen interval from approximate elevation -3 to -5 to -13 to -15 feet NAVD88. 2) Complete borings as monitoring wells; develop new monitoring wells once groundwater returns to steady state conditions. 3) Survey new monitoring well top of casing elevations in NAVD88 once top of casing and monument are set. 4) Conduct four quarterly groundwater monitoring events from a network of 11 IWBZ monitoring wells following termination of concurrent construction dewatering events that occurred at the Block 38 West Property and in the nearby South Lake Union area, and once groundwater returns to steady state conditions. 5) Measure groundwater elevations quarterly to evaluate groundwater flow conditions from a network of 11 monitoring wells (including observation well OW-5).	No soil analyses proposed. Groundwater samples will be analyzed for one or more of the following analytes (see Table J-1B): 1) DRO and ORO by NWTPH-Dx; and 2) Naphthalenes by EPA 8270. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed at these monitoring wells and groundwater samples will be analyzed for CVOCs by EPA 8260D.

Table K-1
Scope of Work and Rationale
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location	Rationale	Scope	Analytes and Methods
Monitoring Wells in the Deep Outwash Aquifer	Assess groundwater conditions in the Deep Outwash Aquifer at the Block 38 West Site post-construction dewatering events that occurred on the Block 38 West Property and in the nearby South Lake Union area.	1) Advance one boring to approximate elevation -55 feet NAVD88. Complete with a 10-foot screen interval from approximate elevation -45 to -55 feet NAVD88. 2) Complete boring as monitoring well; develop monitoring well once groundwater returns to steady state conditions. 3) Survey monitoring well top of casing elevations at the new well in NAVD88 once top of casing and monument are set to match the existing grade. 4) Conduct one groundwater monitoring event from a network of three DOA monitoring wells following termination of concurrent construction dewatering events that occurred at the Block 38 West Property and in the nearby South Lake Union area, and once groundwater returns to steady state conditions. 5) Measure groundwater elevations quarterly to evaluate groundwater flow conditions from a network of three monitoring wells.	Ecology requested that, in addition to the new DOA monitoring well, both FMW-137 and FMW-138 be sampled post-construction dewatering. Analysis of CVOCs is pursuant to Ecology requirements. Groundwater samples will be analyzed for the following analyte (see Table J-1B): 1) CVOCs by EPA 8260D.

NOTES:

bgs = below ground surface

COPC = constituents of potential concern

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

DOA = Deep Outwash Aquifer

EPA = U.S. Environmental Protection Agency

GRO = TPH as gasoline-range organics

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

NAVD88 = North American Vertical Datum of 1988

ORO = TPH as oil-range organics

UST = Underground Storage Tank

CVOC = chlorinated volatile organic compound

Table K-1A
Proposed Soil Analyses
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location Description	Location	Sample Location	Sample Elevation Depth (feet NAVD88)	GRO	DRO	ORO	BTEX	Naphthalenes	cPAHs	Comments
Westlake Avenue North Proximate to former UST line	**FB-17**	**FB-17**	20		X	X			X	11/19/2021 - Email from Ecology requesting analysis of DRO, ORO, and cPAHs at elevations 20, 15, and 10 feet NAVD88. Overall comment for naphthalenes; sufficient data already collected for this COPC; although [naphtha] > SLs at elevation 20 feet NAVD88 in soil sample from UST-01-Line1; it was < SLs in several WSW samples at elevation 20 feet: M1-WSW2, M1-WSW, N1-WSW, N1-NSW.
			15		X	X			X	
			10		X	X			X	
Mercer Avenue Proximate to former UST line	**FB-A Ecology Required Boring North of Grid N1**	**FB-20**	20		X	X		X	X	11/19/2021 - Email from Ecology requesting analysis of cPAHs + naphthalenes. 10/12/2021 - Call with Ecology - clarified that field screening (qualitative data) will not be accepted to bound DRO + ORO impacts detected in a soil sample collected from N1-WSW at elevation 17 feet NAVD88. Ecology is requiring empirical data for all elevations listed and agreed to collect and retain at the 10-foot elevation pending results at elevation 15 feet NAVD88. Farallon summarized the lack of obvious signs of contamination by visual, olfactory, and PID field screening, which is why the soil sample collected from the north sidewall of N1 was considered representative of conditions. Farallon reviewed the utility locations and access limitations. Ecology requested that a boring be advanced or attempted to be advanced. Updating the proposed boring location map to include the utility layout provided by City Investors. Naphthalenes were detected at concentrations > SLs in two soil samples, M1-Tank and UST-01-Line. M1-Tank was bounded in all directions by UST soil samples collected during decommissioning (UST01-W1, UST01-N1, UST01-E1, UST01-S1, and UST01-B at elevations ranging from 19 to 17.5 feet NAVD88). UST-01-Line was bounded in all directions by UST soil samples collected during decommissioning (M1-WSW, UST02-N and UST02-N1, UST02-E, UST02-S, M1-WSW2, and UST01-B at elevations ranging from 20 to 17.5 feet NAVD88). No data gap for naphthalenes. cPAHs were not detected at concentrations > SLs in one (M1-WSW) out of nine samples collected from the NW and N sidewalls of the excavation; boring FB-17 is being analyzed for cPAHs to evaluate exceedance at M1-WSW. No data gap for cPAHs.
			17		X	X		X	X	
			15		X	X		X	X	
			10		/	/		/	/	
Westlake Avenue North TP-12	**FB-B**	**FB-18**	20						X	11/19/2021 - Email from Ecology agreeing to analysis of only cPAHs. cPAHs were detected at a concentration > SLs in TP-12 at elevations 20 and 15 feet NAVD88. Ecology's 9/14/2021 response letter only states that cPAHs are required to complete the remedial investigation. Farallon did not sample for these COPCs based on existing data set and no field indications of petroleum hydrocarbon impacts.
			15						X	
			10						/	Collect and retain; analyze if cPAHs > SLs at elevation 15 feet NAVD88.
Westlake Avenue North TP-12	**FB-C**	**FB-19**	20						X	11/19/2021 - Email from Ecology agreeing to analysis of only cPAHs. cPAHs were detected at a concentration > SLs in TP-12 at elevations 20 and 15 feet NAVD88. Ecology's 9/14/2021 response letter states that cPAHs are required to complete the remedial investigation. Farallon did not sample for these COPCs based on existing data set and no field indications of petroleum hydrocarbon impacts.
			15						X	
			10						/	Collect and retain; analyze if cPAHs > SLs at elevation 15 feet NAVD88.

Table K-1A
Proposed Soil Analyses
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location Description	Location	Sample Location	Sample Elevation Depth (feet NAVD88)	GRO	DRO	ORO	BTEX	Naphthalenes	cPAHs	Comments
Mercer Street North of Alley NSW	**FB-D**	**FB-21**	28						X	N/A5-NSW cPAHs > SLs at elevation 28 feet NAVD88; make Ecology aware of utility bank in sidewalk. Boring may not be feasible.
			26						X	Collect and retain; analyze if cPAHs > SLs at elevation 28 feet NAVD88.
SWBZ gw sample west of FB-03 reconnaissance	**FMW-A**	**FMW-158**								
IWBZ bound DRO/ORO to west	**FMW-B**	**FMW-159**	20		/	/		/	/	Data from FB-05 does not indicate that COPCs are present above SLs. Farallon agrees to collect and retain in the event of a detection of a COPC in groundwater.
		FMW-159	15		/	/		/	/	Data from FB-05 does not indicate that COPCs are present above SLs. Farallon agrees to collect and retain in the event of a detection of a COPC in groundwater.
SWBZ	**FMW-C**	**FMW-160**	20		X	X		X	X	3/17/22 - Ecology letter required analysis for naphthalenes and cPAHs. Based on ORO + DRO detected in FMW-134 > SLs at elevation 20 feet NAVD88; collect and retain for naphthalenes analyze if detected in groundwater at concentration > SLs.
		FMW-160	15		X	X		X	X	3/17/22 - Ecology letter required analysis for naphthalenes and cPAHs.
SWBZ	**FMW-D**	**FMW-161**	20		X	X		X	X	3/17/22 - Ecology letter required analysis for naphthalenes and cPAHs. Based on ORO + DRO detected in FMW-134 > SLs at elevation 20 feet NAVD88; collect and retain for naphthalenes analyze if detected in groundwater at concentration > SLs.
		FMW-161	15		X	X		X	X	3/17/22 - Ecology letter required analysis for DRO, ORO, naphthalenes, and cPAHs. DRO, ORO, DRO + ORO, cPAHs, naphthalenes > SLs in FMW-149 at elevations 15 and 5 feet NAVD88.
IWBZ	**FMW-E**	**FMW-162**	20							
		FMW-162	15							
SWBZ	**FMW-F**	**FMW-163**	20		X	X		X	X	5/3/22 Ecology requested soil samples be analyzed for DRO, ORO, naphthalenes, and cPAHs. TP-15 is 10 feet north of proposed SWBZ FMW-F. DRO, ORO, DRO + ORO > SLs in TP-15 at elevations 20, 15, 10 feet NAVD88; and DRO, ORO, DRO + ORO > SLs in FMW-136; and DRO, ORO, DRO + ORO, cPAHs, naphthalenes > FMW-149 at elevations 15 and 5 feet NAVD88.
		FMW-163	15		X	X		X	X	

Table K-1A
Proposed Soil Analyses
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location Description	Location	Sample Location	Sample Elevation Depth (feet NAVD88)	GRO	DRO	ORO	BTEX	Naphthalenes	cPAHs	Comments
IWBZ	**FMW-G**	**FMW-164**								
SWBZ	**FMW-H**	**FMW-154**								
SWBZ	**FMW-I**	**FMW-155**								
IWBZ	**FMW-J**	**FMW-157**								
SWBZ	**FMW-K**	**FMW-156**								

NOTES:
bgs = below ground surface
COPC = constituents of potential concern
cPAHs = carcinogenic polycyclic aromatic hydrocarbons
DRO = total petroleum hydrocarbons (TPH) as diesel-range organics
Ecology = Washington State Department of Ecology
GRO =TPH as gasoline-range organics
NAVD88 = North American Vertical Datum of 1988
MTCA = Washington State Model Toxics Control Act Cleanup Regulation
ORO = TPH as oil-range organics

/ = Collect and retain sample for potential analysis

Table K-1B
Proposed Groundwater Analyses
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location Description	Location	Sample Location	Screen Interval (feet NAVD88)	GRO	DRO	ORO	BTEX	Naphthalenes	cPAHs	CVOCs	Metals	Comments
IWBZ	**NA**	**FMW-150**	-8.5 to -13.5[1]		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**FMW-151**	-9.3 to -14.3[1]		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**FMW-152**	-8.5 to -13.5[1]		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**FMW-153**	-8.5 to -13.5[1]		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**OW-1**	-6.0 to -21.0		X	X		X		/		Ecology requested naphthalenes be analyzed in IWBZ based on naphthalenes detected at a concentration that exceeds the groundwater screening level protective of indoor air in FMW-146. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**OW-2**	-7.0 to -22.0		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
IWBZ	**NA**	**OW-3**	-8.0 to -23.0		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
SWBZ gw sample west of FB-03 reconnaissance	**FMW-A**	**FMW-158**	15 to 10	X	X	X	X	X			X	1/30/2023 - Ecology requested analysis of barium for the first quarterly monitoring event to verify whether the soil exceedance in saturated soil at FB-03 has impacted groundwater.
IWBZ bound DRO/ORO to west	**FMW-B**	**FMW-159**	-3 to -13		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
SWBZ	**FMW-C**	**FMW-160**	15 to 10	X	X	X	X	X				
SWBZ	**FMW-D**	**FMW-161**	15 to 10	X	X	X	X	X				
IWBZ	**FMW-E**	**FMW-162**	-3 to -13		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
SWBZ	**FMW-F**	**FMW-163**	15 to 10	X	X	X	X	X				

Table K-1B
Proposed Groundwater Analyses
Block 38 West Site
Seattle, Washington
Farallon PN: 397-019

Location Description	Location	Sample Location	Screen Interval (feet NAVD88)	GRO	DRO	ORO	BTEX	Naphthalenes	cPAHs	CVOCs	Metals	Comments
IWBZ	**FMW-G**	**FMW-164**	-3 to -13		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
SWBZ	**FMW-H**	**FMW-154**	14 to 9	X	X	X	X	X			X	1/30/2023 - Ecology requested analysis of barium for the first quarterly monitoring event to verify whether the soil exceedance in saturated soil at FB-04 has impacted groundwater.
SWBZ	**FMW-I**	**FMW-155**	14 to 9	X	X	X	X	X			X	1/30/2023 - Ecology requested analysis of barium and mercury for the first quarterly monitoring event to verify whether the soil exceedance in saturated soil at FB-02 has impacted groundwater.
IWBZ	**FMW-J**	**FMW-157**	-4 to -14		X	X		X		/		5/3/2022 - Ecology requested analysis of naphthalenes from all IWBZ monitoring wells. If DRO and ORO are present at concentrations exceeding groundwater screening levels, then the potential for comingling of these COPCs with the American Linen CVOC Plume will be assessed.
SWBZ	**FMW-K**	**FMW-156**	11 to 6	X	X	X	X	X			X	1/30/2023 - Ecology requested analysis of barium for the first quarterly monitoring event to verify whether the soil exceedance in saturated soil at FB-01 has impacted groundwater.
DOA	**FMW-L**	**FMW-165**	-45 to -55							X		
DOA	**NA**	**FMW-137**	-41.9 to -54.9							X		3/17/22 - Ecology letter requested sampling and analysis of existing monitoring well. One time event.
DOA	**NA**	**FMW-138**	-49.96 to -59.96							X		3/17/22 - Ecology letter requested sampling and analysis of existing monitoring well. One time event.

NOTES:

bgs = below ground surface

COPC = constituents of potential concern

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

GRO =TPH as gasoline-range organics

NAVD88 = North American Vertical Datum of 1988

MTCA = Washington State Model Toxics Control Act Cleanup Regulation

ORO = TPH as oil-range organics

[1]In feet referenced to North American Vertical Datum of 1988 (NAVD88) based on well construction detail.

/ = Collect and retain sample for potential analysis

APPENDIX L
WELL SURVEY REPORT

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

MONITORING WELL SURVEY 520 WESTLAKE AVE. N., SEATTLE	SURVEY DATE MAY 16, 2023	APEX ENGINEERING JOB #36151

FARALLON JOB NO. 397-019

FEATURE	ELEVATION NORTH RIM OF OUTER CASE	ELEVATION NORTH EDGE OF PVC	NORTHING	EASTING
FMW-158	35.51	35.04	231219.18	1269311.57
FMW-159	36.48	36.15	231170.14	1269311.66
FMW-160	39.23	38.95	231030.33	1269305.99
FMW-161	40.24	39.86	230983.90	1269329.97
FMW-162	40.35	40.09	230981.28	1269335.12
FMW-163	40.66	40.29	230979.55	1269369.25
FMW-164	40.53	40.18	230978.04	1269410.55
FMW-165	32.43	32.11	231376.97	1269316.42

VERTICAL DATUM:	NAVD 88 - BASED ON CITY OF SEATTLE BENCHMARK NO. 3658-0102 WITH A PUBLISHED ELEVATION OF 54.26'
HORIZONTAL DATUM:	NAD 83/2011 WASHINGTON SOUTH ZONE - BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

APPENDIX M
DATA VALIDATION REPORT

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

2021 DATA VALIDATION REPORT

DATA VALIDATION REPORT

BLOCK 38 WEST SITE
500 THROUGH 536 WESTLAKE AVENUE NORTH
SEATTLE, WASHINGTON

Agreed Order No. DE 17963
Facility Site Identification No. 62773
Cleanup Site Identification No. 15008

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

Farallon PN: 397-019

For:
City Investors IX LLC
505 5th Avenue South
Seattle, Washington 98104

August 13, 2021

Prepared by:

Jeanette Mullin, L.G.
Environmental Data Manager

Reviewed by:

Eric Buer, L.G., L.H.G.
Principal Hydrogeologist

TABLE OF CONTENTS

TABLES

1.0 INTRODUCTION

This report provides a summary of quality assurance (QA) data validation findings. Data validation was performed for the following environmental samples:

Project Name:	Block 38 West Site
Project No.:	397-019
Lab Name:	OnSite Environmental Inc. (OnSite), Redmond, Washington
Lab Reference No.:	55 Sample Delivery Groups identified in Table 1
Matrices:	Soil and Groundwater

Table 1 identifies the 55 Sample Delivery Groups (SDGs) analyzed by OnSite, the number of samples within each delivery group, the sample matrix, and the analytical methods used to analyze one or more samples within each delivery group.

This review of project data was performed using the U.S. Environmental Protection Agency's (EPA) National Functional Guidelines for Organic Superfund Methods Data Review (USEPA-540-R-2017-002) dated January 2017, and National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA-540-R-2017-001) dated January 2017.

This report includes a review of holding times, method blanks, matrix spike and spike blank recoveries, matrix spike duplicate and spike blank duplicate data, duplicates, surrogates, and chain-of-custody records. As shown in Table 1, select samples were analyzed for total petroleum hydrocarbons (TPH) in the diesel- and oil-range by Northwest Method NWTPH-Dx, TPH in the gasoline-range by Northwest Method NWTPH-Gx, and TPH by Northwest Method NWTPH-HCID (hydrocarbon identification); volatile organic compounds (VOCs) by EPA Method 8021B; VOCs by EPA Method 8260C or 8260D; semivolatile organic compounds (SVOCs) by EPA Method 8270D/Selective Ion Monitoring (SIM) mode or 8270E/SIM; polychlorinated biphenyl (PCB) Aroclors by EPA Method 8082A; metals by EPA Method 6010D or 6020B, and mercury by EPA Method 7471B.

1.1 OVERALL DATA ASSESSMENT

All data are of known quality and are acceptable for use. No results were rejected as a result of this data assessment. Data qualified during this validation effort is summarized in Table 2 and discussed in the sections below.

1.2 DATA QUALIFIER DEFINITIONS

Following are definitions of data qualifiers used during data validation:

J+ (Estimated High Bias): The result is an estimated quantity and the result may be biased high based on non-conformances identified during data validation.

J- (Estimated Low Bias): The result is an estimated quantity and the result may be biased low based on non-conformances identified during data validation.

J- (Estimated): The result is an estimated quantity based on non-conformances identified during data validation.

UJ (Non-detected estimated): The analyte was reported as not detected by the laboratory; however, the reporting limit is estimated due to non-conformances identified during data validation.

1.3 CHAIN-OF-CUSTODY

Field chain-of-custody forms were complete. All chain-of-custody forms were signed and dated. No issues with sample receipt conditions were indicated in the Case Narrative section of the laboratory reports except as noted below. All samples listed on the chain-of-custody forms were analyzed as indicated:

- **SDG 1901-097:** Volatile organic analysis vials were not received for sample PH-13-3.0-011219 in accordance with Method 5035A for analysis by Northwest Method NWTPH-Gx. A sample aliquot was extracted from a 4-ounce jar for analysis and some loss of volatiles may have occurred. The non-detect result for this sample is qualified as not detected and the reporting limit is an estimate (UJ) as shown in Table 2.
- **SDG 1901-158:** Volatile organic analysis vials were not received for sample PH-11A-4.0-011919 in accordance with Method 5035A for analysis by Northwest Method NWTPH-Gx. A sample aliquot was extracted from a 4-ounce jar for analysis and some loss of volatiles may have occurred. The non-detect result for this sample is qualified as not detected and the reporting limit is an estimate (UJ) as shown in Table 2.
- **SDG 2002-223:** Soil samples I3-B-15.0, I3-B-20.0, N2-B-10.0, and N2-B-15.0 were received by the laboratory 2 hours outside the 48-hour holding time specified by Method 5035A for unpreserved samples to be analyzed by Northwest Method NWTPH-Gx and

EPA Method 8021B. The non-detect results for these samples are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.

1.4 COMPLETENESS

Completeness is expressed as the ratio of valid results to the amount of data expected to be obtained under normal conditions. Completeness is determined by assessing the number of samples for which valid results were obtained versus the number of samples that were submitted to the laboratory for analysis. Valid results are results that are determined to be usable during the data validation review process.

The completeness of this data set is 100 percent.

2.0 PETROLEUM HYDROCARBON NWTPH-DX QA REVIEW

2.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Dx soil and preserved groundwater samples is 14 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within holding times except for the following sample:

- **SDG 1912-093:** Soil sample N3-20.0-121019 was analyzed 1 day outside of the holding time. The non-detect results for this sample are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.

2.2 FIELD QUALITY CONTROL SAMPLES

One field duplicate water sample was collected and analyzed by Northwest Method NWTPH-Dx. The duplicate sample and parent sample are:

Field Duplicate Sample ID	Parent Sample ID
FMW500-122818	FMW134-122818

See Table 3 for the calculation of the relative percent difference (RPD) for diesel- and oil-range organics. The results were less than five times the practical quantitation limit (PQL) so the absolute differences between the results were calculated. The absolute RPD differences were below standard RPD limits of less than one times the PQL when the original or duplicate sample results are less than five times the PQL.

2.3 LABORATORY QUALITY CONTROL SAMPLES

2.3.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates were analyzed at a rate of 1 duplicate per 10 samples with a minimum of 1 duplicate per SDG. These criteria were met for all delivery groups.

2.3.2 Method Blanks

No target analytes were detected in the soil or groundwater method blanks at or exceeding the reporting limits for all delivery groups.

2.3.3 Laboratory Duplicates

RPDs of all analytes were within the laboratory's quality control (QC) limits for all delivery groups. In cases where the RPD was elevated, the duplicate was performed on a non-project sample where heterogeneity and matrix impacts may have been present. No qualification of project samples is needed.

2.3.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for Method NWTPH-Dx. All surrogate recoveries were within the laboratory's QC limits for all delivery groups except as noted below. The o-terphenyl surrogate spike was not recovered in the following samples due to sample dilution to address high concentrations of target analyses:

- **SDG 1808-229:** Sample FB-01-5.0-082118;
- **SDG 1901-158:** Sample PH-12-4.0-011919;
- **SDG 1912-207:** Sample TP-2-15.0-121919;
- **SDG 1912-230:** Sample FB-08-2.5;
- **SDG 2001-179:** Sample M1-24.5;
- **SDG 2001-349:** Sample UST-01-line-21.0;
- **SDG 2002-097:** Sample N1-WSW-17.0; and
- **SDG 2002-150:** Sample K3-B-20.0.

No qualifications of sample results are needed based on the lack of surrogate recovery in these samples.

3.0 PETROLEUM HYDROCARBON NWTPH-GX QA REVIEW

3.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Gx soil and preserved groundwater samples is 14 days. All samples were extracted and analyzed within this period except as noted below:

- **SDG 1912-093:** Soil sample N3-20.0-121019 was analyzed 1 day outside of the holding time. The non-detected gasoline result for this sample is qualified as not detected and the reporting limit is an estimate (UJ) as shown in Table 2.
- **SDG 2002-032:** Soil samples H4-ESW-20.0 and H4-ESW2-20.0 were analyzed 7 days outside of the holding time. The non-detected gasoline results for these two samples are qualified as non-detected estimated (UJ) as shown in Table 2.
- **SDG 2002-223:** Soil samples I3-B-15.0, I3-B-20.0, N2-B-10.0, and N2-B-15.0 were received by the laboratory 2 hours outside the 48-hour holding time specified for unpreserved samples to be analyzed by Northwest Method NWTPH-Gx as noted in Section 1.3. The non-detect results for these samples are qualified as non-detected estimated (UJ) as shown in Table 2.

3.2 FIELD QUALITY CONTROL SAMPLES

One field duplicate water sample was collected and analyzed by Northwest Method NWTPH-Gx. The duplicate sample and parent sample are:

Field Duplicate Sample ID	Parent Sample ID
FMW500-122818	FMW134-122818

See Table 3 for the calculation of the RPDs for gasoline-range organics. Gasoline-range organics were not detected in the field duplicate or parent sample.

3.3 LABORATORY QUALITY CONTROL SAMPLES

3.3.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. Duplicates, spike blanks/spike blank duplicates, and/or matrix spikes/matrix spike duplicates were analyzed at a frequency of 1 per 10 samples. These criteria were met for all delivery groups.

3.3.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

3.3.3 Laboratory Duplicates, Spike Blanks/Spike Blank Duplicates, and/or Matrix Spikes/Matrix Spike Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

3.3.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for Method NWTPH-Gx. All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

4.0 PETROLEUM HYDROCARBON NWTPH-HCID QA REVIEW

4.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-HCID soil samples is 14 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within holding times.

4.2 LABORATORY QUALITY CONTROL SAMPLES

4.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. These criteria were met for all delivery groups.

4.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

4.2.3 Surrogate Recoveries

The laboratory used one surrogate spike compound for Method NWTPH-HCID. Surrogates were not able to be recovered for the following:

- **SDG 2001-179:** The surrogate o-terphenyl was not able to be recovered in Sample M1-24.5-Product due to the necessary dilution of the sample as a result of the elevated concentrations of target analytes. No qualifications of sample results are needed.
- **SDG 2002-043:** The surrogate o-terphenyl was not able to be recovered in Sample UST-02-Product due to the necessary dilution of the sample as a result of the elevated concentrations of target analytes. No qualifications of sample results are needed.

5.0 VOLATILE ORGANIC COMPOUND 8021B QA REVIEW

5.1 TIMELINESS

The recommended holding time for EPA Method 8021B is 14 days for soil samples and 14 days for preserved water samples. All samples were extracted and analyzed within this period except as noted below:

- **SDG 1912-093:** Soil sample N3-20.0-121019 was analyzed 1 day outside of the holding time. The non-detected results for this sample are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.
- **SDG 2002-223:** Soil sample I3-B-20.0 was received by the laboratory 2 hours outside the 48-hour holding time specified by Method 5035A for preservation of samples to be analyzed by EPA Method 8021B as noted in Section 1.3, Chain-of-Custody. The non-detect results for this sample are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.

5.2 LABORATORY QUALITY CONTROL SAMPLES

5.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. Duplicates, spike blanks/spike blank duplicates, and/or matrix spikes/matrix spike duplicates were analyzed at a frequency of 1 per 10 samples. These criteria were met for all delivery groups.

5.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

5.2.3 Laboratory Duplicates, Spike Blanks/Spike Blank Duplicates, and/or Matrix Spikes/Matrix Spike Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

5.2.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for EPA Method 8021B. All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

6.0 VOLATILE ORGANIC COMPOUND 8260C/D QA REVIEW

6.1 TIMELINESS

The recommended holding time for EPA Method 8260C/8260D is 14 days for preserved soil samples and 14 days for preserved water samples. All samples were extracted and analyzed within this period.

6.2 FIELD QUALITY CONTROL SAMPLES

One field duplicate water sample was collected and analyzed by EPA Method 8260C. The duplicate sample and parent sample are:

Field Duplicate Sample ID	Parent Sample ID
FMW500-122818	FMW134-122818

See Table 3 for calculation of the RPDs for VOCs. VOCs were not detected in the field duplicate or parent sample.

6.3 LABORATORY QUALITY CONTROL SAMPLES

6.3.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. Spike blanks/spike blank duplicates were analyzed at a frequency of 1 per 10 samples. These criteria were met for all delivery groups.

6.3.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

6.3.3 Spike Blanks/Spike Blank Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

6.3.4 Surrogate Recoveries

The laboratory used three surrogate spike compounds for EPA Method 8260C/8260D. All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

7.0 SEMIVOLATILE ORGANIC COMPOUND QA REVIEW

7.1 TIMELINESS

The recommended holding time for EPA Method 8270D/SIM or 8270E/SIM soil samples is 14 days to extract and 40 days to analyze after extraction; and the recommended holding time for water samples is 7 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within this period except for the following:

- **SDG 1808-272:** Soil sample FB-06-10.0-082218 was extracted and analyzed 1 day outside of the holding time. The non-detect results for this sample are qualified as not detected, the reporting limits are estimates (UJ), and the one detected analyte (pyrene) is qualified as an estimate (J) as shown in Table 2.
- **SDG 2002-069:** Soil sample N2-B-20.0 was extracted and analyzed 5 days outside of the holding time. The results for this sample are qualified as estimates (J).

7.2 FIELD QUALITY CONTROL SAMPLES

One field duplicate water sample was collected and analyzed by EPA Method 8270D/SIM. The duplicate sample and parent sample are:

Field Duplicate Sample ID	Parent Sample ID
FMW500-122818	FMW134-122818

See Table 3 for calculation of the RPDs for SVOCs. Where sample results were less than five times the PQL, the absolute difference between the results was calculated instead of an RPD. The results were compared to the following criteria: an RPD less than 20 percent, or an absolute difference less than the PQL for results less than five times the PQL. Four polycyclic aromatic hydrocarbons results for water sample FMW134-122818 and its duplicate did not meet the criteria, and these original and duplicate results are qualified as estimates (J) as shown on Table 2.

7.3 LABORATORY QUALITY CONTROL SAMPLES

7.3.1 Quality Control Analysis Frequency

Method blanks and spike blanks/spike blank duplicates (or matrix spikes/matrix spike duplicates) were analyzed at a minimum frequency of 5 percent (or one per batch). These criteria were met for all delivery groups.

7.3.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

7.3.3 Spike Blanks/Spike Blank Duplicates and/or Matrix Spikes/Matrix Spike Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups except for the following:

- **SDG 1808-272:** The percent recovery of pentachlorophenol in the spike blank duplicate exceeded the upper control limit. This analyte was not detected in the one sample in the associated batch and no action is needed.

7.3.4 Surrogate Recoveries

The laboratory used between three and six surrogate spike compounds for EPA Method 8270D/SIM or 8270E/SIM for soil and water samples depending on the list of reported SVOCs. Surrogate recoveries were within the laboratory's QC limits for all delivery groups except as noted below:

- **SDG 1808-293:** The percent recovery of the surrogate 2,4,6-tribromophenol was less than the lower control limit for soil sample FMW-133-20.0-082418. The non-detect results associated with this surrogate for this sample are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.
- **SDG 1808-374:** The percent recovery of the surrogate 2-fluorobiphenyl exceeded the upper control limit in the water method blank. Surrogate recoveries in all project samples in this delivery group were within control limits and no action is needed.
- **SDG 1808-375:** The percent recovery of the surrogate 2-fluorobiphenyl exceeded the upper control limit in the water method blank. Surrogate recoveries in all project samples in this delivery group were within control limits and no action is needed.

- **SDG 1901-158:** The percent recovery of the surrogate terphenyl-d14 was less than the lower control limit for soil sample PH-11A-4.0-011919. All results are qualified as estimates with a low bias (J-) as shown in Table 2.
- **SDG 1912-256:** The percent recovery of the surrogate pyrene-d10 exceeded the upper control limit for water sample FMW-146-122619. The analytes associated with this surrogate compound, benzo(a)anthracene and chrysene, were detected in the sample and the results are qualified as estimates with a high bias (J+). The percent recovery of pyrene-d10 exceeded the upper control limit in spike blank SB1226W1 and spike blank duplicate SB1231W2. No action is needed as this surrogate was within control limits for the other project samples in the batch except for FMW-146-122619 as described earlier.
- **SDG 2001-349:** The percent recovery of the surrogate 2-fluorobiphenyl exceeded the upper control limit in soil sample UST-01-line-21.0. The analytes associated with this surrogate compound, 2-methylnaphthalene and 1-methylnaphthalene, were detected in the sample and the results are qualified as estimates with a high bias (J+).
- **SDG 2002-032:** Surrogates were not able to be recovered in soil sample I4-ESW-20.0 due to the necessary dilution of the sample as a result of elevated concentrations of target analytes. No qualifications of sample results are needed.

8.0 PCB AROCLORS QA REVIEW

8.1 TIMELINESS

There is no recommended holding time specified in the method for soil and water samples analyzed by EPA Method 8082A due to the stability of PCBs in environmental samples. However, many programs and laboratories default to the holding time for SVOCs of 7 days to extraction for water samples, 14 days to extraction for soil samples, and 40 days to analyze after extraction for both matrices. All samples were analyzed within 1 to 3 days after collection.

8.2 LABORATORY QUALITY CONTROL SAMPLES

8.2.1 Quality Control Analysis Frequency

Method blanks and spike blanks/spike blank duplicates (or matrix spikes/matrix spike duplicates) were analyzed at a minimum frequency of 5 percent (or one per batch). These criteria were met for all delivery groups.

8.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

8.2.3 Spike Blanks/Spike Blank Duplicates and/or Matrix Spikes/Matrix Spike Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

8.2.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for EPA Method 8082A for soil and water samples. Surrogate recoveries were within the laboratory's QC limits for all delivery groups except as noted below:

- **SDG 1912-256:** The percent recovery of the surrogate decachlorobiphenyl was less than the lower control limit for water samples FMW-145-122619 and FMW-146-122619. Aroclors were not detected in the samples and all results are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.

9.0 METALS QA REVIEW

9.1 TIMELINESS

The recommended holding time for EPA Method 6010D or 6020B is 6 months for soil samples. The recommended holding time for EPA Method 7471B (mercury in soil) is 28 days. All samples were extracted and analyzed within holding times.

9.2 LABORATORY QUALITY CONTROL SAMPLES

9.2.1 Quality Control Analysis Frequency

Method blanks, matrix spikes/matrix spike duplicates, and laboratory duplicates were analyzed at a frequency of 5 percent (or one per batch). These criteria were met for all delivery groups.

9.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

9.2.3 Matrix Spikes/Matrix Spike Duplicates and Laboratory Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups except as noted below:

- **SDG 1808-217:** The laboratory duplicate RPD for chromium exceeded the RPD control limit. The laboratory duplicate analysis was conducted on a non-project sample within the batch; the laboratory noted that the result may be due to sample soil material heterogeneity. The laboratory re-analyzed the sample with similar results. No action is needed as the duplicate analysis was not performed on a project sample.
- **SDG 1808-229:** The laboratory duplicate RPD for chromium exceeded the RPD control limit. The laboratory duplicate analysis was conducted on a non-project sample within the batch; the laboratory noted that the result may be due to sample soil material heterogeneity. The laboratory re-analyzed the sample with similar results. No action is needed as the duplicate analysis was not performed on a project sample.
- **SDG 2001-279:** The laboratory duplicate RPD for lead exceeded the RPD control limit. The laboratory duplicate analysis was conducted on a non-project sample within the batch; the laboratory noted that the result may be due to sample soil material heterogeneity. The

laboratory re-analyzed the sample with similar results. No action is needed as the duplicate analysis was not performed on a project sample.

- **SDG 2001-280:** The laboratory duplicate RPD for lead exceeded the RPD control limit. The laboratory duplicate analysis was conducted on a non-project sample within the batch; the laboratory noted that the result may be due to sample soil material heterogeneity. The laboratory re-analyzed the sample with similar results. No action is needed as the duplicate analysis was not performed on a project sample.

10.0 REFERENCES

U.S. Environmental Protection Agency (EPA). 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. OLEM 9355.0-135, EPA-540-R-2017-001. January.

———. 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. OLEM 9355.0-136, EPA-540-R-2017-002. January.

TABLES

DATA VALIDATION REPORT
Block 38 West Site
500 Through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Table 1
Overview of Soil Sample Analyses
Block 38
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Matrix	Number of Samples	Analytical Method							
			NWTPH-Dx	NWTPH-Gx	NWTPH-HCID	EPA 8021B	EPA 8260C/D	EPA 8270D/E/SIM	EPA 8082A	EPA 6010D/6020B//7471B
1808-217	Soil	4	X	X		X	X	X		X
1808-229	Soil	8	X	X		X	X	X		X
1808-272	Soil	7	X	X		X	X	X		X
1808-271	Soil	3	X	X		X	X	X		X
1808-277	Soil	6	X	X		X		X		X
1808-292	Soil	6	X	X		X	X	X		X
1808-293	Soil	3	X	X		X		X		X
1808-374	Groundwater	4	X	X			X	X		
1808-375	Groundwater	2	X	X			X	X		
1812-267	Groundwater	7	X	X			X	X		
1901-097	Soil	1	X	X				X		
1901-158	Soil	2	X	X				X		
1901-216	Soil	1						X		
1903-242	Groundwater	6	X	X		X		X		
1912-093	Soil	1	X	X		X				
1912-141	Soil	1	X	X		X				
1912-207	Soil	4	X	X		X		X		
1912-230	Soil	10	X	X		X		X		
1912-231	Soil	18	X	X		X		X		
1912-240	Soil	1	X	X			X	X	X	X
1912-256	Groundwater	5	X	X		X	X	X	X	
2001-112	Soil	2	X							
2001-179	Soil	1	X		X					
2001-199	Soil	1		X			X	X	X	X
2001-279	Soil	1	X	X			X	X	X	X
2001-280	Soil	4	X				X	X		X
2001-348	Soil	4	X					X		
2001-349	Soil	1	X					X		X
2002-014	Soil	4	X					X		
2002-115	Soil	4	X					X		
2002-032	Soil	9	X	X				X		
2002-043	Soil	2	X	X	X		X	X	X	
2002-069	Soil	7	X			X		X		
2002-081	Soil	10	X					X		
2002-097	Soil	4	X							X
2002-150	Soil	3	X	X				X		
2002-163	Soil	10	X	X			X	X		
2002-174	Soil	1	X							
2002-199	Soil	3	X	X				X		
2002-208	Soil	2		X				X		
2002-215	Soil	1	X							
2002-223	Soil	14	X	X		X		X		
2002-240	Soil	11	X	X				X		
2002-241	Soil	3		X						

Table 1
Overview of Soil Sample Analyses
Block 38
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Matrix	Number of Samples	Analytical Method							
			NWTPH-Dx	NWTPH-Gx	NWTPH-HCID	EPA 8021B	EPA 8260C/D	EPA 8270D/E/SIM	EPA 8082A	EPA 6010D/6020B//7471B
2002-263	Soil	6	X	X						
2002-275	Soil	15	X	X				X		
2002-293	Soil	9	X	X				X		
2002-303	Soil	9	X					X		
2003-002	Soil	2						X		
2004-206	Soil	1	X							
2004-218	Soil	1						X		
2005-017	Soil	5						X		
2005-214	Soil	1	X	X		X		X		
2006-023	Soil	1	X	X		X		X		
2006-045	Soil	4	X	X		X		X		

NOTES:

An "X" indicates one or more samples within the delivery group were analyzed by the method specified in that column.

EPA = U.S. Environmental Protection Agency

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	n-Nitrosodimethylamine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Pyridine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Phenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Aniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	bis(2-Chloroethyl)ether	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Chlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,3-Dichlorobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,4-Dichlorobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzyl alcohol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,2-Dichlorobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Methylphenol (o-Cresol)	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	bis(2-Chloroisopropyl)ether	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	(3+4)-Methylphenol (m,p-Cresol)	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	n-Nitroso-di-n-propylamine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Hexachloroethane	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Nitrobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Isophorone	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Nitrophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4-Dimethylphenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	bis(2-Chloroethoxy)methane	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4-Dichlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,2,4-Trichlorobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Naphthalene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Chloroaniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Hexachlorobutadiene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Chloro-3-methylphenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Methylnaphthalene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1-Methylnaphthalene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Hexachlorocyclopentadiene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4,6-Trichlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,3-Dichloroaniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4,5-Trichlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Chloronaphthalene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2-Nitroaniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,4-Dinitrobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Dimethylphthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,3-Dinitrobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,6-Dinitrotoluene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,2-Dinitrobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Acenaphthylene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	3-Nitroaniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4-Dinitrophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Acenaphthene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Nitrophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,4-Dinitrotoluene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Dibenzofuran	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,3,5,6-Tetrachlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	2,3,4,6-Tetrachlorophenol	UJ	Sample analyzed outside of holding time

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Diethylphthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Chlorophenyl-phenylether	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Nitroaniline	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Fluorene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4,6-Dinitro-2-methylphenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	n-Nitrosodiphenylamine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	1,2-Diphenylhydrazine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	4-Bromophenyl-phenylether	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Hexachlorobenzene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Pentachlorophenol	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Phenanthrene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Anthracene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Carbazole	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Di-n-butylphthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Fluoranthene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzidine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Pyrene	J	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Butylbenzylphthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	bis-2-Ethylhexyladipate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	3,3'-Dichlorobenzidine	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzo[a]anthracene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Chrysene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	bis(2-Ethylhexyl)phthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Di-n-octylphthalate	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzo[b]fluoranthene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzo(j,k)fluoranthene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzo[a]pyrene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Indeno[1,2,3-cd]pyrene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Dibenz[a,h]anthracene	UJ	Sample analyzed outside of holding time
FB-06-10.0-082218	1808-272	Soil	EPA 8270D/SIM	Benzo[g,h,i]perylene	UJ	Sample analyzed outside of holding time
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	4-Chloro-3-methylphenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	2,4,6-Trichlorophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	2,4,5-Trichlorophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	2,4-Dinitrophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	4-Nitrophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	2,3,5,6-Tetrachlorophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	2,3,4,6-Tetrachlorophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	4,6-Dinitro-2-methylphenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW-133-20.0-082418	1808-293	Soil	EPA 8270D/SIM	Pentachlorophenol	UJ	Percent recovery of surrogate 2,4,6-tribromophenol was below the lower control limit
FMW134-122818	1812-267	Groundwater	EPA 8270D/SIM	Naphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW134-122818	1812-267	Groundwater	EPA 8270D/SIM	2-Methylnaphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW134-122818	1812-267	Groundwater	EPA 8270D/SIM	1-Methylnaphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW134-122818	1812-267	Groundwater	EPA 8270D/SIM	Acenaphthene	J	Parent sample and field duplicate RPD exceeds control limit
FMW500-122818	1812-267	Groundwater	EPA 8270D/SIM	Naphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW500-122818	1812-267	Groundwater	EPA 8270D/SIM	2-Methylnaphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW500-122818	1812-267	Groundwater	EPA 8270D/SIM	1-Methylnaphthalene	J	Parent sample and field duplicate RPD exceeds control limit
FMW500-122818	1812-267	Groundwater	EPA 8270D/SIM	Acenaphthene	J	Parent sample and field duplicate RPD exceeds control limit

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
PH-13-3.0-011219	1901-097	Soil	NWTPH-Gx	Gasoline	UJ	VOA vials not provided for sample per Method 5035A; sample extracted from 4-ounce jar
PH-11A-4.0-011919	1901-158	Soil	NWTPH-Gx	Gasoline	UJ	VOA vials not provided for sample per Method 5035A; sample extracted from 4-ounce jar
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Benzo[a]anthracene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Chrysene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Benzo[b]fluoranthene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Benzo(j,k)fluoranthene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Benzo[a]pyrene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Indeno(1,2,3-c,d)pyrene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
PH-11A-4.0-011919	1901-158	Soil	EPA 8270D/SIM	Dibenz[a,h]anthracene	J-	Percent recovery of surrogate terphenyl-d14 was below the lower control limit
N3-20.0-121019	1912-093	Soil	NWTPH-Gx	Gasoline	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	EPA 8021B	Benzene	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	EPA 8021B	Toluene	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	EPA 8021B	Ethyl Benzene	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	EPA 8021B	m,p-Xylene	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	EPA 8021B	o-Xylene	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	NWTPH-Dx	Diesel Range Organics	UJ	Sample analyzed outside of holding time
N3-20.0-121019	1912-093	Soil	NWTPH-Dx	Oil Range Organics	UJ	Sample analyzed outside of holding time
FMW-146-122619	1912-256	Groundwater	EPA 8270E/SIM	Benzo[a]anthracene	J+	Percent recovery of surrogate pyrene-d10 exceeded the upper control limit
FMW-146-122619	1912-256	Groundwater	EPA 8270E/SIM	Chrysene	J+	Percent recovery of surrogate pyrene-d10 exceeded the upper control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1016	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1221	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1232	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1242	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1248	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1254	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-145-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1260	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1016	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1221	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1232	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1242	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1248	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1254	UJ	Percent recovery of surrogate DCB was below the lower control limit
FMW-146-122619	1912-256	Groundwater	EPA 8082A	Aroclor 1260	UJ	Percent recovery of surrogate DCB was below the lower control limit
UST-01-line-21.0	2001-349	Soil	EPA 8270E/SIM	2-Methylnaphthalene	J+	Percent recovery of surrogate 2-fluorobiphenyl exceeded the upper control limit
UST-01-line-21.0	2001-349	Soil	EPA 8270E/SIM	1-Methylnaphthalene	J+	Percent recovery of surrogate 2-fluorobiphenyl exceeded the upper control limit
H4-ESW-20.0	2002-032	Soil	NWTPH-Gx	Gasoline	UJ	Sample analyzed outside of holding time
H4-ESW2-20.0	2002-032	Soil	NWTPH-Gx	Gasoline	UJ	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Benzo[a]anthracene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Chrysene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Benzo[b]fluoranthene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Benzo(j,k)fluoranthene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Benzo[a]pyrene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Indeno(1,2,3-c,d)pyrene	J	Sample analyzed outside of holding time
N2-B-20.0	2002-069	Soil	EPA 8270E/SIM	Dibenz[a,h]anthracene	J	Sample analyzed outside of holding time
I3-B-15.0	2002-223	Soil	NWTPH-Gx	Gasoline	UJ	Sample received outside of Method 5035A preservation holding time
N2-B-15.0	2002-223	Soil	NWTPH-Gx	Gasoline	UJ	Sample received outside of Method 5035A preservation holding time
N2-B-10.0	2002-223	Soil	NWTPH-Gx	Gasoline	UJ	Sample received outside of Method 5035A preservation holding time

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
I3-B-20.0	2002-223	Soil	NWTPH-Gx	Gasoline	UJ	Sample received outside of Method 5035A preservation holding time
I3-B-20.0	2002-223	Soil	EPA 8021B	Benzene	UJ	Sample received outside of Method 5035A preservation holding time
I3-B-20.0	2002-223	Soil	EPA 8021B	Toluene	UJ	Sample received outside of Method 5035A preservation holding time
I3-B-20.0	2002-223	Soil	EPA 8021B	Ethyl Benzene	UJ	Sample received outside of Method 5035A preservation holding time
I3-B-20.0	2002-223	Soil	EPA 8021B	m,p-Xylene	UJ	Sample received outside of Method 5035A preservation holding time
I3-B-20.0	2002-223	Soil	EPA 8021B	o-Xylene	UJ	Sample received outside of Method 5035A preservation holding time

NOTES:

DCB = decachlorobiphenyl

EPA = U.S. Environmental Protection Agency

J = result is an estimate

J+ = result is an estimate with a high bias

J- = result is an estimate with a low bias

RPD = relative percent difference

SDG = sample delivery group

UJ = analyte not detected exceeding the laboratory reporting limit and reporting limit is an estimate

Table 3
FMW-134 Sample and Field Duplicate Precision Summary
Block 38
Seattle, Washington
Farallon PN: 397-019

Analytical Method	Analyte	Unit	Original Sample FMW-134 FMW134-122818 12/28/2018			Duplicate Sample FMW-134 FMW500-122818 12/28/2018			RPD (percent)	Absolute Difference when Results are less than 5x PQL	RPD Criteria Met
			Result	Detect	PQL	Result	Detect	PQL			
NWTPH-Dx	Diesel-Range Organics	mg/l	0.56		0.26	0.68		0.26		0.12	Yes
NWTPH-Dx	Oil-Range Organics	mg/l	0.41	U	0.41	0.49		0.41		0.08	Yes
NWTPH-GX	Gasoline-Range Organics	µg/l	100	U	100	100	U	100			ND
EPA 8260C	1,1,1,2-Tetrachloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1,1-Trichloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1,2,2-Tetrachloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1,2-Trichloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1-Dichloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1-Dichloroethene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,1-Dichloropropene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2,3-Trichlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2,3-Trichloropropane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2,4-Trichlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2-Dibromo-3-chloropropane	µg/l	1	U	1	1	U	1			ND
EPA 8260C	1,2-Dibromoethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2-Dichlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2-Dichloroethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,2-Dichloropropane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,3-Dichlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,3-Dichloropropane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	1,4-Dichlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	2,2-Dichloropropane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	2-Chloroethyl Vinyl Ether	µg/l	1	U	1	1	U	1			ND
EPA 8260C	2-Chlorotoluene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	4-Chlorotoluene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Benzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Bromobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Bromochloromethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Bromodichloromethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Bromoform	µg/l	1	U	1	1	U	1			ND
EPA 8260C	Bromomethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Carbon Tetrachloride	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Chlorobenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND

Table 3
FMW-134 Sample and Field Duplicate Precision Summary
Block 38
Seattle, Washington
Farallon PN: 397-019

Analytical Method	Analyte	Unit	Original Sample FMW-134 FMW134-122818 12/28/2018			Duplicate Sample FMW-134 FMW500-122818 12/28/2018			RPD (percent)	Absolute Difference when Results are less than 5x PQL	RPD Criteria Met
			Result	Detect	PQL	Result	Detect	PQL			
EPA 8260C	Chloroethane	µg/l	1	U	1	1	U	1			ND
EPA 8260C	Chloroform	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Chloromethane	µg/l	1	U	1	1	U	1			ND
EPA 8260C	cis-1,2-Dichloroethene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	cis-1,3-Dichloropropene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Dibromochloromethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Dibromomethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Dichlorodifluoromethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Ethylbenzene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Hexachlorobutadiene	µg/l	1	U	1	1	U	1			ND
EPA 8260C	Iodomethane	µg/l	1	U	1	1	U	1			ND
EPA 8260C	m,p-Xylene	µg/l	0.4	U	0.4	0.4	U	0.4			ND
EPA 8260C	Methylene Chloride	µg/l	1	U	1	1	U	1			ND
EPA 8260C	o-Xylene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Tetrachloroethene (PCE)	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Toluene	µg/l	1	U	1	1	U	1			ND
EPA 8260C	trans-1,2-Dichloroethene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	trans-1,3-Dichloropropene	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Trichloroethene (TCE)	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Trichlorofluoromethane	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8260C	Vinyl Chloride	µg/l	0.2	U	0.2	0.2	U	0.2			ND
EPA 8270D/SIM	1-Methylnaphthalene	µg/l	0.67		0.11	1.7		0.1	86.9		No
EPA 8270D/SIM	2-Methylnaphthalene	µg/l	0.77		0.11	2.3		0.1	99.7		No
EPA 8270D/SIM	Acenaphthene	µg/l	0.71		0.11	1.6		0.1	77.1		No
EPA 8270D/SIM	Acenaphthylene	µg/l	0.11	U	0.11	0.1	U	0.1			ND
EPA 8270D/SIM	Anthracene	µg/l	0.11	U	0.11	0.1	U	0.1			ND
EPA 8270D/SIM	Benzo(a)Anthracene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Benzo(a)Pyrene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Benzo(b)Fluoranthene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Benzo(g,h,i)Perylene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Benzo(j,k)Fluoranthene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Chrysene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Dibenzo(a,h)Anthracene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Fluoranthene	µg/l	0.11	U	0.11	0.1	U	0.1			ND

Table 3
FMW-134 Sample and Field Duplicate Precision Summary
Block 38
Seattle, Washington
Farallon PN: 397-019

Analytical Method	Analyte	Unit	Original Sample FMW-134 FMW134-122818 12/28/2018			Duplicate Sample FMW-134 FMW500-122818 12/28/2018			RPD (percent)	Absolute Difference when Results are less than 5x PQL	RPD Criteria Met
			Result	Detect	PQL	Result	Detect	PQL			
EPA 8270D/SIM	Fluorene	µg/l	0.11	U	0.11	0.15		0.1		0.04	Yes
EPA 8270D/SIM	Indeno(1,2,3-cd)Pyrene	µg/l	0.011	U	0.011	0.01	U	0.01			ND
EPA 8270D/SIM	Naphthalene	µg/l	23		1.1	62		2.1	91.8		No
EPA 8270D/SIM	Phenanthrene	µg/l	0.11	U	0.11	0.1	U	0.1			ND
EPA 8270D/SIM	Pyrene	µg/l	0.11	U	0.11	0.1	U	0.1			ND

NOTES:

mg/l = milligrams per liter

µg/l = micrograms per liter

ND = analyte not detected in both original sample and field duplicate

PQL = practical quantitation limit

RPD = relative percent difference

U = analyte not detected at or exceeding the laboratory practical quantitation limit

2022 DATA VALIDATION REPORT

DATA VALIDATION REPORT

ALLEY AREA OF BLOCK 38 WEST SITE
BETWEEN REPUBLICAN STREET AND MERCER STREET
SEATTLE, WASHINGTON

Agreed Order No. DE 17963
Facility Site Identification No. 62773
Cleanup Site Identification No. 15008

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

Farallon PN: 397-019

For:
City Investors IX LLC
505 5th Avenue South
Seattle, Washington 98104

August 23, 2022

Prepared by:

Jeanette Mullin, L.G.
Environmental Data Manager

Reviewed by:

Eric Buer, L.G., L.H.G.
Principal Hydrogeologist

TABLE OF CONTENTS

TABLES

1.0 INTRODUCTION

This report provides a summary of quality assurance (QA) data validation findings. Data validation was previously performed for most of the data shown in the Block 38 analytical results tables and is reported in two other reports:

- Appendix B of the *Alley Area of Block 38 West Site Interim Action Workplan* (Farallon 2021a); and
- Appendix D of the Agency Review Draft Interim Action Report, Block 38 West Site, 500 through 536 Westlake Avenue North, Seattle, Washington (Farallon 2021).

This report documents the data validation performed for additional soil samples collected in 2021 from the Block 38 alley during the interim action cleanup. Data validation was conducted for the following environmental samples:

Project Name:	Alley Area of the Block 38 West Site
Project No.:	397-019
Lab Name:	OnSite Environmental Inc. (OnSite), Redmond, Washington
Lab Reference No.:	11 Sample Delivery Groups identified in Table 1
Matrices:	Soil

Table 1 identifies the 11 Sample Delivery Groups (SDGs) analyzed by OnSite, the samples analyzed within each delivery group, the sample matrix, and the analytical methods used to analyze each sample.

This review of project data was performed using the U.S. Environmental Protection Agency's (EPA) National Functional Guidelines for Organic Superfund Methods Data Review (USEPA-540-R-2017-002) dated January 2017, and National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA-540-R-2017-001) dated January 2017.

This report includes a review of holding times, method blanks, matrix spike and spike blank recoveries, matrix spike duplicate and spike blank duplicate data, duplicates, surrogates, and chain-of-custody records. As shown in Table 1, select samples were analyzed for total petroleum hydrocarbons (TPH) as diesel- and oil-range organics by Northwest Method NWTPH-Dx; TPH as gasoline-range organics by Northwest Method NWTPH-Gx; volatile organic compounds (VOCs)

by EPA Method 8260D; semivolatile organic compounds (SVOCs) by EPA Method 8270E/Selective Ion Monitoring (SIM); and metals by EPA Method 6010D.

1.1 OVERALL DATA ASSESSMENT

All data are of known quality and are acceptable for use. No results were rejected as a result of this data assessment. Data qualified during this validation effort is summarized in Table 2 and discussed in the sections below.

1.2 DATA QUALIFIER DEFINITIONS

Following are definitions of data qualifiers used during data validation:

J+ (Estimated High Bias): The result is an estimated quantity, and the result may be biased high based on non-conformances identified during data validation.

1.3 CHAIN-OF-CUSTODY

Field chain-of-custody forms were complete. All chain-of-custody forms were signed and dated. No issues with sample receipt conditions were indicated in the Case Narrative section of the laboratory reports.

1.4 COMPLETENESS

Completeness is expressed as the ratio of valid results to the amount of data expected to be obtained under normal conditions. Completeness is determined by assessing the number of samples for which valid results were obtained versus the number of samples that were submitted to the laboratory for analysis. Valid results are results that are determined to be usable during the data validation review process.

The completeness of this data set is 100 percent.

2.0 PETROLEUM HYDROCARBON NWTPH-DX QA REVIEW

2.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Dx soil is 14 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within holding times.

2.2 LABORATORY QUALITY CONTROL SAMPLES

2.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates were analyzed at a rate of 1 duplicate per 10 samples with a minimum of 1 duplicate per SDG. These criteria were met for all delivery groups.

2.2.2 Method Blanks

No target analytes were detected in the soil method blanks at or exceeding the reporting limits for all delivery groups.

2.2.3 Laboratory Duplicates

Relative Percent Differences (RPDs) of all analytes were within the laboratory's quality control (QC) limits for all delivery groups. In cases where the RPD was elevated, such as for SDG 2107-084, the duplicate was performed on a non-project sample where heterogeneity and matrix impacts may have been present. No qualification of project samples is needed.

2.2.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for Method NWTPH-Dx. All surrogate recoveries were within the laboratory's QC limits for all delivery groups except as noted below. The o-terphenyl surrogate spike was not recovered in the following sample due to sample dilution to address high concentrations of target analytes:

- **SDG 2107-084:** Sample I/A5-ESW-20.0-070921

No qualifications of sample results are needed based on the lack of surrogate recovery in this sample.

3.0 PETROLEUM HYDROCARBON NWTPH-GX QA REVIEW

3.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Gx soil samples is 14 days. All samples were extracted and analyzed within this period.

3.2 LABORATORY QUALITY CONTROL SAMPLES

3.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. Duplicates were analyzed at a frequency of 1 per 10 samples. These criteria were met for all delivery groups.

3.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

3.2.3 Laboratory Duplicates, Spike Blanks/Spike Blank Duplicates, and/or Matrix Spikes/Matrix Spike Duplicates

RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

3.2.4 Surrogate Recoveries

The laboratory used one surrogate spike compound for Method NWTPH-Gx. All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

4.0 VOLATILE ORGANIC COMPOUND 8260D QA REVIEW

4.1 TIMELINESS

The recommended holding time for EPA Method 8260D is 14 days for preserved soil samples. All samples were extracted and analyzed within this period.

4.2 LABORATORY QUALITY CONTROL SAMPLES

4.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a frequency of 1 method blank per 10 samples. Spike blanks/spike blank duplicates were analyzed at a frequency of 1 per 10 samples. These criteria were met for all delivery groups.

4.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

4.2.3 Spike Blanks/Spike Blank Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

4.2.4 Surrogate Recoveries

The laboratory used three surrogate spike compounds for EPA Method 8260D. All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

5.0 SEMIVOLATILE ORGANIC COMPOUND QA REVIEW

5.1 TIMELINESS

The recommended holding time for EPA Method 8270E/SIM soil samples is 14 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within this period.

5.2 LABORATORY QUALITY CONTROL SAMPLES

5.2.1 Quality Control Analysis Frequency

Method blanks and spike blanks/spike blank duplicates (or matrix spikes/matrix spike duplicates) were analyzed at a minimum frequency of 5 percent (or one per batch). These criteria were met for all delivery groups.

5.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

5.2.3 Spike Blanks/Spike Blank Duplicates and/or Matrix Spikes/Matrix Spike Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups.

5.2.4 Surrogate Recoveries

The laboratory used three surrogate spike compounds for EPA Method 8270E/SIM for soil samples. Surrogate recoveries were within the laboratory's QC limits for all delivery groups except as noted below:

- **SDG 2107-084:** The percent recovery of the surrogate terphenyl-d14 exceeded the upper control limit in soil sample I/A5-ESW-17.5-070921. The analytes associated with this surrogate compound (benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo(j,k)fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, and dibenz[a,h]anthracene) were detected in the sample and the results are qualified as estimates with a high bias (J+) as shown in Table 2.

6.0 METALS QA REVIEW

6.1 TIMELINESS

The recommended holding time for EPA Method 6010D is 6 months for soil samples. All samples were extracted and analyzed within holding times.

6.2 LABORATORY QUALITY CONTROL SAMPLES

6.2.1 Quality Control Analysis Frequency

Method blanks, matrix spikes/matrix spike duplicates, and laboratory duplicates were analyzed at a frequency of 5 percent (or one per batch). These criteria were met for all delivery groups.

6.2.2 Method Blanks

No target analytes were detected at or exceeding the reporting limits in the method blanks for all delivery groups.

6.2.3 Matrix Spikes/Matrix Spike Duplicates and Laboratory Duplicates

Recoveries and RPDs of all analytes were within the laboratory's QC limits for all delivery groups except as noted below:

- **SDG 2107-039B:** The laboratory duplicate RPD for lead exceeded the RPD control limit. The laboratory duplicate analysis was conducted on a non-project sample within the batch; the laboratory noted that the original and duplicate results were within five times the quantitation limit. EPA guidance indicates that when the original sample and duplicate sample results are less than five times the quantitation limit, the absolute difference between the original sample result and duplicate sample result should be calculated and compared to the quantitation limit. If the difference is less than the quantitation limit, no qualification is needed. No qualifications of project sample results are needed for two reasons: 1) the duplicate analysis was performed on a non-project sample and results are not applicable to project samples, and 2) the absolute difference between the original and duplicate sample results was less than the practical quantitation limit.

7.0 REFERENCES

Farallon Consulting, L.L.C. (Farallon). 2021. *Interim Action Work Plan, Alley Area of Block 38 West Site Between Republican Street and Mercer Street, Seattle, Washington*. Prepared for City Investors IX LLC. February 3.

———. 2022. *Remedial Investigation Work Plan, Block 38 West Site, 500 through 536 Westlake Avenue North, Seattle, Washington.* Prepared for City Investors IX LLC. August 5.

U.S. Environmental Protection Agency (EPA). 2017a. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* OLEM 9355.0-135, EPA-540-R-2017-001. January.

———. 2017b. *National Functional Guidelines for Organic Superfund Methods Data Review*. OLEM 9355.0-136, EPA-540-R-2017-002. January.

TABLES

DATA VALIDATION REPORT
Alley Area of Block 38 West Site
Between Republican Street and Mercer Street
Seattle, Washington

Farallon PN: 397-019

Table 1
Overview of Soil Sample Analyses
Block 38 Alley
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Sample Identification	Matrix	Sample Date	Analytical Method				
				NWTPH-Dx	NWTPH-Gx	EPA 8260D	EPA 8270E/SIM	EPA 6010D
2103-120	A/A5-SSW-22.5-031021	Soil	3/10/2021				X	
2103-120	A/A5-B2-22.5-031021	Soil	3/10/2021				X	
2103-120	A/A5-B2-20.0-031021	Soil	3/10/2021				X	
2103-120	A/A5-B2-17.5-031021	Soil	3/10/2021				X	
2103-120	A/A5-B-17.5-031021	Soil	3/10/2021				X	
2103-234	A/A5-ESW-22.5-031821	Soil	3/18/2021				X	
2103-234	A/A5-ESW-20.0-031821	Soil	3/18/2021				X	
2103-234	A/A5-ESW-17.5-031821	Soil	3/18/2021				X	
2103-234	A/A5-SSW-20.0-031821	Soil	3/18/2021				X	
2103-267	C/A5-ESW-22-5-032221	Soil	3/22/2021				X	
2103-267	C/A5-ESW-20.0-032221	Soil	3/22/2021				X	
2103-267	C/A5-ESW-17.5-032221	Soil	3/22/2021				X	
2103-267	D/A5-B-17.5-032221	Soil	3/22/2021				X	
2103-267	A/A5-SSW-17.5-032221	Soil	3/22/2021				X	
2103-287	A/A5-B-16.0-032421	Soil	3/24/2021				X	
2105-037	E/A5-ESW-22.5-050421	Soil	5/4/2021	X	X	X	X	
2105-037	E/A5-ESW-20.0-050421	Soil	5/4/2021	X	X	X	X	
2105-037	E/A5-ESW-17.5-050421	Soil	5/4/2021	X	X	X	X	
2106-270	E/A5-B-17.5	Soil	6/28/2021	X	X	X	X	
2106-270	F/A5-B-17.5	Soil	6/28/2021	X	X	X	X	
2107-039	G/A5-ESW-22.5-070621	Soil	7/6/2021	X			X	X
2107-039	G/A5-ESW-20.0-070621	Soil	7/6/2021	X			X	X
2107-039	G/A5-ESW-17.5-070621	Soil	7/6/2021	X			X	X
2107-039	H/A5-ESW-22.5-070621	Soil	7/6/2021	X			X	X
2107-039	H/A5-ESW-20.0-070621	Soil	7/6/2021	X			X	X
2107-039	H/A5-ESW-17.5-070621	Soil	7/6/2021	X			X	X
2107-039	H/A5-B-17.5-070621	Soil	7/6/2021	X			X	X
2107-084	I/A5-ESW-22.5-070921	Soil	7/9/2021	X			X	X
2107-084	I/A5-ESW-20.0-070921	Soil	7/9/2021	X			X	X
2107-084	I/A5-ESW-17.5-070921	Soil	7/9/2021	X			X	
2107-084	I/A5-B-17.5-070921	Soil	7/9/2021	X			X	X
2107-084	J/A5-ESW-22.5-070921	Soil	7/9/2021	X			X	X

Table 1
Overview of Soil Sample Analyses
Block 38 Alley
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Sample Identification	Matrix	Sample Date	Analytical Method				
				NWTPH-Dx	NWTPH-Gx	EPA 8260D	EPA 8270E/SIM	EPA 6010D
2107-084	J/A5-ESW-20.0-070921	Soil	7/9/2021	X			X	X
2107-084	J/A5-ESW-17.5-070921	Soil	7/9/2021	X			X	
2107-095	L/A5-ESW-25.0-071221	Soil	7/12/2021	X			X	
2107-095	L/A5-ESW-22.5-071221	Soil	7/12/2021	X			X	
2107-095	L/A5-B-22.0-071221	Soil	7/12/2021	X			X	
2107-157	M/A5-ESW-25.0-071521	Soil	7/15/2021	X			X	
2107-157	M/A5-ESW-22.5-071521	Soil	7/15/2021	X			X	
2107-191	N/A5-ESW-28.0-072021	Soil	7/20/2021				X	
2107-191	N/A5-ESW-26.0-072021	Soil	7/20/2021				X	
2107-191	N/A5-NSW-28.0-072021	Soil	7/20/2021				X	
2107-191	N/A5-NSW-26.0-072021	Soil	7/20/2021				X	
2107-191	N/A5-B-25.0-072021	Soil	7/20/2021				X	

NOTES:

An "X" indicates the sample was analyzed by the method specified in that column.

Table 2
Summary of Qualified Data
Block 38 Alley
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Benzo[a]anthracene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Chrysene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Benzo[b]fluoranthene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Benzo(j,k)fluoranthene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Benzo[a]pyrene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Indeno[1,2,3-cd]pyrene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit
I/A5-ESW-17.5-070921	2107-084	Soil	EPA 8270E/SIM	Dibenz[a,h]anthracene	J+	Percent recovery of surrogate terphenyl-d14 exceeded the upper control limit

NOTES:

EPA = U.S. Environmental Protection Agency

J+ = result is an estimate with a high bias

SDG = sample delivery group

2024 DATA VALIDATION REPORT

DATA VALIDATION REPORT

Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Agreed Order No. DE 17963
Facility Site Identification No. 62773
Cleanup Site Identification No. 15008

Farallon PN: 397-019

December 20, 2024

Prepared by:

Jeanette Mullin, L.G.
Environmental Data Manager

Reviewed by:

Pete Kingston, L.G.
Principal Geologist

For:
City Investors IX LLC
505 5th Avenue South
Seattle, Washington 98104

Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

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ACRONYMS AND ABBREVIATIONS

EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
GRO	gasoline-range organics
J	estimated
J-	estimated low bias
QA	quality assurance
QC	quality control
RPD	relative percent difference
SDG	Sample Delivery Group
SIM	Selective Ion Monitoring
SVOC	semivolatile organic compound
TPH	total petroleum hydrocarbons
UJ	non-detected estimated
VOA	volatile organic analysis
VOC	volatile organic compound

1.0 INTRODUCTION

This Data Validation Report provides a summary of quality assurance (QA) data validation findings for analytical results obtained for the Block 38 West Remedial Investigation. This report supplements the Data Validation reports provided in the *Final Interim Action Report, Block 38 West Site, 500 through 536 Westlake Avenue North, Seattle, Washington* dated December 28, 2023 (Farallon 2023), and the *Final Interim Action Report, Alley Area of Block 38 West Site, Between Republican Street and Mercer Street, 500 through 536 Westlake Avenue North, Seattle, Washington* dated January 5, 2024 (Farallon 2024). Data validation was performed for the following environmental samples:

Project Name:	Block 38 West Site	
Project No.:	397-019	
Lab Name:	OnSite Environmental Inc. (OnSite), Redmond, Washington	
Lab Reference No.:	2111-264	2202-076
Matrices:	Soil	
Lab Name:	Apex Laboratories, LLC (Apex), Tigard, Oregon	
Lab Reference No.:	A3E1048	A3K1435
	A3E1263	A4B1607
	A3E1405	A4B1613
	A3E1514	A4B1637
	A3H1087	A4C0878
	A3H1155	
Matrices:	Soil and Water	
Lab Name:	ALS Environmental (ALS), Kelso, Washington (subcontractor to Apex)	
Lab Reference No.:	A4B1637	A4C0878
Matrices:	Water	

Apex subcontracted with ALS to perform total organic carbon analysis by Standard Method 5310C. Table 1 identifies the soil and water samples analyzed by OnSite, Apex, and ALS, the analytical method used to analyze each sample, and the Sample Delivery Group (SDG) each sample was analyzed in.

This review of project data was performed using the U.S. Environmental Protection Agency (EPA) (2020b) *National Functional Guidelines for Organic Superfund Methods Data Review* dated November 2020, and the EPA (2020a) *National Functional Guidelines for Inorganic Superfund Methods Data Review* dated November 2020.

This Data Validation Report includes a review of holding times, method blanks, matrix spike and spike blank recoveries, spike blank duplicate data, surrogates, and Chain of Custody forms. As shown in Table 1, select soil and groundwater samples were analyzed for total petroleum hydrocarbons (TPH) in the diesel- and oil-range by Northwest Method NWTPH-Dx with and without silica gel treatment, TPH in the gasoline-range by Northwest Method NWTPH-Gx, volatile organic compounds (VOCs) by EPA Method 8260D; semivolatile organic compounds (SVOCs) by EPA Method 8270E or EPA Method 8270E/Selective Ion Monitoring (SIM) mode, metals by EPA Method 6020B, total suspended solids by Standard Method 2540D, and total organic carbon by Standard Method 5310C.

1.1 OVERALL DATA ASSESSMENT

All data are of known quality and are acceptable for use. No results were rejected as a result of this data assessment. Data qualified as estimated during this validation effort are summarized in Table 2 and discussed in the sections below.

1.2 DATA QUALIFIER DEFINITIONS

The definitions of the data qualifiers used during data validation are as follows:

- **J (estimated):** The analyte was analyzed for and positively identified by the laboratory; however, the reported concentration is estimated due to non-conformances identified during data validation.
- **J- (estimated low bias):** The analyte was analyzed for and positively identified by the laboratory; however, the reported concentration is estimated and the result may be biased low due to non-conformances identified during data validation.
- **UJ (non-detected estimated):** The analyte was reported as not detected by the laboratory; however, the reported quantitation/detection limit is estimated due to non-conformances identified during data validation.

1.3 CHAIN OF CUSTODY

Field Chain of Custody forms were complete. All Chain of Custody forms were signed and dated. All samples listed on the Chain of Custody forms were analyzed as indicated. No

issues with sample receipt conditions were indicated on the Apex Cooler Receipt Form, or in the Case Narrative sections of the other laboratory reports, with the exceptions noted below:

- **SDG A3E1405:** One of the six volatile organic analysis (VOA) vials submitted for sample FMW-161-051523 was received broken. The laboratory was able to conduct the requested analyses with the remaining VOA vials. Visible headspace was observed in two of the six VOA vials submitted for sample FMW-160-051523, in one of six VOA vials submitted for sample FMW-158-051523, and in three of five VOA vials submitted for sample FMW-161-051523. The laboratory was able to conduct the requested analyses for these samples using VOA vials without visible headspace and no qualification of data is needed.
- **SDG A3E1514:** Broken lids were observed by the laboratory on the amber glass containers received for samples OW-2-051623 and FMW-164-051623. The laboratory replaced the lids with no loss of sample. Visible headspace was observed in one of three VOA vials submitted for samples OW-1-051623, FMW-162-051623, OW-3-051723, and in one of six VOA vials submitted for FMW-155-051623. The laboratory was able to conduct the requested analyses for these samples using VOA vials without visible headspace and no qualification of data is needed. Visible headspace was also observed in three of three VOA vials submitted for sample FMW-165-051723. The laboratory used one of the VOA vials with visible headspace for EPA Method 8260D analysis for sample FMW-165-051723. The VOC results for this sample are qualified as estimates (J and UJ), as shown in Table 2.
- **SDG A3H1087:** Two of six VOA vials submitted for sample FMW-161-081423 were received by the laboratory broken. The laboratory was able to conduct the requested analyses with the remaining VOA vials. No sample identification, date, or time was provided on one of two amber containers submitted for sample FMW-154-081423. The laboratory was able to determine the sample identification of the container by the way the bottles were packaged in the cooler. The laboratory observed visible headspace in four of the six VOA vials submitted for sample FMW-160-081423. The laboratory was able to conduct the requested analyses for this sample using the VOA vials without visible headspace and no qualification of data is needed.
- **SDG A3H1155:** One of the containers for sample FMW-153-081523 was mismarked with a sample name that was not shown on the Chain of Custody form. The laboratory matched the container to the correct sample identification using the date and time of sample collection. The laboratory observed visible headspace in three of three VOA

vials submitted for samples OW-1-081523 and FMW-159-081523, in two of three VOA vials submitted for samples OW-3-081523 and FMW-151-081523, and in one of three VOA vials submitted for sample FMW-157-081523. None of the containers with visible headspace were used in any analysis and no qualification of data is needed.

- SDG A4B1607: The sample identification on the containers submitted for the one sample in this delivery group did not match the sample identification shown on the Chain of Custody form. The laboratory used the sample identification as shown on the Chain of Custody form.
- SDG A4C0878: The times on the containers for several samples did not match the time of collection shown on the Chain of Custody. The laboratory used the times as shown on the Chain of Custody form.

1.4 COMPLETENESS

Completeness is expressed as the ratio of valid results to the amount of data expected to be obtained under normal conditions. Completeness is determined by assessing the number of samples for which valid results were obtained versus the number of samples submitted to the laboratory for analysis. Valid results are results determined during the data validation review process to be usable.

The completeness of this data set is 100 percent.

2.0 PETROLEUM HYDROCARBON NWTPH-DX QA REVIEW

2.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Dx (with and without silica gel cleanup) for soil and preserved groundwater samples is 14 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within holding times.

2.2 LABORATORY QUALITY CONTROL SAMPLES

2.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates and/or spike blanks/spike blank duplicates were analyzed at a rate of 1 duplicate and/or spike blank/spike blank duplicate per batch with a minimum of 1 duplicate or spike blank/spike blank duplicate per delivery group. These criteria were met for all delivery groups.

2.2.2 Method Blanks

No target analytes were detected in the soil or groundwater method blanks at or exceeding the reporting limits for all delivery groups.

2.2.3 Laboratory Duplicates, Spike Blanks, and Spike Blank Duplicates

Recoveries and relative percent difference (RPDs) for all target analytes reported for the laboratory duplicates and spike blanks/spike blank duplicates were within laboratory quality control (QC) limits for all delivery groups.

2.2.4 Surrogate Recoveries

All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

3.0 PETROLEUM HYDROCARBON NWTPH-GX QA REVIEW

3.1 TIMELINESS AND PRESERVATION

The recommended holding time for Northwest Method NWTPH-Gx for preserved groundwater samples is 14 days. All samples were extracted and analyzed within this period.

3.2 LABORATORY QUALITY CONTROL SAMPLES

3.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates and spike blanks were analyzed at a rate of 1 duplicate and spike blank per batch with a minimum of 1 duplicate or spike blank per delivery group. These criteria were met for all delivery groups.

3.2.2 Method Blanks

No target analytes were detected in the groundwater method blanks at or exceeding the reporting limits for all delivery groups.

3.2.3 Laboratory Duplicates and Spike Blanks

Recoveries and RPDs for all target analytes reported for the laboratory duplicates and spike blanks were within laboratory QC limits for all delivery groups.

3.2.4 Surrogate Recoveries

All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

4.0 VOLATILE ORGANIC COMPOUND 8260D QA REVIEW

4.1 TIMELINESS AND PRESERVATION

The recommended holding time for EPA Method 8260D is 14 days for preserved water samples. All samples were extracted and analyzed within this period.

4.2 LABORATORY QUALITY CONTROL SAMPLES

4.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates, spike blanks, and matrix spikes were analyzed at a rate of 1 duplicate, 1 spike blank, and 1 matrix spike per batch with a minimum of one set of these QC samples per delivery group. These criteria were met for all delivery groups.

4.2.2 Method Blanks

No target analytes were detected in the groundwater method blanks at or exceeding the reporting limits for all delivery groups.

4.2.3 Laboratory Duplicates, Spike Blanks, and Matrix Spikes

Recoveries and RPDs for all target analytes reported for the laboratory duplicates, spike blanks, and matrix spikes were within laboratory QC limits for all delivery groups with the following exceptions:

- **SDG A3E1405:** The percent recovery of xylenes in a matrix spike sample exceeded the laboratory's upper control limit. However, the matrix spike was conducted on a non-project sample and results are not applicable to project samples. No qualification of project data is needed.
- **SDG A3K1435:** A matrix spike was conducted on sample FMW-161-111423. The percent recoveries of benzene and ethylbenzene exceeded the laboratory's upper control limits. Benzene and ethylbenzene were not detected in the original sample and no qualification of data is needed.

4.2.4 Surrogate Recoveries

All surrogate recoveries were within the laboratory's QC limits for all delivery groups.

4.2.5 Continuing Calibration Verification

The daily continuing calibration verifications were within established control limits for all delivery groups with the following exceptions:

- **SDG A4B1637:** The daily continuing calibration verification recovery for naphthalene failed the +/-20 percent criteria listed in EPA Method 8260. The non-detect naphthalene results for the following samples associated with this daily continuing calibration verification are qualified as estimates (UJ), as shown in Table 2: FMW-157-022824, FMW-162-022824, OW-2-022824, OW-1-022824, and FMW-154-022824.
- **SDG A4C0878:** The daily continuing calibration verification recovery for naphthalene failed the +/-20 percent criteria listed in EPA Method 8260. The non-detect naphthalene results for the following samples associated with this daily continuing calibration verification are qualified as estimates (UJ), as shown in Table 2: OW3-022824 and FMW-159-022824.

5.0 SEMIVOLATILE ORGANIC COMPOUND 8270E QA REVIEW

5.1 TIMELINESS AND PRESERVATION

The recommended holding time for EPA Method 8270E or 8270E/SIM soil samples is 14 days to extract and 40 days to analyze after extraction; and the recommended holding time for water samples is 7 days to extract and 40 days to analyze after extraction. All samples were extracted and analyzed within this period.

5.2 LABORATORY QUALITY CONTROL SAMPLES

5.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Spike blanks and spike blank duplicates or laboratory duplicates, and/or matrix spikes and matrix spike duplicates were analyzed with a minimum of one spike and one duplicate QC sample per batch. These criteria were met for all delivery groups.

5.2.2 Method Blanks

No target analytes were detected in the soil and groundwater method blanks at or exceeding the reporting limits for all delivery groups with the following exception:

- **SDG A3K1435:** Naphthalene was detected in one of three method blanks in this delivery group at a concentration above the method detection limit but below the reporting limit. Samples FMW-159-111523 and OW-3-111523 were associated with this method blank. Naphthalene was not detected in either sample; no qualification of data is needed.

5.2.3 Spike Blanks, Spike Blank Duplicates, Matrix Spikes, Matrix Spike Duplicates, and Laboratory Duplicates

Recoveries and RPDs for all target analytes reported for the spike blanks, spike blank duplicates, matrix spikes, matrix spike duplicates, and laboratory duplicates were within laboratory QC limits for all delivery groups with the following exceptions:

- **SDG A3E1048:** A laboratory duplicate analysis was conducted on sample FMW-163-20.0. The RPD for naphthalene exceeded the RPD control limit. However, the sample and duplicate results for naphthalene were less than five times the laboratory reporting limit. In cases like this where the results are near the laboratory reporting limit, the absolute difference between the results is calculated instead of the typical RPD. The absolute difference is then compared to the standard RPD limit of less than

two times the laboratory reporting limit when the original or duplicate soil sample results are less than five times the laboratory reporting limit. The absolute difference between the sample and duplicate met this criterion and no qualification of data is needed.

- **SDG A3E1263:** The RPD for naphthalene exceeded the RPD control limit in a laboratory duplicate sample. However, the laboratory duplicate analysis was conducted on a non-SDG sample and the results are not applicable to samples in this delivery group.
- **SDGs A4B1607, A4B1613, and A4B1637:** The percent recoveries of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene were below the lower control limits in the spike blank and spike blank duplicate QC samples associated with the samples in these three delivery groups.

  The laboratory re-extracted and re-analyzed the samples in these delivery groups with similar results. The investigation into the low spike blank recoveries was unable to identify a specific root cause. Analysis of subsequent analytical batches for these analytes by EPA Method 8270E yielded spike blank recoveries within acceptance limits. There was insufficient remaining sample volume for the samples in these three delivery groups to re-analyze the samples again.

  A decision was made to report naphthalene from the EPA Method 8260 analysis due to the Method 8270E QC issues. The 1-methylnaphthalene and 2-methylnaphthalene results are being retained for the samples in these three delivery groups but are being qualified as estimates (UJ) as shown in Table 2. The non-detect 1-methylnaphthalene and 2-methylnaphthalene results for these sample locations are consistent with the three previous groundwater monitoring rounds conducted in 2023.

5.2.4 Surrogate Recoveries

All surrogate recoveries were within the laboratory's QC limits for all delivery groups with the following exceptions:

- **SDG A3E1405:** The percent recovery of the surrogate 2-fluorobiphenyl was less than the lower control limit for sample FMW-163-051523. The naphthalene result for this sample is qualified as an estimate with a low bias (J-), and the 1-methylnaphthalene and 2-methylnaphthalene results are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.

- **SDG A3K1435:** The percent recovery of the surrogate nitrobenzene-d5 was less than the lower control limit for sample OW-3-111523. The naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene results for this sample are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2. The percent recovery of the surrogate nitrobenzene-d5 was less than the lower control limit for sample FMW-161-111423. The naphthalene result for this sample is qualified as an estimate with a low bias (J-), the 1-methylnaphthalene and 2-methylnaphthalene results are qualified as not detected, and the reporting limits are estimates (UJ) as shown in Table 2. The percent recoveries of the surrogates 2-fluorobiphenyl and nitrobenzene-d5 were less than the lower control limits for sample FMW-164-111523. The naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene results are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2. The percent recovery of the surrogate 2-fluorobiphenyl was less than the lower control limit for sample FMW-162-111523. The naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene results are qualified as not detected and the reporting limits are estimates (UJ) as shown in Table 2.
- **SDG A4B1613:** The percent recovery of the surrogate 2,4,6-tribromophenol exceeded the upper control limit for sample FMW-156-022724. This surrogate is not associated with 1-methylnaphthalene and 2-methylnaphthalene. The other surrogate percent recoveries were within control limits, including the surrogates that correspond to the naphthalenes. No qualification of data is needed.
- **SDG A4B1637:** The percent recovery of the surrogate phenol-d6 was less than the lower control limit for sample OW-1-022824. This surrogate is not associated with 1-methylnaphthalene and 2-methylnaphthalene. The other surrogate percent recoveries were within control limits including the surrogates that correspond to the naphthalenes. No qualification of data is needed.

6.0 METALS 6020B QA REVIEW

6.1 TIMELINESS AND PRESERVATION

The recommended holding time for EPA Method 6020B for preserved groundwater samples is 6 months. All samples were extracted and analyzed within this period.

6.2 LABORATORY QUALITY CONTROL SAMPLES

6.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates, spike blanks, and matrix spikes were analyzed at a rate of 1 duplicate, 1 spike blank, and 1 matrix spike per batch with a minimum of one set of these QC samples per delivery group. These criteria were met for all delivery groups.

6.2.2 Method Blanks

No target analytes were detected in the groundwater method blanks at or exceeding the reporting limits for all delivery groups.

6.2.3 Laboratory Duplicates, Spike Blanks, and Matrix Spikes

Recoveries and RPDs for all target analytes reported for the laboratory duplicates, spike blanks, and matrix spikes were within the laboratory's QC limits for all delivery groups.

7.0 TOTAL SUSPENDED SOLIDS QA REVIEW

7.1 TIMELINESS AND PRESERVATION

The recommended holding time for Standard Method 2540D for groundwater samples is 7 days. One sample was analyzed by this method and was extracted and analyzed within this period.

7.2 LABORATORY QUALITY CONTROL SAMPLES

7.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Duplicates and a reference sample were analyzed at a rate of 1 duplicate and reference sample per batch. These criteria were met for the one delivery group analyzed by this method.

7.2.2 Method Blanks

No target analyte was detected in the groundwater method blank at or exceeding the reporting limit for this delivery group.

7.2.3 Laboratory Duplicates and Reference Sample

Recoveries and RPDs for total suspended solids reported for the laboratory duplicates and reference sample were within the laboratory's QC limits with the following exception:

- **SDG A4B1607:** The laboratory ran a duplicate analysis on a non-project sample. The RPD exceeded the QC control limit. However, the sample and duplicate results for total suspended solids were less than five times the laboratory reporting limit. In cases like this where the results are near the laboratory reporting limit, the absolute difference between the results is calculated instead of the typical RPD. The absolute difference is then compared to the standard RPD limit of less than one times the laboratory reporting limit when the original or duplicate groundwater sample results are less than five times the laboratory reporting limit. The absolute difference between the sample and duplicate met this criterion. No qualification of data is needed.

8.0 TOTAL ORGANIC CARBON QA REVIEW

8.1 TIMELINESS AND PRESERVATION

The recommended holding time for Standard Method 5310C for preserved groundwater samples is 28 days. All samples were extracted and analyzed within this period.

8.2 LABORATORY QUALITY CONTROL SAMPLES

8.2.1 Quality Control Analysis Frequency

Method blanks were analyzed at a minimum frequency of 5 percent (or one per batch). Spike blanks were analyzed at a rate of 1 spike blank per batch with a minimum of 1 spike blank per delivery group. These criteria were met for all delivery groups.

8.2.2 Method Blanks

No target analytes were detected in the groundwater method blanks at or exceeding the reporting limits for all delivery groups.

8.2.3 Spike Blanks

Recoveries of total organic carbon reported for the laboratory spike blanks were within laboratory QC limits for all delivery groups.

9.0 REFERENCES

Farallon Consulting, L.L.C. (Farallon). 2023. *Final Interim Action Report, Block 38 West Site, 500 through 536 Westlake Avenue North, Seattle, Washington.* Prepared for City Investors IX L.L.C. December 28.

———. 2024. *Final Interim Action Report, Alley Area of Block 38 West Site, Between Republican Street and Mercer Street, 500 through 536 Westlake Avenue North, Seattle, Washington.* Prepared for City Investors IX L.L.C. January 5.

U.S. Environmental Protection Agency (EPA). 2020a. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* OLEM 9240.1-66; EPA-542-R-20-006. November.

———. 2020b. *National Functional Guidelines for Organic Superfund Methods Data Review.* OLEM 9240.0-51; EPA-540-R-20-005. November.

TABLES

DATA VALIDATION REPORT
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Table 1
Overview of Sample Analyses
Block 38
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Sample Identification	Sample Date	Matrix	Analytical Method							
				NWTPH-Dx	NWTPH-Dx with Silica Gel	NWTPH-Gx	EPA 8260D	EPA 8270E/SIM	EPA 6020B	SM 2540D	SM 5310C
2111-264	FB-18-15.0	11/24/2021	Soil					X			
2111-264	FB-18-20.0	11/24/2021	Soil					X			
2111-264	FB-19-15.0	11/24/2021	Soil					X			
2111-264	FB-19-20.0	11/24/2021	Soil					X			
2202-076	FB-20-12-0	2/5/2022	Soil	X				X			
2202-076	FB-20-15.0	2/5/2022	Soil	X				X			
2202-076	FB-20-17.0	2/5/2022	Soil	X				X			
2202-076	FB-21-3.0	2/5/2022	Soil					X			
2202-076	FB-21-5.0	2/5/2022	Soil					X			
A3E1048	FMW-163-15.0	5/1/2023	Soil	X				X			
A3E1048	FMW-163-20.0	5/1/2023	Soil	X				X			
A3E1048	FMW-161-15.0	5/3/2023	Soil	X				X			
A3E1048	FMW-161-20.0	5/3/2023	Soil	X				X			
A3E1263	FMW-160-15.0	5/5/2023	Soil	X				X			
A3E1263	FMW-160-20.0	5/5/2023	Soil	X				X			
A3E1263	FB-17-10.0	5/9/2023	Soil	X				X			
A3E1263	FB-17-15.0	5/9/2023	Soil	X				X			
A3E1263	FB-17-17.0	5/9/2023	Soil	X				X			
A3E1405	FMW-160-051523	5/15/2023	Water	X		X	X	X			
A3E1405	FMW-158-051523	5/15/2023	Water	X		X	X	X	X		
A3E1405	FMW-161-051523	5/15/2023	Water	X		X	X	X			
A3E1405	FMW-163-051523	5/15/2023	Water	X		X	X	X			
A3E1405	FMW-161-051523	5/15/2023	Water	X		X	X	X			
A3E1405	FMW-163-051523	5/15/2023	Water	X		X	X	X			
A3E1514	FMW-155-051623	5/16/2023	Water	X		X	X	X	X		
A3E1514	FMW-156-051623	5/16/2023	Water	X		X	X	X	X		
A3E1514	OW-1-051623	5/16/2023	Water	X				X			
A3E1514	FMW-154-051623	5/16/2023	Water	X		X	X	X	X		
A3E1514	FMW-157-051623	5/16/2023	Water	X				X			
A3E1514	OW-2-051623	5/16/2023	Water	X				X			
A3E1514	FMW-152-051623	5/16/2023	Water	X				X			
A3E1514	FMW-150-051623	5/16/2023	Water	X				X			
A3E1514	FMW-137-051623	5/16/2023	Water				X				
A3E1514	FMW-164-051623	5/16/2023	Water	X				X			
A3E1514	FMW-162-051623	5/16/2023	Water	X				X			
A3E1514	FMW-138-051623	5/16/2023	Water				X				
A3E1514	FMW-159-051623	5/16/2023	Water	X				X			
A3E1514	FMW-153-051623	5/16/2023	Water	X				X			
A3E1514	FMW-151-051623	5/16/2023	Water	X				X			
A3E1514	OW-3-051723	5/17/2023	Water	X				X			
A3E1514	FMW-165-051723	5/17/2023	Water				X				
A3H1087	FMW-155-081423	8/14/2023	Water	X	X	X	X	X			
A3H1087	FMW-163-081423	8/14/2023	Water	X		X	X	X			
A3H1087	FMW-160-081423	8/14/2023	Water	X	X	X	X	X			
A3H1087	FMW-156-081423	8/14/2023	Water	X		X	X	X			
A3H1087	FMW-161-081423	8/14/2023	Water	X		X	X	X			
A3H1087	FMW-154-081423	8/14/2023	Water	X	X	X	X	X			
A3H1155	OW-2-081523	8/15/2023	Water	X				X			
A3H1155	FMW-158-081523	8/15/2023	Water	X		X	X	X			
A3H1155	FMW-164-081523	8/15/2023	Water	X				X			
A3H1155	FMW-159-081523	8/15/2023	Water	X				X			
A3H1155	OW-1-081523	8/15/2023	Water	X				X			
A3H1155	OW-3-081523	8/15/2023	Water	X				X			
A3H1155	FMW-157-081523	8/15/2023	Water	X				X			

Table 1
Overview of Sample Analyses
Block 38
Seattle, Washington
Farallon PN: 397-019

Lab Sample Delivery Group	Sample Identification	Sample Date	Matrix	Analytical Method							
				NWTPH-Dx	NWTPH-Dx with Silica Gel	NWTPH-Gx	EPA 8260D	EPA 8270E/SIM	EPA 6020B	SM 2540D	SM 5310C
A3H1155	FMW-162-081523	8/15/2023	Water	X				X			
A3H1155	FMW-153-081523	8/15/2023	Water	X				X			
A3H1155	FMW-151-081523	8/15/2023	Water	X				X			
A3H1155	FMW-150-081523	8/15/2023	Water	X				X			
A3H1155	FMW-152-081523	8/15/2023	Water	X				X			
A3K1435	FMW-155-111423	11/14/2023	Water	X	X	X	X	X			
A3K1435	FMW-154-111423	11/14/2023	Water	X	X	X	X	X			
A3K1435	FMW-161-111423	11/14/2023	Water	X		X	X	X			
A3K1435	FMW-160-111423	11/14/2023	Water	X		X	X	X			
A3K1435	FMW-163-111523	11/15/2023	Water	X		X	X	X			
A3K1435	FMW-158-111523	11/15/2023	Water	X	X	X	X	X			
A3K1435	FMW-156-111523	11/15/2023	Water	X		X	X	X			
A3K1435	FMW-159-111523	11/15/2023	Water	X	X			X			
A3K1435	FMW-157-111523	11/15/2023	Water	X				X			
A3K1435	OW-3-111523	11/15/2023	Water	X				X			
A3K1435	OW-2-111523	11/15/2023	Water	X				X			
A3K1435	FMW-164-111523	11/15/2023	Water	X				X			
A3K1435	FMW-162-111523	11/15/2023	Water	X				X			
A3K1435	OW-1-111523	11/15/2023	Water	X	X			X			
A3K1435	FMW-150-111523	11/15/2023	Water	X				X			
A3K1435	FMW-152-111523	11/15/2023	Water	X				X			
A3K1435	FMW-153-111523	11/15/2023	Water	X				X			
A3K1435	FMW-152-111523	11/15/2023	Water	X				X			
A3K1435	FMW-153-111523	11/15/2023	Water	X				X			
A3K1435	FMW-151-111523	11/15/2023	Water	X				X			
A4B1607	FMW-158-022724	2/27/2024	Water			X	X	X		X	
A4B1613	FMW-160-022724	2/27/2024	Water	X		X	X	X			
A4B1613	FMW-161-022724	2/27/2024	Water	X		X	X	X			
A4B1613	FMW-156-022724	2/27/2024	Water	X		X	X	X			
A4B1613	FMW-163-022724	2/27/2024	Water	X		X	X	X			
A4B1613	FMW-155-022724	2/27/2024	Water	X	X	X	X	X			
A4B1637	FMW-154-022824	2/28/2024	Water	X		X	X	X			
A4B1637	OW-2-022824	2/28/2024	Water	X			X	X			
A4B1637	OW-1-022824	2/28/2024	Water	X			X	X			
A4B1637	FMW-157-022824	2/28/2024	Water	X			X	X			
A4B1637	OW-3-022824	2/28/2024	Water	X				X			
A4B1637	FMW-159-022824	2/28/2024	Water	X	X		X	X			X
A4B1637	FMW-162-022824	2/28/2024	Water	X			X	X			
A4C0878	FMW-152-022924	2/29/2024	Water	X				X			
A4C0878	OW3-022824	2/29/2024	Water				X				
A4C0878	FMW-164-022924	2/29/2024	Water	X				X			
A4C0878	FMW-150-022924	2/29/2024	Water	X				X			
A4C0878	FMW-153-022924	2/29/2024	Water	X				X			
A4C0878	FMW-158-022924	2/29/2024	Water	X	X						X
A4C0878	FMW-151-022924	2/29/2024	Water	X				X			

NOTES:
An "X" indicates one or more samples within the delivery group were analyzed by the method specified in that column.
EPA = U.S. Environmental Protection Agency
SM = Standard Method

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
FMW-165-051723	A3E1514	Groundwater	EPA 8260D	Tetrachloroethene	UJ	Visible headspace observed in VOA vial used for analysis.
FMW-165-051723	A3E1514	Groundwater	EPA 8260D	Trichloroethene	UJ	Visible headspace observed in VOA vial used for analysis.
FMW-165-051723	A3E1514	Groundwater	EPA 8260D	cis-1,2-Dichloroethene	J	Visible headspace observed in VOA vial used for analysis.
FMW-165-051723	A3E1514	Groundwater	EPA 8260D	trans-1,2-Dichloroethene	UJ	Visible headspace observed in VOA vial used for analysis.
FMW-165-051723	A3E1514	Groundwater	EPA 8260D	Vinyl Chloride	J	Visible headspace observed in VOA vial used for analysis.
FMW-157-022824	A4B1637	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene failed the +/-20% criteria listed in the method
FMW-162-022824	A4B1637	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene failed the +/-20% criteria listed in the method
OW-2-022824	A4B1637	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene failed the +/-20% criteria listed in the method
OW-1-022824	A4B1637	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene was below the +/-20% criteria listed in the method
FMW-154-022824	A4B1637	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene was below the +/-20% criteria listed in the method
OW3-022824	A4C0878	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene failed the +/-20% criteria listed in the method
FMW-159-022824	A4C0878	Groundwater	EPA 8260D	Naphthalene	UJ	Daily Continuing Calibration Verification recovery for naphthalene failed the +/-20% criteria listed in the method
FMW-163-051523	A3E1405	Groundwater	EPA 8270E/SIM	Naphthalene	J-	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
FMW-163-051523	A3E1405	Groundwater	EPA 8270E/SIM	1-Methylnaphthalene	UJ	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
FMW-163-051523	A3E1405	Groundwater	EPA 8270E/SIM	2-Methylnaphthalene	UJ	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
OW-3-111523	A3K1435	Groundwater	EPA 8270E	Naphthalene	UJ	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
OW-3-111523	A3K1435	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
OW-3-111523	A3K1435	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
FMW-164-111523	A3K1435	Groundwater	EPA 8270E	Naphthalene	UJ	Percent recoveries of surrogates nitrobenzene-d5 and 2-fluorobiphenyl were below the lower control limits
FMW-164-111523	A3K1435	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recoveries of surrogates nitrobenzene-d5 and 2-fluorobiphenyl were below the lower control limits
FMW-164-111523	A3K1435	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recoveries of surrogates nitrobenzene-d5 and 2-fluorobiphenyl were below the lower control limits
FMW-162-111523	A3K1435	Groundwater	EPA 8270E	Naphthalene	UJ	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
FMW-162-111523	A3K1435	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
FMW-162-111523	A3K1435	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of surrogate 2-fluorobiphenyl was below the lower control limit
FMW-161-111423	A3K1435	Groundwater	EPA 8270E	Naphthalene	J-	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
FMW-161-111423	A3K1435	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
FMW-161-111423	A3K1435	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of surrogate nitrobenzene-d5 was below the lower control limit
FMW-158	A4B1607	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-158	A4B1607	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-160-022724	A4B1613	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-160-022724	A4B1613	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-161-022724	A4B1613	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-161-022724	A4B1613	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-163-022724	A4B1613	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-163-022724	A4B1613	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-156-022724	A4B1613	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-156-022724	A4B1613	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-155-022724	A4B1613	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-155-022724	A4B1613	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-154-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-154-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-157-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-157-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-162-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-162-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD

Table 2
Summary of Qualified Data
Block 38
Seattle, Washington
Farallon PN: 397-019

Sample Identification	SDG	Matrix	Method	Analyte	Qualifier	Reason
FMW-159-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
FMW-159-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-1-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-1-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-2-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-2-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-3-022824	A4B1637	Groundwater	EPA 8270E	1-Methylnaphthalene	UJ	Percent recovery of 1-methylnaphthalene was below the lower control limit in the associated LCS and LCSD
OW-3-022824	A4B1637	Groundwater	EPA 8270E	2-Methylnaphthalene	UJ	Percent recovery of 2-methylnaphthalene was below the lower control limit in the associated LCS and LCSD

NOTES:
EPA = U.S. Environmental Protection Agency
J = result is an estimate
J- = result is an estimate with a low bias
LCS = lab control sample (spike blank)
LCSD = lab control sample duplicate (spike blank duplicate)
RPD = relative percent difference
SDG = sample delivery group
UJ = analyte not detected exceeding the laboratory reporting limit and reporting limit is an estimate

APPENDIX N
TERRESTRIAL ECOLOGICAL EVALUATION

REMEDIAL INVESTIGATION/FOCUSED FEASIBILITY STUDY
Block 38 West Site
500 through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Block 38 West	
Facility/Site Address: 520 Westlake Avenue N, Seattle WA 98109	
Facility/Site No: 62773	VCP Project No.: N/A

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Greg Peters		Title: Project Scientist	
Organization: Farallon Consulting			
Mailing address: 975 5th Ave NW			
City: Issaquah		State: WA	Zip code: 98207
Phone: 425-677-9521	Fax:	E-mail: gpeters@farallonconsulting.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☒ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☒ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☐ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

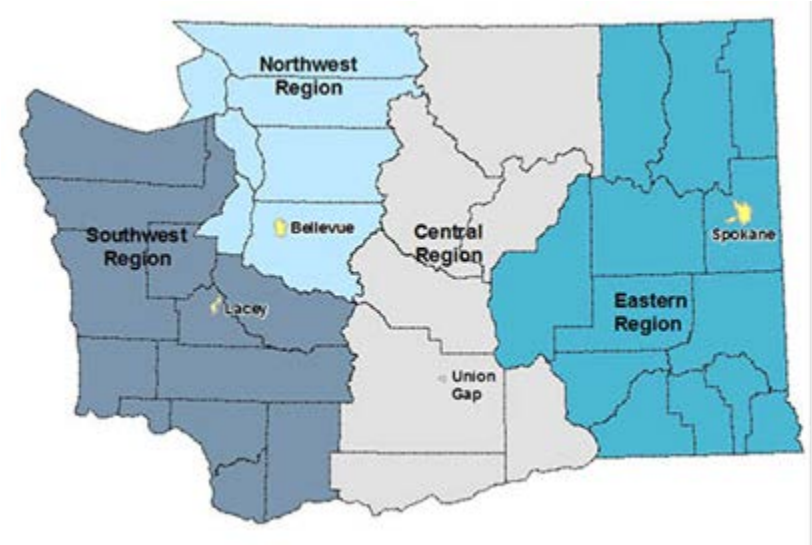
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.