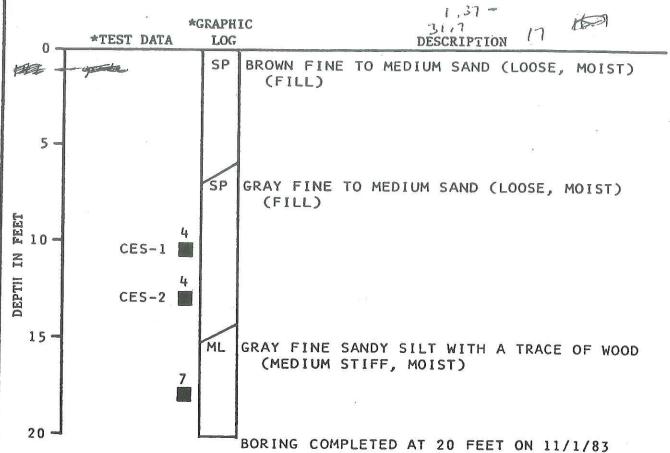
Project: C			Marine	e Serv	ices						Boring/Wel	II Name:
Boring Location: Job #: 008.0205.00007  Drilling Company: ESN Northwest Inc. Logged by: Chris Kramer								-				
Equipment: Track mounted Geoprobe									Logged by: Chris Krame	er C 40.05	G	PE-7
Sampling Method: Split spoon									Start Date/Time: 8-24-07 Finish Date/Time: 8-24-0	7 (2) 13:35	- 0	I L-1
Hammer Weight:					-			Monitoring Device:	07	-		
Screened	Inte	rval (b	gs):	2010 201					First Water (bgs): 11		-	
			90).	য	(pgs)	60	Ď.		Thet water (sign).			Boring
Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	19	1 1411-	ala Basadalla		Abandonment or Well Construction
- vi	Š	<u>oz</u>		<u> </u>	0	0	G	0-0.25	Organics	gic Description		Details
					"-	_	******	0 0.20	0.94.1100		1 -	
											/	
	1 1										_	
	ΙI				=			0.25-5	SAND: Light brown, med	lium to coarse, dry, loose.	1. <del>44</del>	
					_	SP	///////				-	
					-		WWW.				-	
					_						=	
					5						:=	
							W///////		Transitional Contact		_	
	IJ					SP		5-7				
GPE-7-6 @					_			5-7	SAND: Brown, fine to me	dium, moist		
1415	1				_					- Andrew Control	_	
0 <b>€</b> 8	П				_				Sharp Contact		_	
					:			À			_	W.
					-						-	
	1 1					SP		1000 MARCO				10
GPE-7-10	1 1				10	0.		7-12	SAND: Grey, with silt layers and fines, slight odor, some	-		
@ 1420									organics		<del>1000</del>	
	1											
	ш				_						_	
	1 1										_	
					-	ML		12	SILT: Gray, wet		_	1
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	$\perp$	L						L	1,			
Depth of	Bori	ng (bo	is): 12						Filter Pack:	1.		
Depth of \	vveil	(ugs)	3 2						Annulus Sea			
									Surface Seal	li		

## APPENDIX C

HISTORICAL BORING LOGS





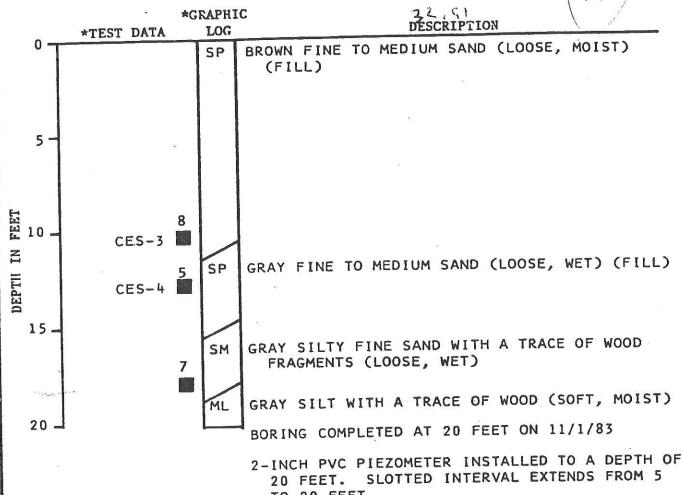
2-INCH PVC PIEZOMETER INSTALLED TO A DEPTH OF 19 FEET. SLOTTED INTERVAL EXTENDS FROM 4 TO 19 FEET.

STATIC WATER LEVEL MEASURED AT ELE. 22.11 FEET ON 11/7/83, AND ELE. 22.20 FEET ON 11/8/83

TOP OF CASING ELEVATION: 33.63 FEET

.12





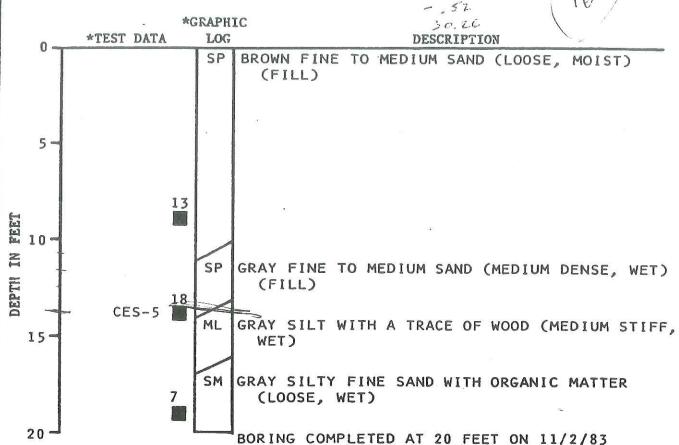
TO 20 FEET
STATIC WATER LEVEL MEASURED AT FLE. 20.11 FEET

STATIC WATER LEVEL MEASURED AT ELE. 20.11 FEET ON 11/7/83, AND ELE. 20.13 FEET ON 11/8/83



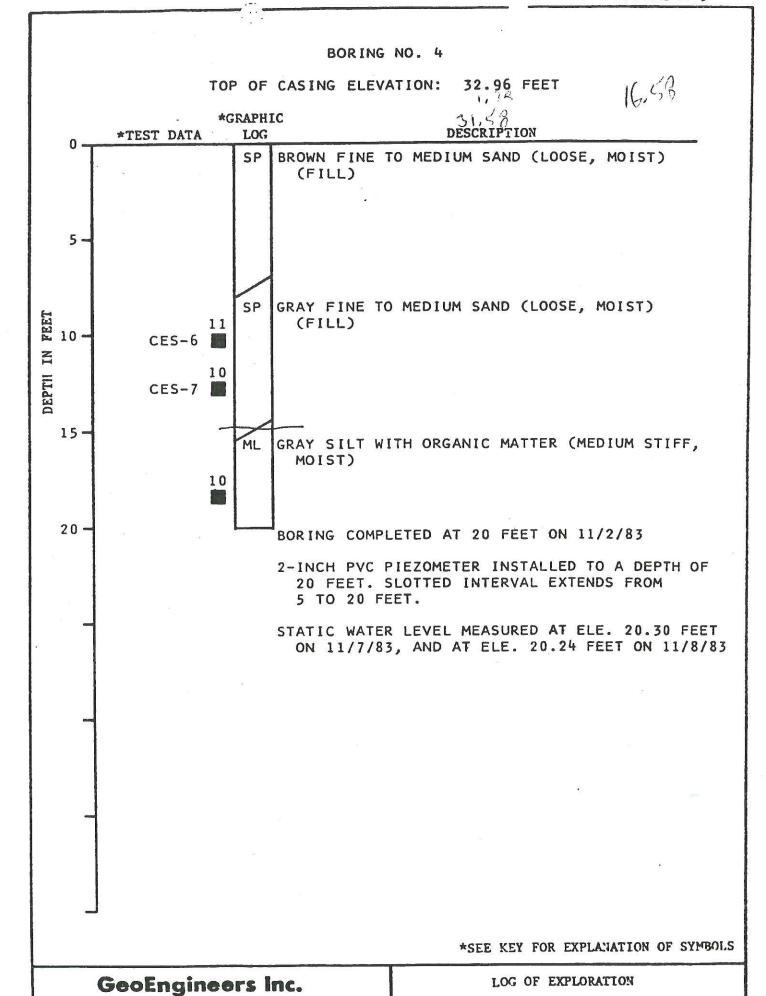






2-INCH PVC PIEZOMETER INSTALLED TO A DEPTH OF 19.5 FEET. SLOTTED INTERVAL EXTENDS FROM 4.5 TO 19.5 FEET.

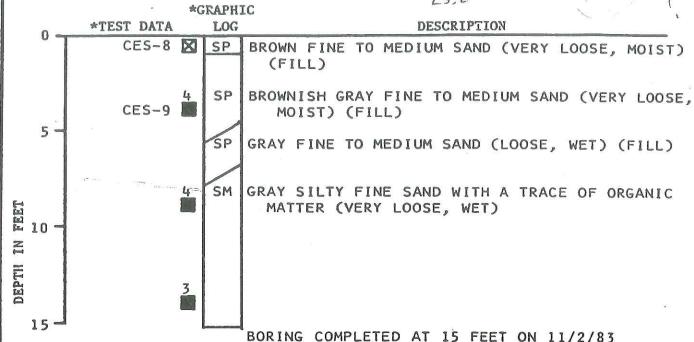
STATIC WATER LEVEL MEASURED AT ELE. 20.32 FEET ON 11/7/83, AND AT ELE. 20.35 FEET ON 11/8/83



TOP OF CASING ELEVATION: 23.50 FEET

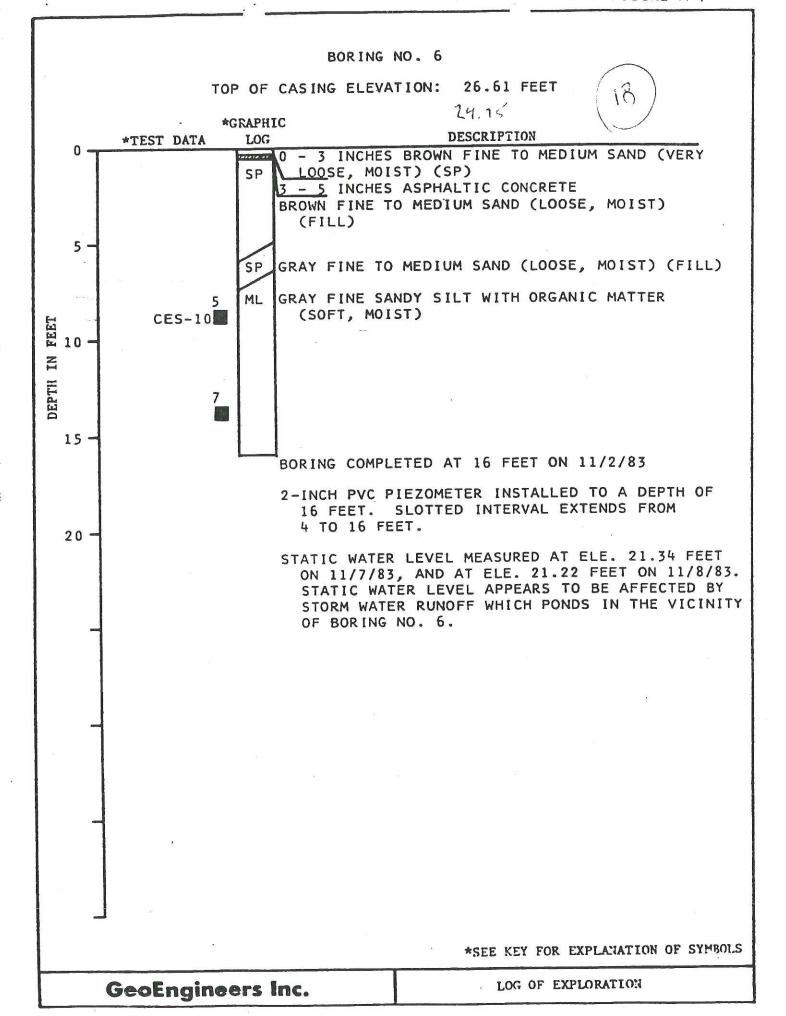






2-INCH PVC PIEZOMETER INSTALLED TO A DEPTH OF 15 FEET. SLOTTED INTERVAL EXTENDS FROM 3 TO 15 FEET.

STATIC WATER LEVEL MEASURED AT ELE. 20.24 FEET ON 11/7/83, AND AT ELE. 20.26 FEET ON 11/8/83

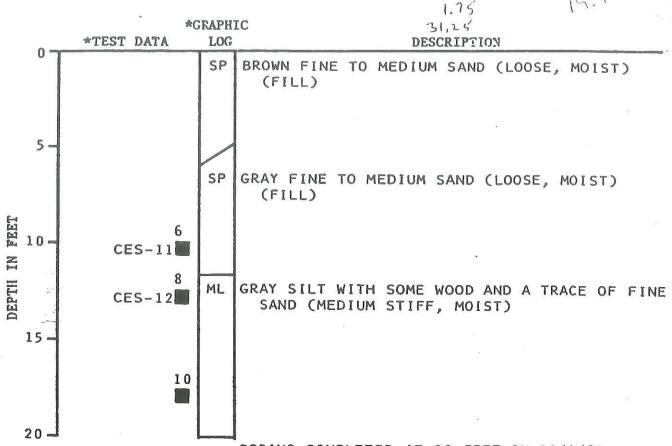




TOP OF CASING ELEVATION:

33.00 FEET





BORING COMPLETED AT 20 FEET ON 11/2/83

2-INCH PVC PIEZOMETER INSTALLED TO A DEPTH OF 18 FEET. SLOTTED INTERVAL EXTENDS FROM 3 TO 18 FEET.

STATIC WATER LEVEL MEASURED AT ELE. 20.79 FEET ON 11/7/83, AND AT ELE. 20.79 FEET ON 11/8/83



TOP OF CASING ELEVATION: 33.13 FEET

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\$1,44

SP GRAY FINE TO MEDIUM SAND (LOOSE, MOIST)
(FILL)

GRAY SILT WITH A TRACE OF FINE SAND AND ORGANIC MATTER (SOFT, MOIST)

BORING COMPLETED AT 20 FEET ON 11/2/83

2-INCH PVC PIEZOMETER INSTALLED TO A DEPTH OF 18.5 FEET. SLOTTED INTERVAL EXTENDS FROM 3.5 TO 18.5 FEET.

STATIC WATER LEVEL MEASURED AT ELE. 19.37 FEET ON 11/7/83, AND AT ELE. 19.61 FEET ON 11/8/83.

\*SEE KEY FOR EXPLANATION OF SYMBOLS

10 -

15 -

20 -

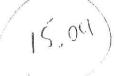
CES-13

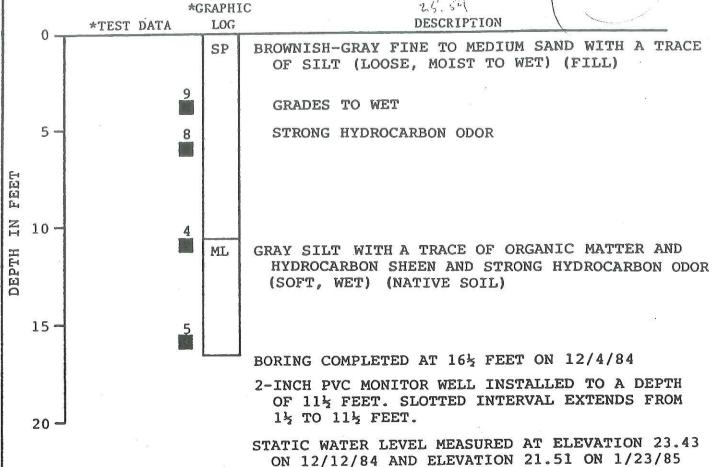
CES-14

8

ML

TOP OF CASING ELEVATION: 26.54 FEET

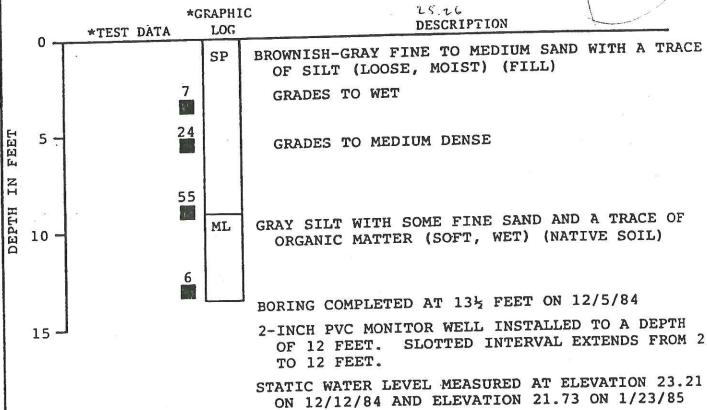




TOP OF CASING ELEVATION: 26.01 FEET



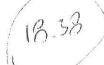


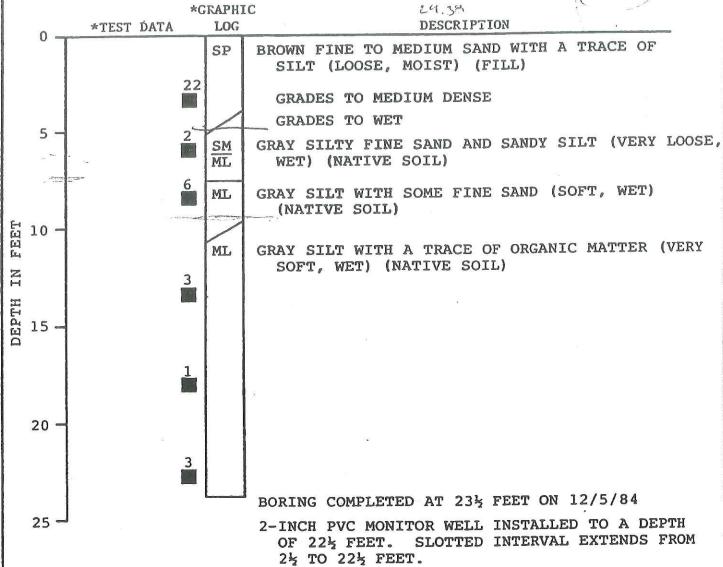




TOP OF CASING ELEVATION: 26.03 FEET

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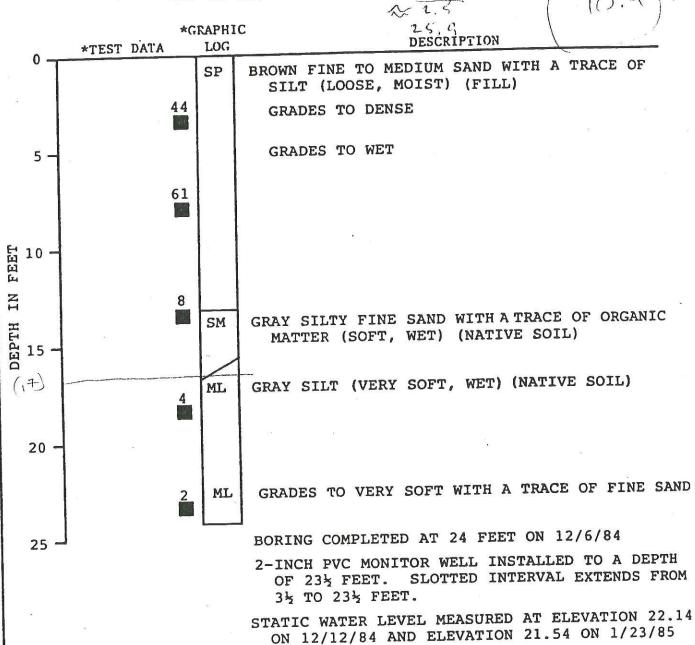
\*SEE KEY FOR EXPLANATION OF SYMBOLS

STATIC WATER LEVAL MEASURED AT ELEVATION 21.37 ON

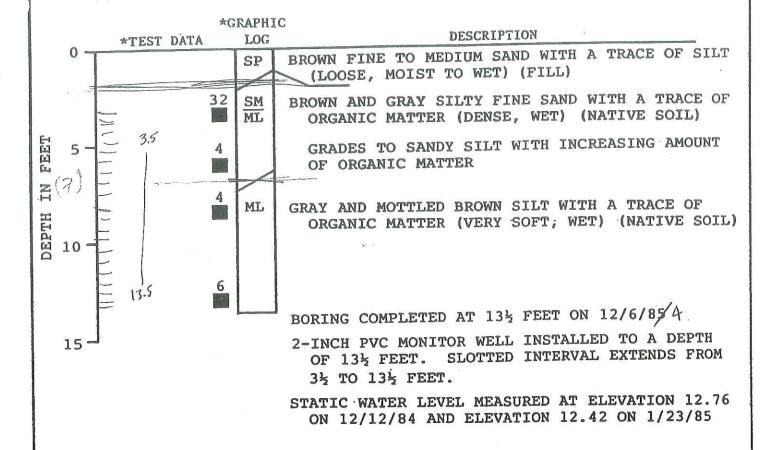
12/12/84 AND ELEVATION 20.17 ON 1/23/85

TOP OF CASING ELEVATION: 28.40 FEET



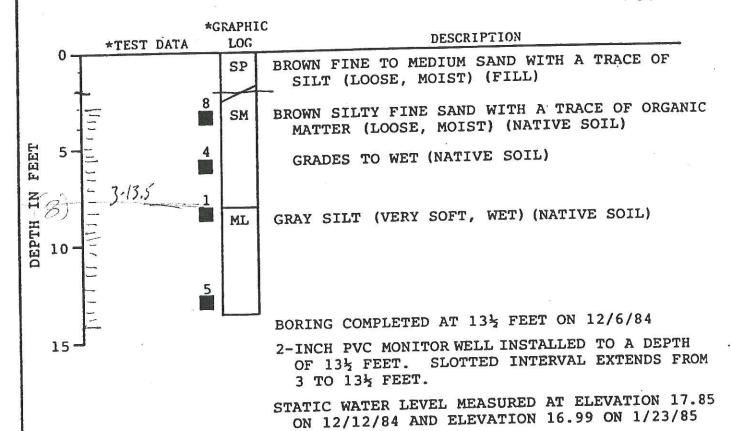


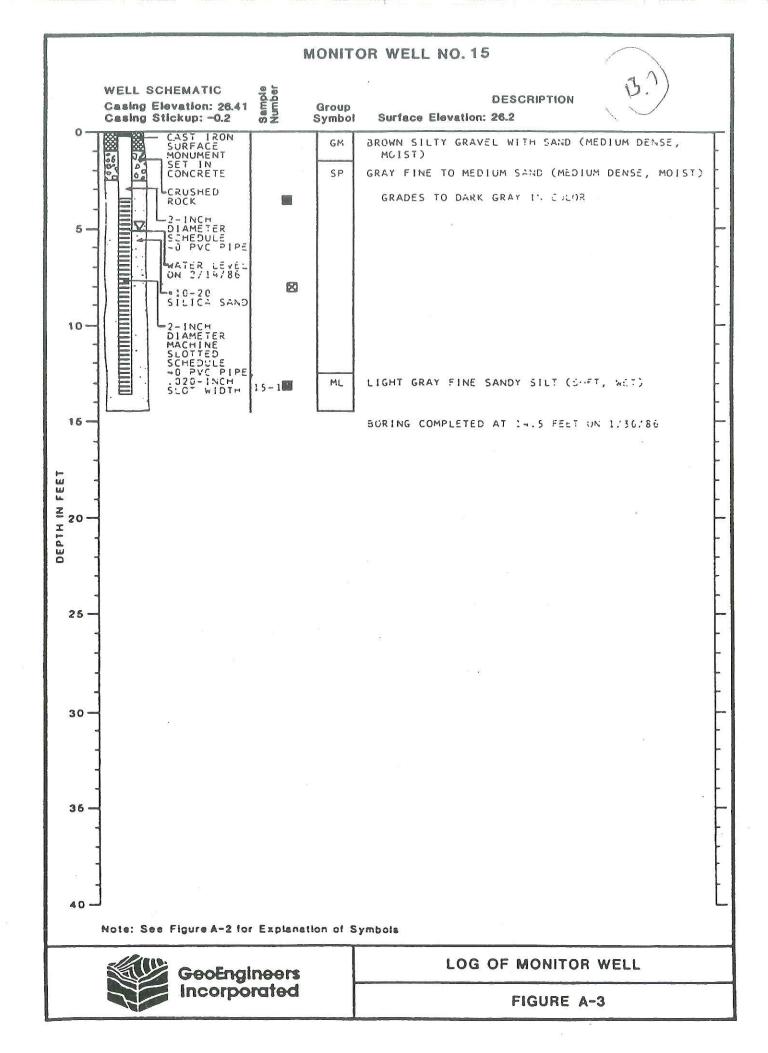
TOP OF CASING ELEVATION: 22.91 FEET



TOP OF CASING ELEVATION: 26.40 FEET

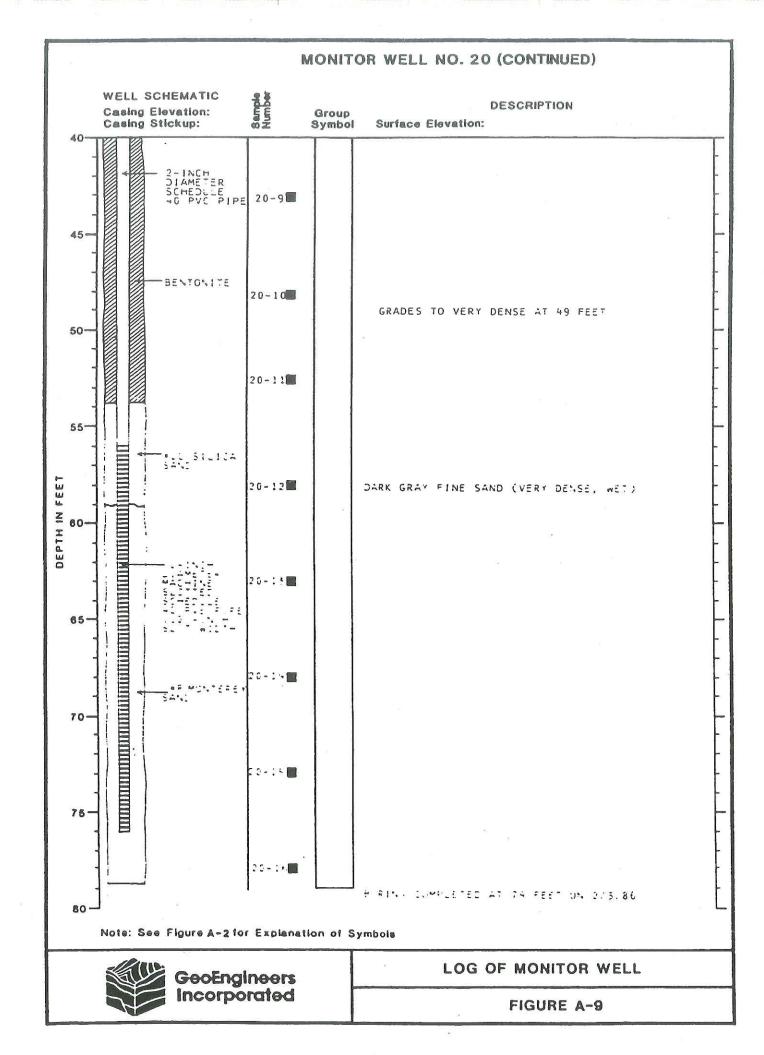
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## **MONITOR WELL NO. 19** 13.6 WELL SCHEMATIC Casing Elevation: 34.16 Casing Stickup: 1.1 DESCRIPTION Group Symbol Surface Elevation: 33.1 BENTONITE MIXED WITH NATIVE SOIL BROWN FINE TO MEDIUM SAND (MEDIUM DENSE, SP MOIST TO WET) 2-INCH DIAMETER SCHEDULE 40 PVC PIPE 19-1 19-2 BENTONITE 10 STRONG HYDROCARBON ODOR AT 12 FEET WATER LEVEL ON 2/14/86 SAND SILICA 16 -0.0 100 Pro-0.0 100 Pro-0. IN FEET 19-3 ML 20 DEPTH 19-4 BORING COMPLETED AT 22 FEET ON 2/1/86 25 30-36 -40 Note: See Figure A-2 for Explanation of Symbols LOG OF MONITOR WELL GeoEngineers Incorporated FIGURE A-7



Parametrix, inc.

										. Farantet	DC.	nc,	į Je		900
Projec	t Name:		TIDEWATER					Boring Nu	mber:	PMX-1					
Pro jec	t Numbe	r:	27 <i>–23</i> 76–0	)2				Sheet:		1 OF 1					
Locati	on:	МС	ORAGE 5	SITE, V	ANCOUVE	R, W	'A	Total Dep	th:	31.0 FEET					
PMX F	Represent	ative: _l	RICK MALIN					Date Star	ted/Completed:_	AUG. 18, '93/AUG.	18,	°<	33		
Drilled	Ву:	(	CRISMAN DI	RILLING	*		_	Ground Le	vel Elevation:	26.1"					
Drill M	ethod: _		HOLLOW ST	EM AUC	SER		_	Measuring	Point Elevation:	25.72' Top of Casii	ıg				
	итно-			1	1	1					1				7
PID READING (PPM)	LOGIC SAMPLE NUMBER	BLOW COUNT	PERCENT RECOVERY	DEPTH IN FEET	SAMPLE INTERVAL	METT	CONS	TRUCTION	LITHOLOGIC DESCRITION			LOC	C		1
22			0/60/100 20/100/100	- - - 5-			MONU SECU CONC HYDR GRAN BENTI	ULAR	fine to fine micac dry to damp, no organic debris, ap	ly SAND (SM). Grey, very reous sond, medium dens hydrocarbon odor, some pears to be FILL.  Silty SAND (SM). Dork	8.				
О	РИХ-1-9.5	3/5/6	10/100/100	10-			PVC COUP FLUSH "O" F 0.5-1 WATE 11.03 BELO	CH SCH 40 CASING LED WITH H MOUNT RINGS 18.5 FEET R LEVEL FEET W TOP OF B/19/93	greenish grey, fine sands, moist, med no hydrocarbon o FLOOD PLAIN depo	s to medium micaceous dium dense, organic debri dor. Interpreted as top o	1				
o	Pux-1-14.5	8/3/3	70/100/100	15-				÷	@ 14.5 feet: fine interbedded siit, r slightly plastic, no loose/medium de	mosit to slightly wet, silt o hydrocarbon odor,					
а	PWX-1-10.5	4/3/4	60/100/100	20-	X			CH HOLE D.5 FEET	(SM/ML). Dark gr	SILT with very line sand eyish brown silt with us sand, moist, organic astic.			オイイイイン	アイイイイ	

-10-20 CSSI SILICA SAND

PMX-1-24.5 2/2/3 100/100/100

PMX-1-29.5 3/3/5 100/100/100

25

30.

0

16.5-31.0 FEET

2-INCH SCH 40 0.010-INCH SLOTTED SCREEN

WITH 6-INCH SUMP 18.5- 27.5 29.0 FEET 23.0 — 27.5 feet: Silty SAND (SM). Brown to greenish grey silty sand, very fine to fine micacesous sands, wet to saturated, trace of rounded fine gravels, loose, slightly plastic.

27.5 - 31.0 feet: SILT (ML). Greyish brown to grey, medium stiff, slightly plastic, sticky, moist to slightly wet.

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			Parametrix, Inc.
Project Name:	TIDEWATER	Boring Number:	PMX-2
Project Number:_	27-2376-02	Sheet:	1 OF 1
ocation:	MOORAGE 5 SITE, VANCOUVER, WA	Total Depth:	16.0 FEET
MX Representati	ve: RICK MALIN	Date Started/Completed:	AUG. 19, '93/AUG. 19, '93
rilled By:	CRISMAN DRILLING	Ground Level Elevation:	25.6'
rill Method:	HOLLOW STEM AUGER	Ma	

Drill M	lethod: _		HOLLOW ST	EM AUGER	Measuring	Point Elevation: 25.18' Top of Casing	
PID READING (PPM)	LITHO- LOGIC SAMPLE NUMBER	BLOW	PERCENT RECOVERY	DEPTH SAMPLE IN FEET INTERV	WELL CONSTRUCTION	LITHOLOGIC DESCRITION	COLUMN
0	PMX-2-2.5		5/80/100		FLUSH-MOUNT MONUMENT SECURED IN CONCRETE HYDRATED GRANULAR BENTONITE 1-2.3 FEET 2-INCH SCH 40	0 - 5.0 feet: SAND (SP). Grey to dark brown, micaceous, dense, predominantly medium sands with coarse lenses, no hydrocarbon odor, slightly damp. Appears to be FiLL.	
0	PMX-2-9.5	7/7/8	0/80/100	5-X	PVC CASING 5 COUPLED WITH FLUSH MOUNT "O" RINGS 0.5-4.5 FEET WATER LEVEL 5.08 FEET BELOW TOP OF PVC 8/19/93 -8-INCH BOREHOLE 0-15.0 FEET	5.0 - 12.0 SAND (SP). Dark blusth grey fine to very fine micaceous sand, some wood debris (sawdust) at 5.0 feet, wet to slightly saturated, no hydrocarbon odor, some organic debris. Interprepeted as the top of FLOOD PLAIN deposit  9.5 feet: very fine micaceous sand, uniform, wet to saturated, slight septic odor, stiff, no organics.	
o l	PMX-2-14.5	3/3/3	7/100/100	15	10-20 CSSI SILICA SAND 2.3-15.0 FEET 12- 2-INCH SCH 40 0.010-INCH SLOTTED SCREEN WITH 6-INCH SUMP 4.5- 15.0 FEET	12.0 — 14.5 feet: Sandy SILT (SM). Sit with fine layering of elightly higher sand percentage material, saturated, organic debris, micaceous, slight septic odor, loose, fairly uniform.	
			ð	20			·
				25 —			
				30 —		- -	

			(Stationing ing the
Project Name:	TIDEWATER	Boring Number:	PMX-3
Project Number:	27-2376-02	Sheet:	1 OF 1
Location:	MOORAGE 5 SITE, VANCOUVER, WA	Total Depth:	16.0 FEET
PMX Representati	ve: RICK MALIN	Date Started/Completed:	AUG. 19, '93/AUG. 19, '93
Drilled By:	CRISMAN DRILLING	Ground Level Elevation:	24.8'
Orill Method:	HOLLOW STEM AUGER	Measuring Point Elevation:	24.59' Top of Casing

PID READING (PPM)		BLOW COUNT	PERCENT RECOVERY	DEPTH IN FEET	SAMPLE INTERVAL WEI	L CONSTRUCTION	LITHOLOGIC DESCRITION	COLUMN COLUMN
0	PMX-3-25	13/6/7	5/80/100			FLUSH-MOUNT MONUMENT SECURED IN CONCRETE HYDRATED GRANULAR BENTONITE	0 — 10.0 feet: SAND (SP). medium to dark brown fine micaceous sand, damp, loase to medium dense, no hydrocarbon odor, no organic debris.	
0	PMX-3-4.5	3/3/4	5/70/100	5-		1-2.5 FEET  2-INCH SCH 40 PVC CASING COUPLED WITH FLUSH MOUNT  "O" RINGS 0.5-4.5 FEET  WATER LEVEL 6.40 FEET BELOW TOP OF PVC 8/19/93	© 4.5 feet: moist to wet, slight increase in silt percentage, loose.	
O	PMX-3-9.5	4/4/12	0/80/100	10		-8-INCH BOREHOLE 10 0-14.5 FEET -10-20 CSSI SILICA SAND 2.3-14.5 FEET -2-INCH SCH 40 0.010-INCH SLOTTED SCREEN	10.0 — 16.0 feet: Sity SAND (SM). Dark blush grey micaceous sity sand, interlayers of sand between higher sit percentage layers, wet to saturated, no hydrocarbon odor, organic debris, medium dense. interpreted as top of FLOOD PLAIN deposit.  © 14.5 feet: slight variability of silt	
O	PMX-3-14.5	4/2/2	100/100/100	15 <i>-</i>		WITH 6-INCH SUMP 4.5- 14.5 FEET	percentage with depth, saturated, soft, to medium stiff.	
				20-				
				25-				
				30	1	ž.		

Parametrix, Inc.	004

				7 g pen 4	211111 011			Parametrix	, Inc
Project	l Name:	וד	DEWATER			Boring Nun	nber:	PMX-4	
						Sheet:		1 OF 1	
Locatio	on:	мос	RAGE 5 SI	ITE, VA	ANCOUVER, WA	Total Depti	n:	26.0 FEET	
						Date Start	ed/Completed:	AUG. 19, '93/AUG. 1	9, '93
Drilled	Ву.	C	RISMAN DR	ILLING		Ground Lev	vel Elevation:	26.9'	
			OLLOW STE			Measuring	Point Elevation:	26.56' Top of Casing	7
PID READING (PPU)	LITHO-	BLOW		0.5071	SAMPLE INTERVAL WELL COM	YSTRUCTION	LITHOLOGIC DESCRITION		LITHO— LOGIC COLUMN
D	PMX-4-2.5		0/50/100	5-	MON SECONO CON HYTC GRAN BEI	SH-MOUNT (UMENT (UMENT) (URED IN (ICRETE ) (RATED (NULAR (ITONITE ) (ITONITE	brown, fine to me percentage of all gravels, no hydro	ming a silty sand, , medium dense, no	
D	PMX-4-9.5	3/5/7	80/100/100	10-	PV 600 FLL 100 0.5	INCH SCH 40 C CASING UPLED WITH USH MOUNT 'RINGS 13.0 FEET 9.5	percentage of sill dense, no hydrod 10.0 - 12.5 feet grey, micaceous.	to medium sands, low its, uniform, moist, medium carbon odor. :: Sandy SILT (ML). Dark wery fine sands, slightly t, traces of organic debris,	/
D	РЫХ-4-14.5	4/5/7	70/100/100	15-		REHOLE 24.5 FEET	no hydrocarbon of the FLOOD PL	odor. Interpreted as the to	P
Đ	PMX-4-18.	2/4/5	100/100/100	20 -	SII   11.   2-   0.0	-20 CSSI JCA SAND .0-24.5 FEET -INCH SCH 40 010-INCH OTTED SCREEN TH 6-INCH JMP 13.0- 1.5 FEET	micaceous sand	rish grey, very fine s, wet to slightly eaturated nic debris, very fine silt/so rocarbon odor.	and
ם ס	PMX-4-24.	5 3/2/4	100/100/100	25		26	fine sand Interlo saturated, silt I saturated, medi organic debris.	creasing sand percentage, ayered with silt, sand layer ayers moist to slightly ium stiff, micaceous, trace	111111111
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Project Name:	TIDEWATER	Boring Number:	PMX-5	
Project Number:	27-2376-02	Sheet:	1 OF 1	
Location:	MOORAGE 5 SITE, VANCOUVER, WA	Total Depth:	16.0 FEET	
PMX Representati	ve: RICK MALIN	Date Started/Completed:_	AUG. 18, '93/AUG. 18, '93	
Drilled By:	CRISMAN DRILLING	Ground Level Elevation:	26.7°	
Drill Method:	HOLLOW STEM AUGER	Measuring Point Elevation:	26.37' Top of Casing	
<del></del>				

PID READING (PPM)	LITHO- LOGIC SAMPLE NUMBER	BLOW COUNT	PERCENT RECOVERY	DEPTH SAI	MPLE TERVAL WELL	CONSTRUCTION	LITHOLOGIC DESCRITION	COLUMN FOCIC FILHO—
225	PMX-4-2.5	17/27/35	50/100/100	-\X		FLUSH—MOUNT MONUMENT SECURED IN CONCRETE HYDRATED GRANULAR BENTONITE	0 — 15.0 feet: SAND (SP), light to dark grey, fine to medium sands with white quartz grains, uniform, poorly graded, very dense, damp, no hydrocarbon odor. Interpreted as FILL material.	
35	РМХ-4-5.0	17/17/19	0/75/100	5-1		1-2.5 FEET  2-INCH SCH 40 PVC CASING COUPLED WITH FLUSH MOUNT "0" RINGS 0.5-4.5 FEET	© 5.0 feet: No hydrocarbon odor, dense.	
o	PMX-4-10.0	10/10/12	100/100/100	10-		WATER LEVEL 6.33 FEET 6.33 FEET 8ELOW TOP OF PVC 8/18/93 -8-INCH BOREHOLE 0-14.5 FEET	© 10.0 feet: dark grey micaceous sands, signs of wood debris, medium dense,	
. P		ě	- 1	14		-10-20 CSSI SILICA SAND 2.3-14.5 FEET -2-INCH SCH 40 0.010-INCH SLOTTED SCREEN WITH 6-INCH	saturated, no hydrocarbon odor.	
0	PLOX-4-14.5	4/7/8	0/60/100	15-		SUMP 4.5— 14.5 FEET 15	15.0 - 16.0 feet: SILT (ML). grey, plastic,	
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Parametrix, Inc.

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	TIDEWATER		Boring Num	ber: PMX-6	
Project Name:	TIDEWATER		Sheet:	1 OF 1	
Project Number	: 27-2376-02	VANCOUVER, WA	Total Depth	: 16.0 FEET	
Location:	MOORAGE 5 SITE,		Date Starte	ed/Completed: AUG. 18, '93,	/AUG. 18, '93
	ative: RICK MALIN		Ground Lev	el Elevation: 26.2'	
Drilled By:	CRISMAN DRILLIE	ALICER		Point Elevation: 25.89° Top o	
Drill Method:	HOLLOW STEM /	HOGEN			итно-
PID LOGIC SAMPLE NUMBER	BLOW PERCENT DEP'	SAMPLE INTERVAL WELL CO	иѕткистюм	UTHOLOGIC DESCRITION	LOGIC
0 PMX-8-2.5	12/6/8 40/100/100	MOSEC HYGEL - New Collins of the col	ISH-MOUNT NUMENT CURED IN NCRETE DRATED ANULAR NTONITE 2.5 FEET -INCH SCH 40 IC CASING OUPLED WITH JUSH MOUNT I'' RINGS 5-4.5 FEET ATER LEVEL 83 FEET ELOW TOP OF IVC 8/25/93	0 — 10.0 feet: SAND (SP). Grey was quartz grains, fine to medium, unimedium dense, no hydrocarbon od Interpreted as FILL material.	HICHIL CRY W
		10 - X - B B O S 2 2 2 2 2 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5	-INCH OREHOLE 10 -14.5 FEET 0-20 CSSI ILICA SAND 1.5-14.5 FEET 1-INCH SCH 40 1.010-INCH SLOTTED SCREEN WITH 6-INCH SUMP 4.5-	grey to blackish grey, micaceous debris, slightly plastic, medium a slight hydrocarbon/organic ador. Interpreted as the top of the FL deposits.  14.5 feet: increasing silt percents in fine sands, wet, still deposits with the sands.	
O PIOC-6-1	2/5/12 20/100/100	25	14.5 FEET	hydrocarbon odor.	ff, no

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Parametrix,	Inc.	Į

Projec	t Name:		TIDEWATER				Boring No	ımber:	PMX-/	
Projec	t Numbe	r:	27-2376-0	)2			Sheet:		1 OF 1	
Location: MOORAGE 5 SITE, VANCOUVER, WA										
PMX Representative: RICK MALIN										
Drilled By: CRISMAN DRILLING							Ground Level Elevation: 31.5'			
			HOLLOW STI				Measuring	Point Elevation:	33.36' Top of Casing	)
PID READING (PPM)		BLOW COUNT	PERCENT RECOVERY	DEPTH IN FEET	SAMPLE INTERVAL	WELL CO	NSTRUCTION	LITHOLOGIC DESCRITION		LITHO- LOGIC COLUMN
0			20/100/100 60/100/100	-		MON SEC CON HYC GRA BEN 1-2 2-1 PVC COL	SH-MOUNT NUMENT	grey fine to medic grains, organic del organic smell, unit Interpreted as FILI 4.5 feet: medium coarse to medium	im dark brown to grey, sands, micaceous, appare hydrocarbon odor, slight	
0	PMX-7-9.5	6/6/7	5/30/100	10-		0.5 WA 8.3 BEL PVC B-1 10- SILI 2.5	RINGS -4.5 FEET  FER LEVEL FEET OW TOP OF C 8/19/93  NCH 9.5 EHOLE L4.5 FEET CA SAND -14.5 FEET	9.5 - 15.0 feet: 3 medium brown sor uniform, medium	SAND (SP). Dark grey to nds, micaceous, saturated, dense, no observoble organ as FLOOD PLAIN deposit.	ic
o	Piox-7-14.5	3/3/4	60/100/100	15-	X	0.0 SLC WIT	NCH SCH 40 10-tnCH DTTED SCREEN H 6-tnCH AP 4.5- 5 FEET 15	15.0 - 16.0 feet:	SILT (ML). Dark bluish gre debris, wet, plastic, medium	
N				20-			9			
				25 =			74	#		

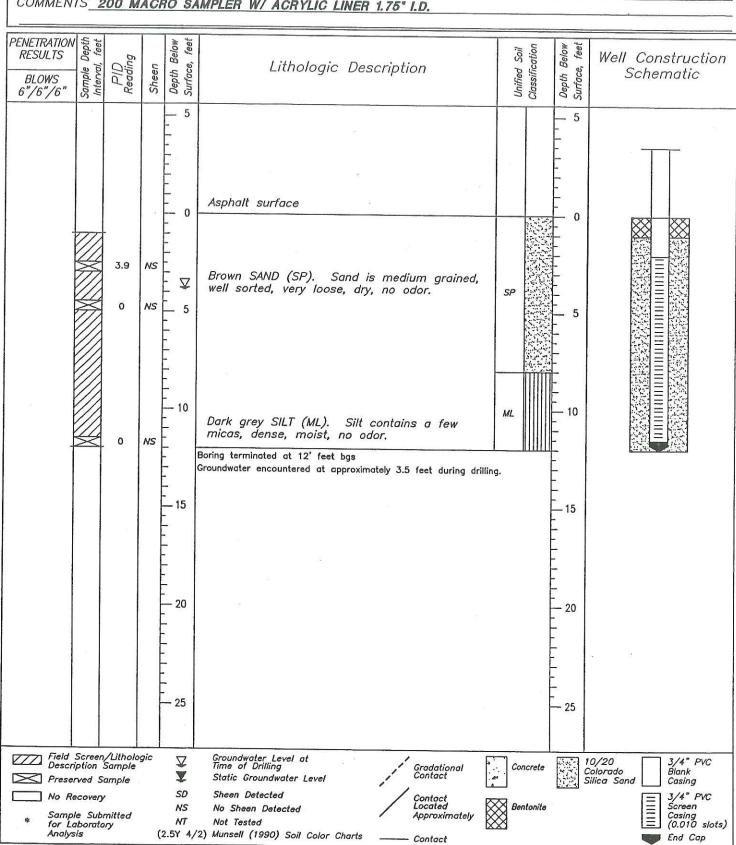
DWG: CRO0308L



FACILITY CROWLEY JOB # 00255-003-01 BORING/WELL EX-2 LOCATION VANCOUVER, WASHINGTON SURFACE ELEVATION 31.50 START <u>2/3/96 1010</u> FINISH <u>2/3/96</u> 1130 CASING TOP ELEVATION\_ 33.53 LOGGED BY J. GIEBER MONITORING DEVICE PID MP-1000 SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING, INC.; CME 75, 10 1/4" O.D. HSA COMMENTS SAMPLED USING A 2" I.D. X 1.5' LONG SPLIT SPOON SAMPLER LINED WITH BRASS SLEEVES USING A 140 POUND HAMMER WITH A 30" STROKE Depth PENETRATION Below Below feel RESULTS Classification Soil PID Reading Well Construction Interval, Lithologic Description Sheen Unified . Depth B Depth Schematic BLOWS 6"/6"/6" 5 0 0 Sand, brown, fine to medium, some silt, loose, moist 5 5 5/6/12 2 NS Dark gray, strong hydrocarbon odor, wet  $\nabla$ 10 10 Wood debris 398 SD Silt, dark gray, soft to medium stiff, minor clay, moist ML 15 20 Olive brown 25 30 Boring terminated at 30 feet, sampler advanced to 11.5 feet. Groundwater encountered at approximately 9 feet during drilling. Boring converted to a groundwater monitoring well on 2/3/96. 35 - 35 Field Screen/Lithologic
Description Sample Groundwater Level at Time of Drilling V 2/12 4" PVC Gradational Contact Blank Y Lonestar Preserved Sample Static Groundwater Level Silica Sand Casing SD Sheen Detected No Recovery 4" PVC Screen Contact Located NS No Sheen Detected Sample Submitted for Laboratory *Approximately* NT Not Tested (0.010 stots) Analysis (2.5Y 4/2) Munsell (1990) Soil Color Charts Contact End Cap

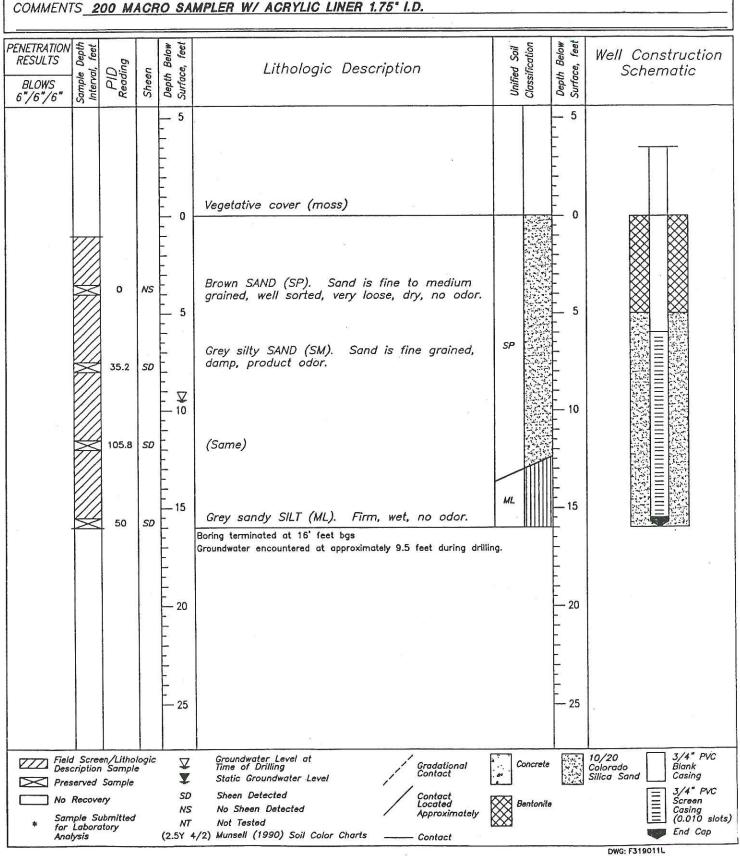


FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # F0319-001-01 BORING/WELL GP-1
LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 23.05
START 10 am FINISH 10:30 am CASING TOP ELEVATION 26.55
LOGGED BY DEC MONITORING DEVICE MODEL 580B OVM
SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG
COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75° I.D.





PAGE 1 OF 1 International Incorporated FACILITY FORMER COLUMBIA MARINE LINES FACILITY F0319-001-01 JOB # BORING/WELL GP-2 LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 28.74 CASING TOP ELEVATION\_ FINISH 11:45 am START 11:20 am MONITORING DEVICE MODEL 580B OVM LOGGED BY DEC SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75° I.D. PENETRATION Below Below Well Construction RESULTS Depth B. Surface, Lithologic Description Schematic Sample l Interval, Depth BLOWS 6"/6"/6" 5



DWG: F319011L



FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # **F0319-001-01** BORING/WELL GP-3 LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 28.58 FINISH \_ 12:35 pm CASING TOP ELEVATION 32.08 LOGGED BY DEC MONITORING DEVICE MODEL 580B OVM SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75" I.D. PENETRATION Depth feet Below feel feet Below Classification RESULTS PID Reading Well Construction Interval, Depth B. Surface, Lithologic Description Sheen Depth Be Surface, Unified Schematic BLOWS 6"/6"/6" 5 5 Vegetative cover (moss) 0 0 NS Brown SAND (SP). Sand is fine to medium grained. Some organic matter present. 5 Loose, damp. 5 Same, color change to grey, odor SP 200 SD V 10 137.1 SD Same, wet 15 ML 15 Grey Sandy SILT (ML). 11.7 NS Firm, wet Boring terminated at 16' feet bgs Groundwater encountered at approximately 9.5 feet during drilling. 20 20 25 - 25 Field Screen/Lithologic Description Sample Groundwater Level at Time of Drilling 3/4" PVC Blank  $\nabla$ 10/20 Gradational Contact Concrete Colorado T Static Groundwater Level Preserved Sample Silica Sand Casing SD Sheen Detected No Recovery 3/4" PVC Screen NS No Sheen Detected Bentonite Sample Submitted **Approximately** Casing (0.010 slots) NT for Laboratory Not Tested Analysis (2.5Y 4/2) Munsell (1990) Soil Color Charts End Cap Contact



Internatio	nal I	ncorp	orat	ed			6 .		PAGE 1 OF 1
FACILITY	FO	RMER	CC	LUMB	NA MARINE LINES FACILITY	JOB # _ <b>FO</b> :	319-001-01		BORING/WELL GP-4
LOCATION	63	05 L	OW	ER RIV	VER ROAD, VANCOUVER, WA	SHINGTON SUR	FACE ELEV	ATION	27.25
SIARI _   LOGGED					FINISH <u>13:35 pm</u> MONITORING DEVICE			LEVAI	1014 30.75
					IPMENT CASCADE DRILLING			1E850	GEOPROBE RIG
COMMEN	TS_2	00 M	ACF	O SA	MPLER W/ ACRYLIC LINER	1.75" I.D.			
-									
PENETRATION RESULTS	Depth feet	_		Depth Below Surface, feet			Unified Soil Classification	Below 9, feet	Well Construction
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BLOWS 6"/6"/6"	Sample Interval,	Rec	Sheen	Dep Surf			Unii	Dep Surf	
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				F	Brown SAND (SP). Sand is	medium arained.		<u>†</u>	
	1	3.9	NS	_	well sorted, loose, dry, no	odor.		<u> </u>	
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				F	Groundwater encountered at approxima	ately 9.5 feet during dr	illing:	F	
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Fiel	d Scre	en/Litho	logic	1	Groundwater Level at			ES ACT	10/20 3/4" PVC
Des Des	cription	Sample Sample	e	<b>₹</b>	Time of Drilling Static Groundwater Level	Gradational Contact	Concrete		Colorado Blank Silica Sand Casing
/	Recove			SD		Contact Located	Bentonit		∃ 3/4" PVC Screen
Sar	nple Si	ubmitted	1	NS NT		Approximately	Dentonit		3/4" PVC Screen Casing (0.010 slots)
1 ror	Laboro lysis	atory			4/2) Munsell (1990) Soil Color Charts	Contact	لمما		End Cap

DWG: F319011L

End Cap

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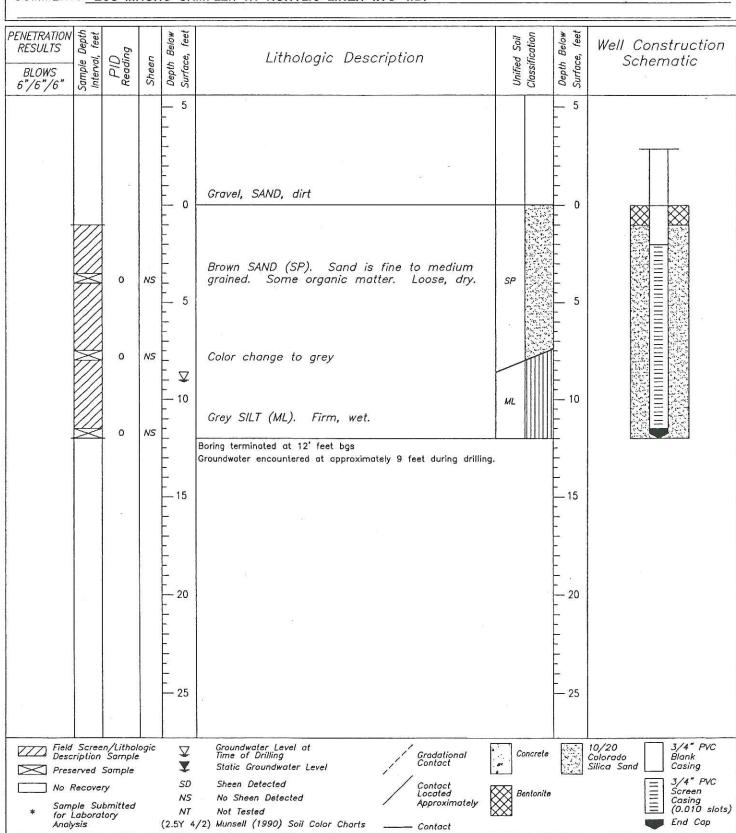


FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # \_F0319-001-01 BORING/WELL\_GP-5 LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 23.47 START \_ 14:03 pm FINISH <u>14:35 pm</u> CASING TOP ELEVATION\_ 26.97 LOGGED BY DEC MONITORING DEVICE MODEL 580B OVM SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75" I.D. PENETRATION Depth feet Below feet Classification Below RESULTS Soil PID Reading Well Construction Depth B. Surface, Sample L Interval, Sheen Lithologic Description Depth B. Surface, Unified Schematic BLOWS 6"/6"/6" Sand, grey, medium, loose, dry 0 0 Brown SAND (SP). Sand is medium grained, 0 NS well sorted, loose damp. 5  $\nabla$ SP Brown silty SAND (SP). Sand is fine grained, loose, wet. 0 NS 10 10 Same 0 NS Grey/brown sandy SILT (ML). Sand is fine 15 grained, mottled, firm. Some reddish brown appears as rust. 0 NS Boring terminated at 16' feet bgs Groundwater encountered at approximately 6 feet during drilling. 20 25 - 25 Field Screen/Lithologic
Description Sample Groundwater Level at Time of Drilling  $\nabla$ 3/4" PVC 10/20 Gradational Contact Concrete Colorado **B**lank V Static Groundwater Level Preserved Sample Silica Sand Casing SD Sheen Detected No Recovery 3/4" PVC Contact Located NS Ścreen No Sheen Detected Sample Submitted for Laboratory Casing (0.010 slots) **Approximately** NT Not Tested (2.5Y 4/2) Munsell (1990) Soil Color Charts Analysis

Contact



FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # F0319-001-01 BORING/WELL GP-6
LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 24.17
START 14:42 pm FINISH 15:03 pm CASING TOP ELEVATION 27.17
LOGGED BY DEC MONITORING DEVICE MODEL 580B OVM
SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG
COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75" I.D.



DWG: F319011L



FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # **F0319-001-01** BORING/WELL GP-7 LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION START <u>15:20 pm</u> FINISH <u>15:55 pm</u> CASING TOP ELEVATION\_ 27.17 MONITORING DEVICE MODEL 580B OVM LOGGED BY DEC SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75° I.D. Below feet Below Classification Soil Well Construction PID Reading Surface, Sample L Interval, Lithologic Description Depth B. Surface, Unified Depth Schematic BLOWS 6"/6"/6" Vegetative cover 0 0 Grey/brown SAND (SP). Sand is medium 0 NS grained, loose, dry. 5 5 Same NS SP 10 Same w/mica, color change to grey 0 NS at 10.5 bgs Same 15 15 0 NS ML Grey SILT (ML). Firm, wet. 0 NS 20 Boring terminated at 20' feet bgs Groundwater encountered at approximately 9.5 feet during drilling. 25 25 Field Screen/Lithologic Description Sample Groundwater Level at Time of Drilling  $\nabla$ 10/20 Gradational Contact Concrete Blank Colorado T Static Groundwater Level Silica Sand Casing Preserved Sample 3/4" PVC Screen Casing (0.010 slots) Sheen Detected SD No Recovery Contact Located NS No Sheen Detected Sample Submitted for Laboratory **Approximately** NT Not Tested Analysis (2.5Y 4/2) Munsell (1990) Soil Color Charts End Cap Contact

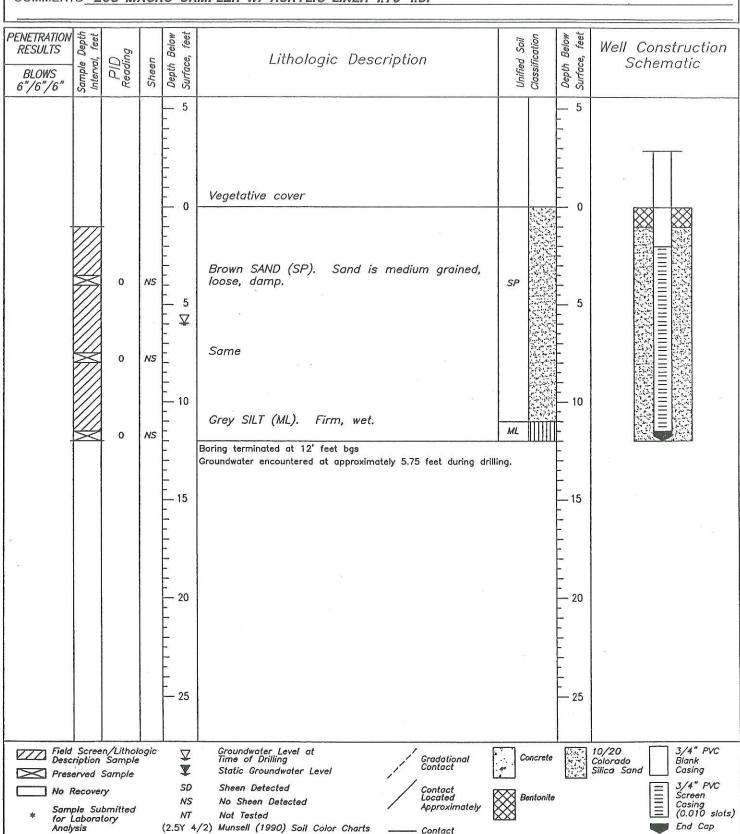
DWG: F319011L



JOB # **F0319-001-01** BORING/WELL GP-8 FACILITY FORMER COLUMBIA MARINE LINES FACILITY LOCATION 6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON SURFACE ELEVATION 26.37 FINISH \_\_17:09 pm CASING TOP ELEVATION\_ 29.37 START <u>16:30 pm</u> MONITORING DEVICE MODEL 580B OVM LOGGED BY DEC SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75" I.D. Below PENETRATION feet Below Classification fee Well Construction RESULTS P1D Reading Depth Be Surface, Lithologic Description Unified Sample ( interval, Schematic Depth **BLOWS** 6"/6"/6" 5 5 Vegetative cover Brown SAND (SP). Sand is medium grained, NS loose, damp. 0 5  $\nabla$ Same 0 NS 10 10 Grey SILT (ML). Firm, wet. 0 NS Boring terminated at 12' feet bgs Groundwater encountered at approximately 5.75 feet during drilling. 15 15 20 20 25 - 25 3/4" PVC Blank Field Screen/Lithologic Description Sample 10/20 Groundwater Level at Time of Drilling  $\nabla$ Gradational Contact Concrete Colorado Silica Sand Casing 1 Static Groundwater Level Preserved Sample 3/4" PVC SD Sheen Detected Contact Located No Recovery NS No Sheen Detected Casing (0.010 slots) **Approximately** Sample Submitted for Laboratory NT Not Tested End Cap (2.5Y 4/2) Munsell (1990) Soil Color Charts **Analysis** Contact



FACILITY FORMER COLUMBIA MARINE LINES FACILITY JOB # **F0319-001-01** BORING/WELL\_GP-9 LOCATION <u>6305 LOWER RIVER ROAD, VANCOUVER, WASHINGTON</u> SURFACE ELEVATION 26.66 START \_\_17:15 pm FINISH \_ 17:45 pm CASING TOP ELEVATION LOGGED BY DEC MONITORING DEVICE MODEL 580B OVM SUBCONTRACTOR AND EQUIPMENT CASCADE DRILLING INC. TRACK MOUNTED CME850 GEOPROBE RIG COMMENTS 200 MACRO SAMPLER W/ ACRYLIC LINER 1.75" I.D.



LOCATION START _ LOGGED SUBCONT	FACILITY Crowley JOB # F0319.001-01 BORING GATA LOCATION SURFACE ELEVATION START 9:00 9:40 9:40 9:10:49 CASING TOP ELEVATION LOGGED BY K. Wavn MONITORING DEVICE OUM 5:50 C SUBCONTRACTOR AND EQUIPMENT Chicado delling CME 7:10:10 Vic											
PENETRATION RESULTS % RECOVERY	Sen ading Standard fee Sen Str. Bek				Lithologic Description	Unified Soil	Depth Below Surface, feet	Borehole Schematic				
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PENETRATIO RESULTS % RECOVER	ple De, rval, fe	PID Reading	Sheen	Depth Below Surface, feet	Lithologic De	escription	Unified Soil	inashir dunin	Depth Below Surface, feet	Borehole Schematic
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PENETRAT. RESULT. % RECOVE	- le	Interval, feet PID Reading	Sheen	Depth Below Surface, feet	Lithologic Description	Unified Soil	Depth Below Surface, feet	Borehole Schematic
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FACILITY	9/14/99 Jarne	SUR FINISH 615 9/14(5) CAS MONITORING DEVICE 52M 550	BORING GP 13A  FACE ELEVATION SING TOP ELEVATION  R  Evalue frack ris
Sample Depth Interval, feet PION POINT PRODUCT	Sheen Depth Below Surface, feet	Lithologic Description	Unified Soil Classification Depth Below Surface, feet Surface, feet
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Field Screen/Lit   Description Sam   Preserved Samp   No Recovery   Sample Submitt   for Laboratory	ole Si Ni red N	Groundwater Level at Time of Drilling Gradations Contact Static Groundwater Level Sheen Detected Contact Located Approximation	Bentonite

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Penetration Results	Sample Depth Interval, feet	D ling	en en	Depth Below Surface, feet		United Soil	Groundwater	Depth Below Surface, feet
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1	<b>*******</b>			-				L
				-15-		5 kg		15
	<b>*******</b>						_	-13
1		131	SD	İ		sw	2	-2

7.1	Boring terminati Groundwater en		feet, sampler advanced to proximately 16 feet during d	
)) w	SD Sheen Detected	~	Groundwater Level at	Approximate Contact
	SSD Slight Sheen Detec		Time of Drilling	No Recovery
	NS No Sheen Detected	d 🗷	Static Groundwater Level	Sampling Interval
	NT Not Tested			Sample Collected for Analysis

				rage 1 of 1			
Facility: CROW	LEY MARI	NE		Job# 015-09266.004 Date: 1/31/02 Boring/Well	GPC-2		
A TABLE 1		IVER RO	OAD, VA	ICOUVER, WASHINGTON Surface Elevation: Surface elevation Top of Casing	Elevatio	n; TOC	C Elevati
ed By: AN		000000000000000000000000000000000000000		Monitoring Device: MINI RAE 2000 PID			
Subcontractor and	d Equipment	: GEOT	ECH EX	PLORATIONS			
Comments: TRA	CK MOUN	I ED GE	OPRUBE	RIG			
Penetration Results	Sample Depth Interval, feet PID	Sheen	Depth Below Surface, feet	2	United Soil Classification	Groundwater Level	Depth Below Surface, feet
Blows 6" /6" /6"	Blows Beading Reading Reading PID Reading Sheen Sheen Sheen Sheen Sheep		Dept	Lithologic Description	Unite	Gro	Deptl
		1	70 7	SAND (0,100,0,0), brown, med. to coarse, well sorted, rounded, moist			_ 0
			-				- -
	0.3	NS	-5 -	SAND, as above	SW		- 5
2	0.0	NS		SAND (0,100,0,0), black to brown, coarse grained, well sorted, rounded, moist	sw		
	2.0	NS	-10-		sw		10 
8	****		-15		ML	w	- 15
	68.6	SD SD	] ]	Sandy SILT (0,10,90,0), hydrocarbon odor and staining, dk. grey, wet	IVIL		

	Boring termination at 16 Groundwater encountered		feet, sampler advanced to sproximately 15.5 feet during dr	929	8
NS	Sheen Detected Slight Sheen Detected No Sheen Detected Not Tested	<b>▼</b>	Groundwater Level at Time of Drilling Static Groundwater Level		Approximate Contact  No Recovery  Sampling Interval  Sample Collected for Analysis

Page I of I

Facility: CROWLEY MARINE Job # 015-09266,004 Date: 1/31/02 Boring/Well GPC-3 ' ration: 6505 LOWER RIVER ROAD, VANCOUVER, WASHINGTON Surface Elevation: Surface elevation Top of Casing Elevation: TOC Elevation Monitoring Device: MINI RAE 2000 PID Subcontractor and Equipment; GEOTECH EXPLORATIONS Comments: TRACK MOUNTED GEOPROBE RIG Groundwater Level Sample Depth Interval, feet Depth Below Surface, feet United Soil Classification Penetration Depth Below Surface, feet Results PID Reading Sheen Blows **Lithologic Description** 6" /6" /6" SAND w/ trace silt (0,98,2,0), brown, med. to coarse, well sorted, rounded, moist NS 1.6 SW SAND, as above, hydrocarbon odor -5 180 SD SW SAND (0,100,0,0), grey, med. to coarse, well sorted, hydrocarbon odor and staining, trace woody debris -10 -10 SAND, as above, wet, product present 318 SD SW 227 SD SILT w/ trace sand (0,5,95,0), dk grey, hydrocarbon odor, wet ML -15 -15 3.2 SD ML

	Boring termination at Groundwater encounter		feet, sampler advanced to proximately 13 feet during d	
2	SD Sheen Detected	¥	Groundwater Level at	Approximate Contact
	SSD Slight Sheen Detected		Time of Drilling	No Recovery
s	NS No Sheen Detected	$\nabla$	Static Groundwater Level	Sampling Interval
	NT Not Tested			Sample Collected for Analysis

Page 1 of 1

Job # 015-09266.004 Facility: CROWLEY MARINE Date: 1/31/02 Boring/Well GPC-4 <sup>1</sup> ration: 6505 LOWER RIVER ROAD, VANCOUVER, WASHINGTON Surface Elevation: Surface elevation Top of Casing Elevation: TOC Elevation Monitoring Device: MINI RAE 2000 PID ed By: AMK Subcontractor and Equipment: GEOTECH EXPLORATIONS Comments: TRACK MOUNTED GEOPROBE RIG Sample Depth Interval, feet Depth Below Surface, feet United Soil Classification Groundwater Level Penetration Depth Below Surface, feet Results PID Reading Sheen Blows **Lithologic Description** 6" /6" /6" 0 SAND (0,100,,0), brown, med. to coarse, well sorted, rounded, damp NS SW 0.6 SAND, as above, moist, slight odor 17.2 SD SW SAND, as above, strong odor, product present -10--10 57.5 SD SW 46.2 SD ML SILT w/ trace sand (0,10,90,0), dk grey, hydrocarbon odor, wet

	Boring termination at		feet, sampler advanced to						
Groundwater encountered at approximately 15.5 feet during drilling.									
SD	Sheen Detected			-	Approximate Contact				
SSD	Slight Sheen Detected	¥	Groundwater Level at Time of Drilling		No Recovery				
	No Sheen Detected	V	Static Groundwater Level		Sampling Interval				
NT	Not Tested	100	State Stand Water Level		Sample Collected for Analysis				

Page 1 of 1

Facility: CROWLEY MARINE Job # 015-09266.004 Date: 1/31/02 Boring/Well GPC-5 1 -cation: 6505 LOWER RIVER ROAD, VANCOUVER, WASHINGTON Surface Elevation: Surface elevation Top of Casing Elevation: TOC Elevation Monitoring Device: MINI RAE 2000 PID Subcontractor and Equipment: GEOTECH EXPLORATIONS Comments: TRACK MOUNTED GEOPROBE RIG Sample Depth Interval, feet Depth Below Surface, feet Penetration Groundwater Level United Soil Classification Depth Below Results PID Reading Blows Lithologic Description 6" /6" /6" SAND w/ trace silt (0,98,2,0), brown, med. to coarse, well sorted, rounded, damp 3.2 SD SAND, as above, moist, slight odor SW -5 59.5 SD SAND, as above, strong odor, hydrocarbon staining SW -10--10 121 SD SW -15 ML SILT w/ trace sand (0,10,90,0), dk grey, wet ML

		nination at 16	feet, sampler advanced to	\$ 6 men		
l	Groundwa	er encountered at ap	pproximately 13.5 feet during d	rilling.		
•	SD Sheen Detect	ed	Groundwater Level at		Approximate Contact	
17	SSD Slight Sheen I		Time of Drilling		No Recovery	
	NS No Sheen De	ected 🗷	Static Groundwater Level		Sampling Interval	
	NT Not Tested		\$2		Sample Collected for Analysis	

ed By: A Subcontractor a Comments: TF	MK and Equip	ment: _	GEOTE	CH EXE	COUVER, WASHINGTON Surface Elevation: Surface elevation  Monitoring Device: MINI RAE 2000 PID  PLORATIONS  RIG	Top of Casing			
Comments: 11	CACK IVII	JUNIE	D GEO	ROBL	NO .				
Penetration Results Blows 6" /6" /6"	Sample Depth Interval, feet	PID Reading	Sheen	Depth Below Surface, feet	Lithologic Description		United Soil Classification	Groundwater Level	Depth Below Surface, feet
				0 7	SAND w/ trace silt (0,98,2,0), brown, med. to coarse, well sorted, rounded, damp				_ o
				-					
		0.4	NS	-5 —	SAND, as above, moist, slight odor	у 5	sw		5 
		58.2	SD	-10-	SAND w/ trace silt (0,98,2,0), trace woody debris, brown to grey, strong hydrocarbon odor, rounded, moist		sw		- - 10
		96.2	SD	-			sw	*	-
		113	SD	-15-	SILT w/ trace sand (0,10,90,0), dk grey, strong odor, wet		ML		- 15
	<b>*****</b>	1		-	0151 W 2000 02115 (0,10) (1) 11 15 17 17 15 17		ML		

Boring termination at Groundwater encounte		feet, sampler advanced to s roximately 13.0 feet during dr		
SD Sheen Detected			- <del></del>	Approximate Contact
SSD Slight Sheen Detected	<b>Y</b>	Groundwater Level at Time of Drilling		No Recovery
NS No Sheen Detected	SZ.	Static Groundwater Level		Sampling Interval
NT Not Tested				Sample Collected for Analysis

Facility: CROW	/LEY M	LARINE	3		Job # 015-09266.004 Date: 1/31/02 Boring/W	ell GPC-	7	
1 ation: 650:	5 LOWE	ER RIV	ER RO	AD, VA		sing Elevati	on: TO	2 Elevation
ed By: Al					Monitoring Device: MINI RAE 2000 PID			
Subcontractor an								
Comments: TRA	ACK MO	DUNTE	ED GEO	PROBE	RIG			
Penetration Results Blows 6" /6" /6"	Sample Depth Interval, feet	PID Reading	Sheen	Depth Below Surface, feet	Lithologic Description	United Soil Classification	Groundwater	Depth Below Surface, feet
				0 -	SAND (0,100,0,0), brown, med. to coarse, well sorted, rounded, damp	, h ,		F 0
		1.2	SD	-		sw		-
		1.2	رانی ا	-5 — - -	SAND, as above, moist, slight odor	3		
		27.4	SD	- - -10—	SAND w/ trace silt (0,98,2,0), trace woody debris, brown to grey, strong hydrocarbon odor, rounded, moist	sw		- - 10
	<u> </u>	121	SD	-	SAND, as above, dk. grey, strong hydrocarbon odor	∑ sw	▼	-
				-15	SILT w/ trace sand (0,10,90,0), dk grey, strong odor, wet	ML		- 15
						ML	1	]

	Boring termination at Groundwater encounte		feet, sampler advanced to stroximately 13.0 feet during dr	
SD	Sheen Detected		Groundwater Level at	 Approximate Contact
SSD	Slight Sheen Detected	<b>T</b>	Time of Drilling	No Recovery
NS	No Sheen Detected	$\nabla$	Static Groundwater Level	Sampling Interval
NT	Not Tested			Sample Collected for Analysis

Facility: CROWLEY MARINE	Job # 015-09266.004 Date: 1/31/02 Boring/Well	GPC-8		
1 coation: 6505 LOWER RIVER ROAD, 1			n: TOC	C Elevation
ed By: AMK	Monitoring Device: MINI RAE 2000 PID			
Subcontractor and Equipment: GEOTECH	XPLORATIONS			
Comments: TRACK MOUNTED GEOPRO	E RIG			
	<del></del>			
Blows Sheen Sheen Below Charles Blow Below Charles Blow C		lion	ater	ow
Blows Sheen Sheet Sheen		United Soil Classification	Groundwater Level	Depth Below Surface, feet
Blows Blows		nite ssif	nou L	Depth Below Surface, feet
8" /6" /6"   San   J	Lithologic Description	Cla	9	De
0 70 70				
0				<del></del> 0
	SAND w/ trace silt (0,98,2,0), brown, med. to coarse, well sorted, rounded, damp			
				Γ
		9	,	
0.8 SD	SAND, as above, moist	sw		-
5	SAND, as above, moist			<b></b> -5
				L
				L
				200
21.2 SD	SAND, as above, trace woody debris	SW		
				- Cont
-10				10
				-
44.1 SD		SW		-
'				-
21.5 SD			7	-
-15	SILT w/ trace sand (0,10,90,0), dk. grey, strong hydrocarbon odor, wet	ML		15
	old in the same (0, 0, 0, 0, 0), and gray, strong hydroducon out, not			-13
A A A A A A A A A A A A A A A A A A A		ML		

	Boring termination at Groundwater encounte		feet, sampler advanced to sproximately 13.5 feet during dr	
SI	Sheen Detected	-	Groundwater Level at	 Approximate Contact
. SS.	Slight Sheen Detected		Time of Drilling	No Recovery
N!	No Sheen Detected	22	Static Groundwater Level	Sampling Interval
N	Not Tested			Sample Collected for Analysis

Facility: CRO	WLEY N	MARIN	Е		Job # 015-09266.004 Date: 1/31/02 Boring/Well	GPC-9	)	
Trantion: 650	05 LOW	ER RIV	ER RO	AD, VAI	NCOUVER, WASHINGTON Surface Elevation: Surface elevation Top of Casing	Elevation	n: TO	Flevation
d By: A	MK				Monitoring Device: MINI RAE 2000 PID	210 (111)	JII. 10.	2 Elevatio
Subcontractor a	nd Equi	pment;	GEOT	ECH EX	PLORATIONS			
Comments: TR	LACK M	IOUNTI	ED GEC	PROBE	RIG			
D. C.	t h	I		اب د		1		
Results			Below ce, feet		United Soil Classification	Groundwater Level	Depth Below Surface, feet	
Blows	npl terv	P	She	Depth Be Surface,		iitec ssifi	om	face
6" /6" /6"	Sa			Q S	Lithologic Description	Clas	5	Dep
	555555		r	0 -				<b>—</b> 0
				-	SAND (0,100,0,0),iron stianing at 3'-4', brown, coarse, well sorted, rounded, damp			U
	<b>******</b>					1		
10 E	<b>********</b>		1	1				-
	******	0.5	NS	-	SAND, as above, wet	sw		=
	******			-5 —	on the distance of the second	J S VV		— -5
				-			2	
	*****							<del></del>
	XXXXXX			223			32	-
		0.3	NS	1		SW		-
				1				

	Boring termination at 8 Groundwater encounter		feet, sampler advanced to s proximately 7 feet during dri	 
SD	Sheen Detected	_	Groundwater Level at	 Approximate Contact
SSD	Slight Sheen Detected		Time of Drilling	No Recovery
NS	No Sheen Detected	∽	Static Groundwater Level	Sampling Interval
NT	Not Tested			Sample Collected for Analysis

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## **International Incorporated**

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Facility: CRO	WLEY MARI	NE		Job# 015-09266,004 Date: 1/31/02	Boring/Well	GPC-1	0	
-stion: 650	05 LOWER R	IVER RC	AD, VAN	NCOUVER, WASHINGTON Surface Elevation: Surface elevation	Top of Casing	Elevatio	n: TOC	Elevati
್ರ:d By: <u>A</u>				Monitoring Device: MINI RAE 2000 PID				
Subcontractor a	and Equipment	GEOT	ECH EXI	PLORATIONS				
Comments: TR	RACK MOUN	TED GE	OPROBE	RIG	- (700 - Web - 1 , 100 -			-
Penetration Results	Sample Depth Interval, feet PID	Sheen	Depth Below Surface, feet	x	4	United Soil	Groundwater Level	Depth Below Surface, feet
Results Sample De Interval, fig. 18, 18, 18, 18, 18, 18, 18, 18, 18, 18,		S	Dept	Lithologic Description		Unit	Groi	Depth Surfa
	DXXXXX		70 -					0
				SAND (0,100,0,0),iron stianing at 3'-4', brown, coarse, well sorted, rounded, damp				L
					1.			
			4					-
	XXXXXX	NIC	1 1			CIV	8	-
	0.2	NS	-5	SAND, as above, iron stianing from 5.5'-6', wet		SW		— -5
	<b>*****</b>			8				_
			1 1		100		<b>X</b>	l
	*******		1 1			N 2	1	200

	Boring termination at 8 Groundwater encountered	at appr	feet, sampler advanced to sa roximately 6.5 feet during dri	78
SSD NS	Sheen Detected Slight Sheen Detected No Sheen Detected Not Tested	<b>y</b>	Groundwater Level at Time of Drilling Static Groundwater Level	Approximate Contact  No Recovery  Sampling Interval  Sample Collected for Analysis

Facility: CROWLEY MARINE	Job # 015-09266.004 Date: 1/31/02 Boring/Well (	GPC-11
* reation: 6505 LOWER RIVER ROAD, VANCOUVER,	WASHINGTON Surface Elevation: Surface elevation Top of Casing E	Elevation: TOC Elevation
:d By: AMK	Monitoring Device: MINI RAE 2000 PID	
Subcontractor and Equipment: GEOTECH EXPLORATION	<u>4S</u>	
Comments: TRACK MOUNTED GEOPROBE RIG		
Penetration Results Blows Openth Below Surface, feet Surface, feet Sheen	Lithologic Description	United Soil Classification Groundwater Level Depth Below Surface, feet
0 - SAND (C	0,100,0,0), brown, coarse, well sorted, rounded, moist	0
0.0 NS SAND, a	s above, wet	sw
0.0 NS		SW
0.1 NS -10- SILT W	11 doe sand (0,5,75,0), ak. groj, wet	ML10
		-

x 4	Boring termination at 12 0 Groundwater encountered		feet, sampler advanced to sam oximately 7.0 feet during drilling	9
SD	Sheen Detected	<b>Y</b>	Groundwater Level at	 Approximate Contact
SSD	Slight Sheen Detected		Time of Drilling	No Recovery
NS	No Sheen Detected	SZ	Static Groundwater Level	Sampling Interval
NT	Not Tested			Sample Collected for Analysis

# SECOR International Incorporated 7730 SW MOHAWE STREET TUALATIN, ORECON 97062 (503) 691-2030/692-7074 (FAX)

STAF LOGO SUBO	ATION RT 1 GED CONT	BY RAC	TOR	ANI	D EQ	JOB#	ACE NG T	ELEY OP 1	VATIO	PAGE OF  NG/WELL & PD - 1  N TION
SAME		Depth 7	(mdd)	T.	Selow (fact)	Lithologic Description		ified	Below (feet)	Well Construction
BLO\ 6"/6"	WS	Sample Interval	PID Reading (	Sheen	Depth Below			PAT	Depth B	Schematic
		3	0.0	W. W. W. W. W. W. W. W. W. W. W. W. W. W		MOSS GRASS  SAND, BROWN, MENTO FINE GRAINED,  MOIST  WET  SILT, GRAY, SUGHT ODOR, WET  TERMINATE BORING AT 16'  Boring terminated at feet, sampler advanced to feet.  Groundwater encountered at approximately feet during drilling			5 - 10 - 15 - 20	
D P	ield Sc lescripti reserve lo Reco	on S d Sa very	ample mple	gic	₩ SD NS	Groundwater Level at Time of Drilling Static Groundwater Level Sheen Detected No Sheen Detected Contact Located Approximately	Cond	onite	- Co	2" PVC Blank Casing  2" PVC Screen Casing Casing
* fo	nalysis			(2	NT 1.5Y 4/	Not Tested  2) Munsell (1990) Soil Color Charts Contact	<u> </u>			(0.010 slots) End Cap

International Incorporated
7730 SW MOHAWE STREET
TUALATIN, OREGON 97062
(608) 691-2030/692-7074 (FAX)

PAGE OF

	CILIT					JOB# BORING/WELL GPD-2 SURFACE ELEVATION	_
	ART		25			FINISH CASING TOP ELEVATION	
	GGED			43.11		MONITORING DEVICE	
SU	BCON BCON	JTRA	CTOR	ANL	) EQ	QUIPMENT	
	IVI IVI L.	412_					
SA	MPLE IMBER	Depth (feet)	PID Reading (ppm)		Below (feet)	Lithologic Description  (Typical name, color, description, shape, density, maisture)  (Typical name, color, description, shape, density, maisture)  (Typical name, color, description, shape, density, maisture)	-
	LOWS	- 90	E .	Sheen	th B		101
6"/	_0ws /6"/6'	Sample	Read		Sur	SIM PAI U	
					- 5 -	5	
					E		
					Ė		
					E o	MOSS/ORASS	
		]	1	NS		SOME GRAVEL MEDIUM	
		Ĭ	Ĭ		-	SAND, BROWN TO TAN, FINE GRAINED,	
			0.0		E	MOIST	
				.  .	E		
		ļ	0.0	.  .	_ 5		
	* **		ļ	.  .	Ē	E	
	2 102		0.0	.  .	Ē	E	
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	N 19 MIS	ļ!	0.0	11. †	-	E	
				1.1.		E Total	
		V V V	0.0	1	-		
		X		A	. ! -		
			0.0	17.	- 15	WET	
				1	-	SICTY SAND, GRAY W/BIOTITE, WET	
	]		0.0.			TERMINATE BORING AT 16'	
				, È			
		• • • •		· ·			
	• • • •	• • • •			- 20		
	1	• • • •				············· [-	
	• • •			···	1	····;······   [- ,	
	]	• • • •		··		········ [-	
				·	-		
					- 25 E	Boring terminated at feet, sampler advanced to feet. 25	
						Groundwater encountered at approximately feet during drilling.	
	Descrip	ption S	• 00	jic	Ā	Groundwater Level at Time of Drilling Gradational Concrete 10/20 2" PVC Blank	
	Preser		6.5		<b>▼</b> SD	Static Groundwater Level Casing	
	No Red				NS	No Sheen Detected Located Bentonite	
*	for Lat Analysi	borator		(2.	NT 5Y 4/2	Not Tested Approximately Cosing (0.010 slo  (2) Munsell (1990) Soil Color Charts ——— Contact End Cap	ts)
						- CONTROL	- 1

# SECOR International Incorporated 7730 SW MOHAWE STREET TUALATIN, ORSO, 997062 (503) 503, 0880, 997062 (503) 603, 0880, 997062

PAGE											
FACILIT					JOB#		9	BOR	ING/WELL &PD-3		
	LOCATIONSURFACE ELEVATION										
START	CASING TO ELEVATION_										
	LOGGED BYMONITORING DEVICESUBCONTRACTOR AND EQUIPMENT										
	COMMENTS										
	150	1 2	T	T . 5							
SAMPLE		PID Reading (ppm)	-	Below (feet)	Lithologic Description		ified oil	Below (feet)	Well Construction		
	- 87	1 E	Sheen	£ 5	(Typical name, color, description, shape, density, moisture)	Classi	fication item	4 S	Schematic		
BLOWS 6"/6"/6	Sample Interval	900	0,	Depth Surface	Example: Clayey SILT, brown; moderately plastic; coarse to to fine sand; odor; firm and dry in places			Depth Surface	*		
	+	-	+	_ 5		SYM	PAT	_ 5			
0				F	***			F°	*PID - REMOVED		
		1		F				F	DESSICANTIMBE		
	1			F	W.			F	& APPLIED FILTE		
				F				Ė	1		
				F	MOSS/GRASS			-			
٠.			NS.	F 0	SAND, BROWN, FINE TO MEDIUM GRAINED,	+		- 0			
* 74	.	والانت	17	F	MOIST			Ē			
<b>x</b> (*)	.	· · · · · ·	1	_				Ē			
		0.0	- -	F	y						
			-		OREANIC LENSE WOLLDATION COLORING						
		0.0		_ 5	[N.4".THICK)			_ 5			
					(~4" THICK) SAND, BROWN, FINE TO MEDIUM GRAIN			_			
125 2				_ `	INDIST			-			
	X	180	Ш	- /	STRONG ODER (642!)		-				
10 Total	ľ			_ \	2		Ī	-			
8 88	1	90	H,		SANDYSILT LENGE AT 7, STRONG OBOR	1 1		-			
2 68	1			— 10 -		1 1	ļ	— 10 -	100101		
	X	66	Ā	-	COARSE GRAINED		Į	-			
# 0#0#	+		- N	_		1	E	-			
* **	1		ij	-	WYWDOD CHIPS, WET		Ŀ	-			
	1		1/	-	SILT, GRAY W/ WOOD CHIPS, OBOR; WET			-			
*1 ** **	····		S	<b>—</b> 15	PLASTIC TUBE/FREE PHASE PRODUCT		F	_15	*****		
	<del>  </del>				· · · · · · · · · · · · · · · · · · ·		F	-			
780 W 40	<b>∤</b> ∤				JERMINATE BORING AT 16'		F				
	···				0.0.10.0.0.10.0.10.0.0.0.0.0.0.0.0.0.0.		Ė	-			
	<b>  </b>		[	** <del>-</del>	tot tot total toe total toe eleke kie e to kie kie kielikook kaa kielikaala kaa kielikaala kielikaala k		þ				
	<b></b>			<u> </u>	**************************************		E	- 20			
/s 25.25	1						E				
	ļ ļ.		[				E				
	l l		E				F				
			F				F	i ii			
			·· F				-	.			
				- 3	Boring terminated at feet, sampler advanced to feet.			- 25			
					Groundwater encountered at approximately feet during drilling	1.			6.		
Com Bald	Screen	/Litholog			Groundwater Level at				0/00		
Desci	ription S	Sample	Jic	₹ V	Groundwater Level at Time of Drilling Gradational Static Contact Contact	Cond	rete	*, C	0/20 2" PVC Blank		
	rved Sc			SD	Static Groundwater Level			II SI	ilica Sand Casing		
	ecovery			NS	No Sheen Detected Located	Bent	onite		Screen Casing		
* for L	ile Subn aborator	nrtted Y	1-	NT	Not Tested Approximately				(0.010 slots)		
Analy	818		(2	.5Y 4/	2) Munsell (1990) Soil Color Charts Contact				End Cap		

# International Incorporated 7730 SW MOHAWE STREET TUALATIN, OREGON 97062 (503) 691-2030/692-7074 (FAX)

PAGE OF

LOC STA LOG	FACILITY JOB# BORING/WELL 100-4  LOCATION SURFACE ELEVATION  START 1310 FINISH 1340 CASING TOP ELEVATION  LOGGED BY MONITORING DEVICE									
SUBCONTRACTOR AND EQUIPMENTCOMMENTS										
NUM		Sample Depth Interval (feet)	PID Reading (ppm)	Sheen	Depth Below Surface (feet)	Lithologic Description (Typical name, color, description, shape, density, moisture) Example: Clayey SILT, brown; moderately plastic; coarse to to fine sand; odor; firm and dry in places	Unified Soil Classificat System		Depth Below Surface (feet)	Well Construction Schematic
	Field Sc		0.0 0.0	> \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	5	MOSS/GRASS  SAND, BROWN, FINE TO MEDIUM  GRAINED, MOIST  MEDIUM  MEDIU			- 5 10 15 20	
	Descript	ion S	omple "	ic	<b>∑</b>	Groundwater Level at Time of Drilling Gradational Contact	Conc	rete	17 1 Co	0/20 2" PVC plorado Blank
2					SD	Sheen Detected Contact	7	1	Si	lica Sand Casing
* 5	* Sample Submitted * for Laboratory				NS NT 5Y 4/	No Sheen Detected Located Approximately Not Tested	Bent	onite		2 PVC Screen Casing (0.010 slots)

# SECOR International Incorporated 7730 SW MOHAWE STREET TUALATIN, OREGON 97062 (508) 691-2030/692-7074 (FAX)

PAGE OF

FACILITY	JOB# BORING/WELL <u>分りつら</u> SURFACE ELEVATION
START 1345	FINISH 1405 CASING TOP ELEVATION
LOGGED BY	MONITORING DEVICE
SUBCONTRACTOR AND EG	UIPMENT
COMMENTS	
Samble Depth Interval (feet)  Sheen Sheet Sheen	Lithologic Description  (Typical name, color, description, shape, density, moisture)  Example: Clayey SILT, brown; moderately plastic; coarse to to fine sand; odor; firm and dry in places  Lithologic Description  Unified Soil Classification System  SYM PAT  SYM PAT
	MOSS/GRASS  SAND, BROWN, FINE TO MEDIUM  GRAINED, MOIST  CLAY LENSE W/ORGANICS AT 4.5'  STUTIZ ANDONIAR GRAVEL BENSE F"TOFIS"  GRAVELY SAIDD, BROWN; MEDIUM GRAINED  MOIST.  MOOD CHIPS  SAIDD, GRAY W/WOOD, ODOR, MEDIUM  GRAINED, WET
- 24	Boring terminated at feet, sampler advanced to feet.  Groundwater encountered at approximately feet during drilling.
Field Screen/Lithologic Description Sample Preserved Sample No Recovery Sample Submitted for Laboratory Analysis (2.5)	Static Groundwater Level  Contact Located No Sheen Detected  Contact Located Approximately



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

#### THE LEADER IN ENVIRONMENTAL TESTING

SLR-Portland

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-11 (GPE-4-11)	34	Soil			Samp	oled: 08/2	24/07 13:11			
1-Methylnaphthalene	EPA 8270C	ND		0.427	mg/kg dry	1x	7081433	08/30/07 11:30	09/08/07 20:06	
Acenaphthene	, o	ND		0.427	ä		н	•	09/05/07 01:19	
Acenaphthylene	W.	ND		0.427	и	. "	n:	are:	i e	
Anthracene	000	ND		0.427	30	30	w.	SH2	: 10:	
Benzo (a) anthracene	.90.5	ND		0.427		n	u		Ü	
Benzo (a) pyrene		ND		0.427	n	.0	п	u	Ų	
Benzo (b) fluoranthene	•	ND	<del>1-101</del>	0.427	H		Ü	Emi-	e.	
Benzo (ghi) perylene	/3 <b>H</b> 0/	ND		0.427	:0	и	n-	2.002		
Benzo (k) fluoranthene	30	ND		0.427		п		w	TE.	
Benzoic Acid	u	ND		1.29	30		10	*		
Benzyl alcohol		ND	-	1,29	н	eu:	ii	и	ď	
4-Bromophenyl phenyl ether	S1001	ND		0,427	300	(00)	*	H:	m.	
Butyl benzyl phthalate	7,117	ND	-	0.427	11	n		ů.	2	
4-Chloro-3-methylphenol	H.	ND		0.427	. 11	30	'n		*	
4-Chloroaniline	v.	ND		2.59	n.	u	'n	16.		
Bis(2-chloroethoxy)methane	a	ND	100000	0.427	(11)	9.00	.00	и.		
Bis(2-chloroethyl)ether	и,	ND		0.427	u	11		· ·	11	
Bis(2-chloroisopropyl)ether	$\widetilde{\mathfrak{X}}$	ND		0.427	п	n	ji	9	"	
2-Chloronaphthalene	v.	ND		0.427	2 16	· u	301	n.	.00	
2-Chlorophenol	w	ND		0.427	3.00	- 10:	(0.)	n	Ü,	
4-Chlorophenyl phenyl ether	11.	ND	0	0.427	u		•	×	0	
Chrysene	H .	ND	( <u> </u>	0.427	II.		,n		( <b>n</b> )//	
Di-n-butyl phthalate		ND		1.29	16	40	365	n e	3 <b>1</b> C	
Di-n-octyl phthalate	u	ND		0.427	0.		U	- n	10	
Dibenzo (a,h) anthracene	я.	ND		0.427	ű.	ji .			(iii	
Dibenzofuran		ND		0.427	H	ĵi.	п	2	300	
1,2-Dichlorobenzene	ĵi	ND	-	1.29	H	**	н	.11	0	
1,3-Dichlorobenzene	n	ND		1.29	u	<i>(4</i> <b>9</b>	. 0	)H	TI.	
1,4-Dichlorobenzene	,	ND		1.29		"			(n)	
3,3'-Dichlorobenzidine	1	ND		1.29	11			U	(m)	
2,4-Dichlorophenol	. 9	ND		0.427	н	**	:115	310.70	(10)	
Diethyl phthalate	(0.1)	ND		0.427		30	8 200	10	0	
2,4-Dimethylphenol	0	ND		1.29	0	9	· ·	n	0	
Dimethyl phthalate		ND		0.427	11		11		u u	
4,6-Dinitro-2-methylphenol	н.	ND		1.29	n	311	BC.	800	···	
2,4-Dinitrophenol	36	ND		2.59	.0	.00	v	10	, iii	
2,4-Dinitrotoluene	300	ND		0.647			II.	•	** <b>i</b>	
2,6-Dinitrotoluene	it.	ND		0,647	ű		N.		a	
Bis(2-ethylhexyl)phthalate	, m	ND		2.59	10	11	w	300	и	
Fluoranthene	au .	ND		0.427	3003	8907		80	ñ	
Fluorene	4	ND		0.427	n .		, W	u	or W	
Hexachlorobenzene		ND		0.427	ji .	.0	H	u	n n	
Hexachlorobutadiene		ND		1.29		100			11	

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C

TestAmerica - Portland, OR

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-11 (GF	PE-4-11)		Soil			Sampl	ed: 08/2	24/07 13:11			
Hexachlorocyclopentadi	ene	EPA 8270C	ND		1.29	mg/kg dry	lx	7081433	08/30/07 11:30	09/05/07 01:19	
Hexachloroethane		95	ND		1.29	.00	0		, H	(4 (9))	
Indeno (1,2,3-cd) pyrene	•	H.	ND		0.427	30.1	or.	m	7(11)	:W2	
Isophorone		ñ	ND		0.427	.0	10.	10	.45	.00	
2-Methylnaphthalene		u.	ND	920-225	0.427	0	n	11	n	•	
2-Methylphenol	A	U	ND		0.427	.11	п		u	(11)	
3-,4-Methylphenol		e e	ND	5000.00E	0.427	303	10	n	-0	THE	
Naphthalene		Ü	ND	(MAY 100)	0.427	н	tr.	( <b>N</b> )	u	6/H07	
2-Nitroaniline		Ü.	ND	100000	0.427	10	0		.10		
3-Nitroaniline		W.	ND		1.29	ii)	11	.11		30	
4-Nitroaniline		Я	ND	55759755V	0.427	(30.0	10	36	20	3 <b>0</b> 0	
Nitrobenzene		Ü	ND		0.427	u.	Ĭ.	0	u	(0)	
2-Nitrophenol			ND	(***********)	0.427	(ii)	11		•	•	
4-Nitrophenol		v	ND		1.29	(0.7)	н		10	n.	
N-Nitrosodi-n-propylam	ine	u	ND		0.427	300	и	9.00	200	.00	
N-Nitrosodiphenylamine	e	11	ND		0.427	н	ñ	v	0	п	
Pentachlorophenol		"	ND		1.29	10.	•		u	п	
Phenanthrene		31	ND	( <del></del> )	0.427	H	W	11	ff.	THE STATE OF THE S	
Phenol		я.	ND		0.427			5(0)	0.	7.9%	
Pyrene			ND		0.427	u	y	u	Ÿ,	•	
1,2,4-Trichlorobenzene		<u>n</u>	ND	( <del>******</del> )	1.29		и	, m	<b>y</b>	11	
2,4,5-Trichlorophenol			ND	( <del></del> )	0.427	9.00	И	11	Ü	1/10:	
2,4,6-Trichlorophenol		u	ND	1222	0.427	.00	n		<b>U</b> .		
Surrogate(s): 2-	Fluorobiphenyl	tt		95.7%		33 - 126 %	n			u	
2	Fluorophenol			64.5%		20 - 127 %	ü			"	
Ni	trohenzene-d5			83.4%		25 - 131 %	"				
PI	nenol-d6			84.0%		13 - 138 %	"			u	
p-	Terphenyl-d14			81.4%		38 - 142 %	u			"	
2,-	4,6-Tribromophenol			70.3%		46 - 124 %	"			, it	

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THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

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008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-15 (GPE-6-11)		Soil	l .	3	Samp	oled: 08/2	24/07 15:05			RL
1-Methylnaphthalene	EPA 8270C	ND		22.1	mg/kg dry	50x	7081433	08/30/07 11:30	09/08/07 21:31	
Acenaphthene		ND		22.1	Œ.	10	,11	n.	09/04/07 23:11	
Acenaphthylene	36	ND	()	22.1	4	300	ii .	и	;н	
Anthracene	9	ND		22.1	10	\.0		•		
Benzo (a) anthracene	30.0	ND		22,1	ii.	u	10	ü	0.	
Benzo (a) pyrene	<b>.u</b> ()	ND		22.1	ij	н	.0	н	ii	
Benzo (b) fluoranthene	At 1	ND		22.1	u u	ű:	.0		311	
Benzo (ghi) perylene	(11)	ND		22.1	0.	11.	302	n	•	
Benzo (k) fluoranthene	u	ND		22.1	ii.	W.				
Benzoic Acid	(41)	ND	<u> </u>	67.0		u	a	•	n	
Benzyl alcohol		ND		67.0	u	Ħ	300	300	(0.)	
4-Bromophenyl phenyl ether		ND		22,1	и	н.	(d)	н	п	
Butyl benzyl phthalate	300	ND	-	22.1	w	n				
4-Chloro-3-methylphenol	989	ND		22.1	3	×.	n	14	· w/	
4-Chloroaniline	n .	ND		134	'n	н	н	(10)	, W.	
Bis(2-chloroethoxy)methane		ND		22.1	30	31	ů.		ii ii	
Bis(2-chloroethyl)ether		ND		22.1	u		**			
Bis(2-chloroisopropyl)ether	W.	ND		22.1		n	н	n .	-m	
2-Chloronaphthalene	<u></u>	ND	****	22.1	я	3010	u.	3.00		
2-Chlorophenol	ű.	ND		22.1	310	3, 300	n	и		
20.000 to 20.000 to 20.000 to 30.000 to 20.000  11	ND		22.1	. 11	н		n.	н		
4-Chlorophenyl phenyl ether	ii	ND		22.1	u		0	U	di .	
Chrysene	ii ii	ND		67,0	100	a	и	*	a	
Di-n-butyl phthalate	"	ND		22,1	200	н	n	K	Û	
Di-n-octyl phthalate	n	ND	( <del>DESTRE</del> ).	22.1		и	y.	9	W.	
Dibenzo (a,h) anthracene		ND	2/25/22/20	22.1	a	u	,	u	0	
Dibenzofuran	*			67.0	100		ЭН		н	
1,2-Dichlorobenzene		ND .		67.0	m,	н	n	и	W	
1,3-Dichlorobenzene		ND		67.0			ū	ŭ	11	
1,4-Dichlorobenzene		ND					11	u	"	
3,3'-Dichlorobenzidine		ND		67.0		30 H0	31		n .	
2,4-Dichlorophenol		ND	(I <del>ncres</del> )	22,1	u.				70%	
Diethyl phthalate	"	ND		22.1	ï				11	
2,4-Dimethylphenol		ND		67.0	v 2			34 34	. M.C.	
Dimethyl phthalate		ND		22.1				20 M		
4,6-Dinitro-2-methylphenol	п	ND	(1 <del>111-1111</del> )	67.0				140	797	
2,4-Dinitrophenol	н	ND		134			500	020	1000 2000	
2,4-Dinitrotoluene		ND		33.5	э	<u>n</u>	1.00		3110 2007	
2,6-Dinitrotoluene	"	ND		33,5		u.			100	
Bis(2-ethylhexyl)phthalate	n	ND		134	11	н	Э.Н	3H.	29 <b>H</b> S	
Fluoranthene	46	ND		22.1	a <b>H</b>		200	(00)	10	
Fluorene	30113	ND	-	22.1	0	.0	(t		н.	
Hexachlorobenzene		ND		22.1		н	ii.	· H	<b>17</b> )	
Hexachlorobutadiene		ND	200	67.0	30	(0)	90	5,00	"	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-15 (GPE-6-11)		Soi	L		Sampl	led: 08/2	24/07 15:05	Si		RL.
Hexachlorocyclopentadiene	EPA 8270C	ND	( <del>eness</del>	67.0	mg/kg dry	50x	7081433	08/30/07 11:30	09/04/07 23:11	
Hexachloroethane	ii.	ND	(TTTT	67.0	Н		н	n	II.	
Indeno (1,2,3-cd) pyrene	H.	ND		22.1	н	nc	in:	'n	II .	
Isophorone	И.	ND	Telephone .	22.1	Ü	e.	н		: <b>11</b> %	
2-Methylnaphthalene	10	ND		22.1	н		H	.0		
2-Methylphenol	<b>ii</b>	ND		22.1	Ж	m	H	in .	n	
3-,4-Methylphenol		ND		22.1	.00	90	OH C	31	11	
Naphthalene	ii.	ND	Samuel	22,1	п	0	н	.00	30 %	
2-Nitroaniline	2. <b>U</b>	ND	-	22,1	11		н	ā	W.	
3-Nitroaniline	ű	ND		67.0	н	0.	и,		W	
4-Nitroaniline		ND	-	22.1	ĬĬ.		HE	30	н	
Nitrobenzene	ii	ND		22.1	16	ů.	11	, n	3103	
2-Nitrophenol	a.	ND		22.1	**	0,	H.	,u	u ×	
4-Nitrophenol	W.	ND		67.0	и	nc				
N-Nitrosodi-n-propylamine	•	ND		22.1		10		.,	7007	
N-Nitrosodiphenylamine	0.	ND		22,1		16	•		10.7	
Pentachlorophenol	u.	ND		67.0	40	н			u .	
Phenanthrene	o o	ND		22.1	0.	16	.00	ñ		
Phenol	0.	ND		22.1		n)	0	и	(m.)	
Pyrene	u.	ND		22.1		10		n	.0.1	
1,2,4-Trichlorobenzene	9	ND		67.0	u .	н	0	39	0	
2,4,5-Trichlorophenol	0	ND		22.1	o.	110	30 %	H	n ·	
2,4,6-Trichlorophenol	11	ND		22.1	u	W		н	00 %	27
Surrogate(s): 2-Fluorobiphenyl			NR		33 - 126 %	п			" Z	7.3
2-Fluorophenol			NR		20 - 127 %	n				7.3
Nitrobenzene-d5			NR		25 - 131 %	и				7.3
Phenol-d6			NR		13 - 138 %	H			" 2	?3
p-Terphenyl-d14			NR		38 - 142 %	u			. " 2	7.3
2,4,6-Tribromophenol			NR		46 - 124 %	"			" 2	3

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TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
QH1091-17 (GPE-7-10)		Soil			Samp	oled: 08/2	4/07 14:20			RI
-Methylnaphthalene	EPA 8270C	45.8		10.8	mg/kg dry	25x	7081433	08/30/07 11:30	09/08/07 22:14	
Acenaphthene		ND		10.8	000	п	п	н	09/04/07 22:28	
Acenaphthylene	n n	ND	S <del>####</del> 31	10.8	н.	, u	*	*	w	
Anthracene	Ü	ND		10.8	9	п	"	"		
Benzo (a) anthracene	II	ND	1	10.8	ii.		- 10		•	
Benzo (a) pyrene	U	ND		10.8		IE.	.11	31		
Benzo (b) fluoranthene	•	ND		10.8	11			(**)		
Benzo (ghi) perylene	<u>ii</u>	ND		10,8	,	n	н	n	W. 22	
Benzo (k) fluoranthene	<b>30</b>	ND		10.8	н	u		8. <b>11</b> ()		
Benzoic Acid	:0	ND		32.8	u	11	2002	11		
Benzyl alcohol	0	ND		32,8	3.10.7	u	u	ш	u.	
4-Bromophenyl phenyl ether		ND		10.8	•	.01	н	11	н —	
Butyl benzyl phthalate	SHE	ND		10.8	**	0	0	w	<b>N</b>	
4-Chloro-3-methylphenol	3.0	ND		10.8	10	H	н,	u	31	
4-Chloroaniline	(6)	ND		65.6		н	9	<u></u>	"	
Bis(2-chloroethoxy)methane	u	ND		10.8	n		. "	. o u	31	
Bis(2-chloroethyl)ether	300	ND		10.8	a	и	11.		u	
3is(2-chloroisopropyl)ether	23.00	ND		10.8	W.	316		n	.10	
2-Chloronaphthalene	•	ND		10.8	11.	W	ŭ	,	10 T	
2-Chlorophenol	0	ND		10.8	W	ii.	n	n	ans	
4-Chlorophenyl phenyl ether	•	ND		10,8	n	u/	30	31	.0	
Chrysene	ii.	ND		10.8	ų	п	н	n	Н	
Di-n-butyl phthalate	ű.	ND		32.8	Ñ	u		, II	1/ <b>U</b> 3	
Di-n-octyl phthalate	Ж.	ND	177-127	10,8	,,	u	.11	30	. но	
Dibenzo (a,h) anthracene	19	ND		10,8	, u	н	10	(0.)	•	
Dibenzofuran	Я	ND	<del></del>	10.8	30.1	p	и	n	11	
1,2-Dichlorobenzene	n	ND		32.8	9	н	10	U		
1,3-Dichlorobenzene	w w	ND		32.8	H.	0	11	11		
1,4-Dichlorobenzene	и "	ND		32,8		'n	800	2.00	ü	
3,3'-Dichlorobenzidine	W	ND		32.8	an .	80%		W.	91	
2,4-Dichlorophenol		ND		10.8	.0	W	n.	•	30	
Diethyl phthalate	н	ND		10.8	11		9	#6	30	
2,4-Dimethylphenol	(0.5)	ND		32,8	u	91111	ж		Ü	
Dimethyl phthalate	н	ND		10.8	00	200	n n	ij.	п	
4,6-Dinitro-2-methylphenol		ND		32.8	4	11	Ĥ	22	3 H 3	
2,4-Dinitrophenol	n .	ND		65.6	11		0	Ħ	986	
2,4-Dinitrophenor	8113	ND		16.4		DW:	31	19	4	
2,6-Dinitrotoluene	a.	ND		16.4		ıı.	ú	30	н	
	ij.	ND		65.6	5 "	и	ji	(0)	· ·	
Bis(2-ethylhexyl)phthalate Fluoranthene	"	ND	= <u>917-33-34</u>	10.8	3 "	v.		903	n:	
	H.	ND		10.8		ii ii	903	\nu_1	Ĭ.	
Fluorene	W	ND		10.8		я	n		н	
Hexachlorobenzene Hexachlorobutadiene		ND		32.8		11	n		H	

DRAFT REPORT





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Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-17 (GPE-7-10)		Soi	il		Samp	led: 08/2	24/07 14:20			RI
Hexachlorocyclopentadiene	EPA 8270C	ND	(500,00)	32.8	mg/kg dry	25x	7081433	08/30/07 11:30	09/04/07 22:28	
Hexachloroethane	e.	ND		32.8	u	ø,	3.00	u.	10-1	
Indeno (1,2,3-cd) pyrene		ND		10.8	•	9		ŭ.	n.	
Isophorone	a	ND	-	10.8	46			9	11 (1) 11 (1) 12 (1)	
2-Methylnaphthalene	"	ND		10.8	300	31	u	ıı	o.	
2-Methylphenol		ND		10.8	10	9		11.	n	
3-,4-Methylphenol	n n	ND	(1	10.8	.11	p		n	ű.	
Naphthalene	н	ND	: <del>2</del> 3	10.8	· W		u	и	<b>u</b>	
2-Nitroaniline	п	ND		10,8	100	38	(0)	11.	n.	
3-Nitroaniline	iii	ND		32.8		и	4	В.	N.	
4-Nitroaniline	n	ND	-	10,8	<b>36</b>	9	16		ŭ	
Nitrobenzene	11	ND		10.8	200	'n	и		и	
2-Nitrophenol	н	ND		10.8	2002	'n	1.00	и	TC	
4-Nitrophenol	н	ND		32.8	,11	'n	v	и	и.	
N-Nitrosodi-n-propylamine	H	ND	(2-1	10.8	.00		· ·	N .	N.	
N-Nitrosodiphenylamine	п	ND	-	10.8	(W)	30	H			
Pentachlorophenol	ii .	ND	12222	32.8	.00		16	ж	ж	
Phenanthrene	ii .	17.9		10.8	N.		W.	31	15	
Phenol		ND	7 <del>-4</del>	10.8			H.	u	n	
Pyrene	n S	ND		10.8			n.	9	ii ii	
1,2,4-Trichlorobenzene		ND		32.8	.00	3000	16:	•	п	
2,4,5-Trichlorophenol	·	ND	-	10.8			n		HE.	
2,4,6-Trichlorophenol		ND	: <del></del> :	10.8	ø		ii.	u	ï	
Surrogate(s): 2-Fluorobiphenyl		HATCH CO. CO. CO. CO. CO. CO. CO. CO. CO. CO.	87.3%		33 - 126 %	"		1. T. S.	" 2	7.3
2-Fluorophenol			86.0%		20 - 127 %	,,			n	
Nitrobenzene-d5			101%		25 - 131 %	u				<b>7.3</b>
Phenol-d6			91.5%		13 - 138 %	*			n.	
p-Terphenyl-d14			67.3%		38 - 142 %	*	3		" 2	7.3
2,4,6-Tribromophenoi	s;		49.8%		46 - 124 %	in .			"	23

DRAFT REPORT







PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

#### THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number: Project Manager: 008.205.00007

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica - Portland, OR

	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-02 (GPE-1-11)		Soi	l		Sample	ed: 08/2	4/07 10:32			
1-Methylnaphthalene	EPA 8270m	67.0		17.1	ug/kg dry	lx	7090223	09/07/07 13:15	09/13/07 17:32	
2-Methylnaphthalene		26.3	-	17.1		. 0		u	8.00	
Acenaphthene	n	20.0		17.1	ü		.00	•	500	
Acenaphthylene	W.	ND		34.3	Ï	44	W.	н	on.	RLI
Anthracene	· ·	82.7	-	17.1	n	11	и	2	l n	
Benzo (a) anthracene	u .	219	1277.00	17.1	Я	11	W	9	u	
Benzo (a) pyrene	ti .	138	1 <del>21-111</del>	17.1	н	н		н	u	
Benzo (b) fluoranthene	Ü	167		17,1	,,	i)		Ü	u	
Benzo (ghi) perylene	n.	76.0	(2000)	17.1	9	ů.		0	ű	
Benzo (k) fluoranthene	ii .	107	*****	17.1	9	u	п	9	ñ.	
Chrysene	g.	430	124202	17.1	Ö	u	н	<u>a</u>	ii	
Dibenzo (a,h) anthracene		22.6		17.1	30	"	н	*		
Fluoranthene	0.	535	100000	17.1	ù	11	н		u.	
Fluorene	ŭ.	97.5	-	17.1	11	ii	п	n	9. 31	
Indeno (1,2,3-cd) pyrene	ŭ	60.3	2.22	17.1		11		.0	α.	
Naphthalene	ŭ.	27.2	10000000	17.1	н	ú	u			
Phenanthrene	ii.	205		17.1			91	in I	e: n	
Pyrene	н.	474		17.1	.0		.00	•		
A THE STREET					BART 12007212101	'n			· · · · · · · · · · · · · · · · · · ·	GAT
Surrogate(s): Fluorene-d10			101% 101%		24 - 125 %				"	
Pyrene-d10	,		101%		41 - 141 % 38 - 143 %	,,			,,	
Benzo (a) pyrene-d12			12070							
1 2 . 2										
PQH1091-03 (GPE-1-GW)	æ	Wa	iter			ed: 08/2	24/07 10:30			
	EPA 8270m	Wa 1.16	iter	0.0962		ed: 08/2	7081259	08/27/07 15:00	08/31/07 22:33	
PQH1091-03 (GPE-1-GW)	<u> </u>			0.0962	Sampl			08/27/07 15:00	08/31/07 22:33 "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene	EPA 8270m	1.16			Sampl ug/l	1x	7081259		08/31/07 22:33 "	RL1
PQH1091-03 (GPE-1-GW)	EPA 8270m	1.16 ND		0.385	Sampl	1x	7081259		08/31/07 22:33 " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene	EPA 8270m	1.16 ND 0.488		0.385 0.0962	Sampl	1x	7081259		08/31/07 22:33 " " " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene	EPA 8270m	1.16 ND 0.488 0.177		0.385 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33 " " " " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene	EPA 8270m	1.16 ND 0.488 0.177 ND		0.385 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33 " " " " " " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene	EPA 8270m	1.16 ND 0.488 0.177 ND		0.385 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33 " " " " " " " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene	EPA 8270m	1.16 ND 0.488 0.177 ND ND		0.385 0.0962 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33 " " " " " " " " " "	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND		0.385 0.0962 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND ND		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND ND 1.282		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.192 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND 0.282 ND 1.97		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.192 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND 0.282 ND 1.97 3.46 ND		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.192 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RLI
PQH1091-03 (GPE-1-GW)  Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene	EPA 8270m	1.16 ND 0.488 0.177 ND ND ND ND 0.282 ND 1.97 3.46 ND 0.614		0.385 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962 0.0962	Sampl	1x	7081259		08/31/07 22:33	RL1

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager: Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-03 (GPE-1-GW)		Wa	ater		Sampl	ed: 08/2	4/07 10:30			
Pyrene-d10			64.3%		23 - 150 %	lx			08/31/07 22:33	
Benzo (a) pyrene-	-d12		44.1%		10 - 125 %	n				
		22.1	10		7920 S	20 1002000	responser to			
PQH1091-05 (GPE-2-11)		Soi	il ————		Sampl	ed: 08/2	4/07 09:49			
I-Methylnaphthalene	EPA 8270m	ND		16.1	ug/kg dry	1x	7090223	09/07/07 13:15	09/13/07 17:59	\$
2-Methylnaphthalene	9000	ND		16.1	W	E	90	u	3 <b>0</b> 5	
Acenaphthene	300	ND	2	16.1		<b>9</b> )	<b>in</b>	,,	200	
Acenaphthylene		ND		16,1		95	(0 /			
Anthracene	11	ND		16.1		<u>#</u>	n	,,,		
Benzo (a) anthracene		ND		16.1	2		- III		3.02	
Benzo (a) pyrene	1844 1844	ND		16.1		M. W	W.	30 Sh	H.)	
Benzo (b) fluoranthene		ND		16.1		.th	9 <b>9</b> %			
Benzo (ghi) perylene		ND		16.1		# #	an c			
Benzo (k) fluoranthene		ND	7. TES	16.1 16.1	,	n	u	,		
Chrysene	ш	ND		16.1		ii ii	0		1	
Dibenzo (a,h) anthracene Fluoranthene	in .	ND ND		16.1		'n	700	u	*	
Fluorene	n.	ND ND	500000 500000	16.1	y.		5807			
ndeno (1,2,3-cd) pyrene	H.	ND	2000	16.1	10	u	36	ü	u	
Naphthalene	ш	ND		16.1	ii	u	w	a a	u	
Phenanthrene	.ms	ND	*********	16.1	30	'n	an :	2003	310	
Pyrene		ND		16,1	Ä	Ü	3,000	ji.		
Surrogate(s): Fluorene-d10			105%		24 - 125 %	n			"	
Pyrene-d10			101%		41 - 141 %	n				
Benzo (a) pyrene	-d12		112%		38 - 143 %	"				
COLINO AC (CDE 3 CWA	题	W	ater		Samul	ad. 09/	24/07 09:50	ş		
PQH1091-06 (GPE-2-GW)			atti	1 0 2 2 2				00/03/03 15 00	- V	
Acenaphthene	EPA 8270m	0.586		0.0962	ug/l	1x	7081259	08/27/07 15:00	08/31/07 23:02	
Acenaphthylene		ND		0.192		# #	717			RL1
Anthracene	900) 1889	0.226	· · · · · · · ·	0.0962		d W	7M7 7M2		100	
Benzo (a) anthracene		ND		0.0962	2007	22	100	W.		
Benzo (a) pyrene	200	ND		0.0962	20.5		2115	and and		
Benzo (b) fluoranthene	n.	ND		0.0962			ii.		w	
Benzo (ghi) perylene	n.	ND '		0.0962	н	0	16	0	*	
Benzo (k) fluoranthene	**************************************	ND 0.120						9.750 M		
Chrysene	000	0.129		0.0962			n.	300	(20) (W)	
Dibenzo (a,h) anthracene	į.	ND		0.192		,,	- 10	-	- <del>1</del> 2)	
Fluoranthene	v. pr	0.727		0.0962	300		sa <b>nt</b> ia santa		OM:	
luorene	"	1.84	W. 55456	0.0962	903		:110	-		
Indeno (1,2,3-cd) pyrene	15 <b>10</b> ). 50	ND		0.0962	W.	38	: : :	(00)		
Naphthalene	W.S	0.201		0.0962		31	230.2		.0	

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-06 (GPE-2-GW)		Wa	ter		Sample	ed: 08/2	4/07 09:50			
Phenanthrene	EPA 8270m	ND	(2-3-2)	0.0962	ug/l	1x	7081259	08/27/07 15:00	08/31/07 23:02	
Pyrene		0.580		0.0962	II .	. 10		н		
Surrogate(s): Fluorene-d10			82.6%		25 - 125 %	u			и	
Pyrene-d10			68.2%		23 - 150 %	"			**	
Benzo (a) pyrene-d12			50.0%		10 - 125 %	200			"	
PQH1091-11 (GPE-4-11)		Soi	l		Sample	ed: 08/2	4/07 13:11			
1-Methylnaphthalene	EPA 8270m	43.8	-	17.4	ug/kg dry	lx	7090223	09/07/07 13:15	09/13/07 18:27	
2-Methylnaphthalene		ND		17.4	,		.11	36	8 <b>n</b> 8	
Acenaphthene		ND		17.4	THE STATE OF THE S	н	200	30.2	(9.99)	
Acenaphthylene	25 NH	ND		17.4	300	и			и	
Anthracene	BH2	ND	2000	17.4		9	11		n	
Benzo (a) anthracene	( <b>1</b> )	ND	*****	17.4	и	ä	п	700	HE.	
Benzo (a) pyrene	u	ND		17.4	11	ж	D	2.002	ч	
Benzo (b) fluoranthene	THE STATE OF THE S	ND		17.4	3.00()	N	u		n	
Benzo (ghi) perylene	и.	ND		17.4	•	9	n.	н	n	
Benzo (k) fluoranthene	0	ND		17.4	.11	н	n/	.0	16	
Chrysene	II.	ND		17.4	( <b>u</b> )	30.1	**	· ·	ii	
Dibenzo (a,h) anthracene	N .	ND		17.4	70%		n	н	u	
Fluoranthene	y.	ND		17.4	11	н		u.	ü	
Fluorene	9	26.5		17.4	W.		9	900	it	
Indeno (1,2,3-cd) pyrene	N	ND		17.4			Ħ	ĸ	u	
Naphthalene	9	ND	i <del>ncons</del>	17.4	1100	11	н		ti.	
Phenanthrene		81.7		17.4		п	u	п	ji	
Pyrene		21.7	1 <del>.000.00</del> -1	17.4	18	8.0%	"	u	Đ.	
Surrogate(s): Fluorene-d10			111%		24 - 125 %	"			w.	
Pyrene-d10			106%		41 - 141 %	711			**	iti:
Benzo (a) pyrene-d12			113%		38 - 143 %	и			"	
PQH1091-15 (GPE-6-11)		So	il		Samp	led: 08/	24/07 15:05			R
1-Methylnaphthalene	EPA 8270m	10600		1800	ug/kg dry	100x	7090223	09/07/07 13:15	09/15/07 12:39	
2-Methylnaphthalene	и	6430		180	10	10x	900	H	09/13/07 18:54	
Acenaphthene		526		180	ä	ж	(0)		DAC	
Acenaphthylene	н	ND		360	'n	u.	90	(H)(	3(10)	RL1
Anthracene	n	858		180	0.5	tr.		Ħ	· u	
Benzo (a) anthracene	н	449		180		и	2.90%	0	ũ.	
Benzo (a) pyrene		272		180	305	u	3,003	11	W.	
Benzo (a) pyrene Benzo (b) fluoranthene	n	292		180	10	ж	810		n.	
and the second s		ND		180	SHS.	30	246	(( <b>H</b> ))		
Benzo (ghi) perylene		מאו		.00						

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager: Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-15 (GPE-6-11)		Soi	1	.744	Sampl	led: 08/2	24/07 15:05		3	RL
Chrysene	EPA 8270m	727		180	ug/kg dry	10x	7090223	09/07/07 13:15	09/13/07 18:54	
Dibenzo (a,h) anthracene	Tr.	ND		180	H N	Œ		¥.	•	
Fluoranthene		599		180	,,	00	'n	3.00		
Fluorene	Ü	1480		180	.0.	00	я	310	ū	
Indeno (1,2,3-cd) pyrene	9	ND	200000	180	u	U.	31	'n	,	
Naphthalene		ND		719	Ü	e e	n	п	й	RL1
Phenanthrene	n.	4540		180	ĬĬ.	н	и	10		
Pyrene	300	883		180	11		u	W		
Surrogate(s): Fluorene-d10			174%		24 - 125 %	H	3.10 - 01-03		,	ZX
Pyrene-d10			145%		41 - 141 %	"			71	ZX
Benzo (a) pyrene-d1.	2		106%		38 - 143 %	"			ï	
PQH1091-17 (GPE-7-10)		Soi	I		Sampl	ed: 08/2	4/07 14:20			RL
1-Methylnaphthalene	EPA 8270m	36100		3540	ug/kg dry	200x	7090223	09/07/07 13:15	09/14/07 21:03	
2-Methylnaphthalene	30	ND	****	354	u	20x	и	it	09/13/07 19:22	
Acenaphthene	:#	1390		354	11	n		II.	ii.	
Acenaphthylene	91	ND	1.550.00	1060	nic.	п		W.	u	RLI
Anthracene		984		354	W.	н	w	n.	n	ND1
Benzo (a) anthracene		529		354	u	11	8	n		
Benzo (a) pyrene	ji	ND		354	n:	0	*		W	
Benzo (b) fluoranthene		ND	1988	354			я.	п	й	
Benzo (ghi) perylene	ж	ND		354	0		н	н	ж	
Benzo (k) fluoranthene	×	ND		354	n	n	10		u.	2
Chrysene		803		354	n.	887	6	30%	ii.	
Dibenzo (a,h) anthracene	*	ND	_	354	.00	900	m:		ıı Ü	
Fluoranthene	*	1140	(2000)	354	u	in .		'n	w	
Fluorene	*	4430	(manual)	354	u	3,90,0	<b>M</b> S	9	m m	
Indeno (1,2,3-cd) pyrene	m .	ND	9 <b>-71-4</b> -8	354	0	e e	т.	п	16	
Naphthalene		ND	100000	2480	•		ii)	н	00	RL1
Phenanthrene	N c	10700		354	н	н	100	,,	4	
Pyrene	u .	1380	3 <del>2.00.72</del> 3	354	u	и	u	n	4	
Surrogate(s): Fluorene-d10			235%		24 - 125 %	п		100000000000000000000000000000000000000	'n	ZX
Pyrene-d10			134%		-11 - 141 %	ш			(*#E	
Benzo (a) pyrene-d12	?		97.6%		38 - 143 %	u				

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Percent Dry Weight (Solids) per Standard Methods

TestAmerica - Portland, OR

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-01	(GPE-1-5)		Soil			Samp	led: 08/2	4/07 10:30			
% Solids		NCA SOP	74.2		0.00	% by Weight	ľχ	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-02	(GPE-1-11)		Soil			Samp	led: 08/2	24/07 10:32			0
% Solids		NCA SOP	78.1		0.00	% by Weight	1x	7081216	08/25/07 12:04	08/25/07 12:04	
POH1091-04	(GPE-2-5)		Soil		*	Samp	oled: 08/2	24/07 09:34			
% Solids		NCA SOP	92.5	)2 2	0.00	% by Weight	1x	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-05	(GPE-2-11)		Soil			Samı	oled: 08/2	24/07 09:49			
% Solids		NCA SOP	82.6		0.00	% by Weight	lx	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-07	(GPE-3-5)		Soil	9	1-2-	Sam	pled: 08/	24/07 11:47	_		
% Solids		NCA SOP	94.8	A	0.00	% by Weight	1x	7081216	08/25/07 12:04	08/25/07 12:04	
POH1091-08	(GPE-3-10)		Soi	l		Sam	pled: 08/	24/07 12:00			
% Solids		NCA SOP	80.8	<del>2013</del> )	0.00	% by Weight	lx	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-10	(GPE-4-5)		Soi	l		Sam	pled: 08/	/24/07 13:03			
% Solids	2	NCA SOP	92.0		0.00	% by Weight	lx	7081216	08/25/07 12:04	4 08/25/07 12:04	
POH1091-11	(GPE-4-11)		Soi	1	15	Sam	pled: 08/	/24/07 13:11			
% Solids	*	NCA SOP	77.0		0.00	% by Weight	1x	7081216	08/25/07 12:0-	4 08/25/07 12:04	
POH1091-12	(GPE-5-5)		So	1		Sam	pled: 08	/24/07 12:47			
% Solids		NCA SOP	98.0		0.00	% by Weight	1x	7081216	08/25/07 12:0	4 08/25/07 12:04	
POH1091-13	(GPE-5-9)		So	il		San	pled: 08	/24/07 12:50		11	
% Solids		NCA SOP	77.7	;	0.00	% by Weight	1x	7081216	08/25/07 12:0	08/25/07 12:04	
PQH1091-14	(GPE-6-7)		So	il		San	pled: 08	3/24/07 15:01	N.		

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager: Steve Hammer Report Created:

09/24/07 17:22

### DRAFT: Percent Dry Weight (Solids) per Standard Methods

TestAmerica - Portland, OR

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-14	(GPE-6-7)		Soil			Sam	pled: 08/2	4/07 15:01			
% Solids		NCA SOP	89.9	<u> </u>	0.00	% by Weight	lx	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-15	(GPE-6-11)		Soil	}		Sam	pled: 08/2	4/07 15:05			
% Solids		NCA SOP	74.3		0.00	% by Weight	lx	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-16	(GPE-7-6)		Soil			Sam	pled: 08/2	4/07 14:15			
% Solids	5	NCA SOP	95.4		0,00	% by Weight	1 <b>x</b>	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-17	(GPE-7-10)		Soil			Sam	pled: 08/2	4/07 14:20			
% Solids		NCA SOP	75.7	-	0.00	% by Weight	1x	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-18	(GPE-8-6)		Soil			Sam	pled: 08/2	4/07 15:27		25	
% Solids		NCA SOP	78.3		0.00	% by Weight	1x	7081216	08/25/07 12:04	08/25/07 12:04	
PQH1091-19	(GPE-8-9)		Soil			Sam	pled: 08/2	4/07 15:30			
% Solids	200	NCA SOP	75.5	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	0.00	% by Weight	lx	7081216	08/25/07 12:04	08/25/07 12:04	

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Analyzed

Prepared

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

Analyte

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

MDL\*

Result

Method

Steve Hammer

Dil

Batch

Report Created: 09/24/07 17:22

Notes

### DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method)

TestAmerica - Seattle, WA

MRL Units

PQH1091-02 (GPE-1-11)		Soil			Sample	ed: 08/2	4/07 10:32			
Benzene	EPA 8260B	ND		2.01	ug/kg dry	lx	7105021	09/05/07 08:33	09/05/07 10;51	
1,2-Dibromoethane (EDB)	(40)	ND		6.69	10	н		п		
1,2-Dichloroethane	, m	ND		1.67	н	W.	.11	и		
Ethylbenzene	· u	ND		5.35	ti	и	(M)	ЭН.	n.	
Methyl tert-butyl ether		ND		1.34	и	н	W.	ii.	W.	
n-Hexane	SHE	ND		6.69	н		"			
Naphthalene	U	ND	-	13.4				3.60	11.	
Toluene	n	ND		2.01	Ti .	я	011	SHC - 51	w	
Total Xylenes	ď.	ND		13.4	31	U	(11.)	u	ii	
Surrogate(s): 1,2-DCA-d4			112%		65 - 145 %	"			"	
Toluene-d8			101%		55 - 145 %	"			n,	
<i>4-BFB</i>			104%		50 - 145 %	II .			"	ä
PQH1091-05 (GPE-2-11)		Soil			Sampl	ed: 08/2	4/07 09:49			
Acetone	EPA 8260B	53.4		34.3	ug/kg dry	1x	7106045	09/06/07 08:00	09/06/07 14:00	
Benzene		ND		1.72			X		10	
Bromobenzene	31	ND	(65815)	5.72		11	Ä	u	THE STATE OF THE S	
Bromochloromethane		ND	2424	5.72	16	n.	ä	in .	≋मः	
Bromodichloromethane		ND		5.72	IE.	2308	30	9	W	
Bromoform		ND		5.72	W.	10	Ü	U	(0)	
Bromomethane	я	ND	2002	11.4	16				2000	
2-Butanone	н	ND		17.2	W.		100%	300	2000	
n-Butylbenzene		ND		5.72	a	#	.10:	n .	•	
sec-Butylbenzene	11	ND		5.72		. 9	п	u	T.	
tert-Butylbenzene	п	ND		5.72				(30)	W.	
Carbon disulfide	W	3.47		3.43	и	н-	77 (100)	9	_90	
Carbon tetrachloride		ND		5.72	н	u	10	900		
Chlorobenzene	и.	ND		2,29	Ü	"	5.00	11		
Chloroethane	w.	ND		5.72	.0	n	п	11	11	
Chloroform	≲ 0.	ND		2.86		•		w	п	
Chloromethane	ii .	ND		11.4		0	200	п		
2-Chlorotoluene	ij.	ND		5.72	n	.0	w.	Ü	**	
4-Chlorotoluene	ii ii	ND		5.72	8808		ų	Ĩ.	10	
Dibromochloromethane	н	ND	2000	5.72		н	n	if .	30	
1,2-Dibromo-3-chloropropane	W	ND	(44444)	11.4		n,	W	u	/#1	
1,2-Dibromoethane (EDB)		ND	****	5.72	200	.00		0		
Dibromomethane	ii .	ND	4 <del>5 1 1 1 1</del> 1	5.72	30.0	10	n	<u>)</u>	n	
1,2-Dichlorobenzene	y	ND		5.72	н	U		ii	in:	
1,3-Dichlorobenzene	ĵi	ND	74444	5.72			'n	n	52 BOS	
1,4-Dichlorobenzene		ND		5.72	0000	000	30	.00	n ·	
Dichlorodifluoromethane	u	ND		5.72	10	:	9			
1,1-Dichloroethane	on c	ND	-	2.29		H.	n	u	и	
1,1-Dichiologuiane		1112		17775						

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager: Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method)

TestAmerica - Seattle, WA

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-05	(GPE-2-11)		Soi	1		Samp	led: 08/2	4/07 09:49			
1,2-Dichloroethane		EPA 8260B	ND	( <del>-134-</del> )	1.43 u	ıg/kg dry	1x	7106045	09/06/07 08:00	09/06/07 14:00	
1,1-Dichloroethene		и	ND		3.43	(0)	00	u	Ű	Ü	
cis-1,2-Dichloroeth	ene <sub>.</sub>	II.	ND	* Management	3.43	0.000	0.00.36	u u	m:		
trans-1,2-Dichloroe	thene	и	ND		2.86	0		,	u	u	
1,2-Dichloropropan	ie		ND		5.72	in .		ii.	Ü	u	
1,3-Dichloropropan	ie	u u	ND		5.72	300	n	n	n	Ü	
2,2-Dichloropropan	e	V	ND	-	11.4	all)	ar :	10	n	W .	
1,1-Dichloropropen	e	и	ND		5.72	(n)	H	W.	n	"	
cis-1,3-Dichloropro	pene	H.	ND		5.72	н	.00	u.	6	н	
trans-1,3-Dichlorop	ropene	10	ND		1.43	н	700	ii.	10	ű	
Ethylbenzene		n	ND	-	4.58	ii.	300.	U	300	ø	
Hexachlorobutadien	ie	IE.	ND	-	11.4				. 0	<b>u</b>	
Methyl tert-butyl et	her	(4	ND	-	1.14	0	n	d)	. 10	i i	
n-Hexane		Ü	ND		5.72	are.	90.	и	n.	W	
2-Hexanone		0	ND		22,9	11		200	300		
Isopropylbenzene		ж.	ND		5.72	ü	n				
p-Isopropyltoluene		W.	ND		5.72	10	W		54%	22	
4-Methyl-2-pentano	ne	II.	ND		22.9	**				12	
Methylene chloride		III							8".		
Naphthalene		( <b>u</b> )	ND ND		4.01	o	14	100	Sax Sax	•	
n-Propylbenzene					11.4			и.	9983	<b>11</b> 8 500	
Styrene			ND	2000	5.72	ii				H	
1,2,3-Trichlorobenz	ana	п	ND		1.14	n			A H (A	n.	
1,2,4-Trichlorobenz			ND		11.4				.11	1.00	
1,1,1,2-Tetrachloros			ND		11.4					3.90	
1,1,2,2-Tetrachloro			ND		5.72			- 1		U	
Tetrachloroethene	tilane		ND		5.72		TI.	(III)	н	н	
Toluene			ND		2,29	U	n	ii .	000	.00	
	197		ND	<del></del>	1.72	D	п	11		10	
1,1,1-Trichloroethan			ND		2.86	m	н	w			
1,1,2-Trichloroethar	ie		ND		1.43	II .		3003	3.00 ((	0	
Trichloroethene		760	ND ·		2.86	0	u	п	н	90	
Trichlorofluorometh			ND	2000	5.72	Ü	W.	11	n	H	
1,2,3-Trichloroprop			ND		5.72		ж	10	w	(10)	
1,2,4-Trimethylbenz		*	ND		5.72	n.	n		10	000	
1,3,5-Trimethylbenz	rene	.0.0	ND		5.72	II.		.0		au v	
Vinyl chloride		W.	ND	5775	2.86	ir		0	Ü	u .	
o-Xylene		. <b>X</b>	ND	(2002)	5.72	11.	*	31	,,	(0)	
m,p-Xylene		Tell	ND		5.72			38	ш	n i	
Total Xylenes			ND		11.4			n	й	SIC S	
Surrogate(s):	1,2-DCA-d4	35		100%	d	50 - 140 %	"		(F-1)	п	
	Toluene-d8			102%	0	50 - 140 %	"			300	
	<i>4-BFB</i>			98.9%	6	50 - 140 %	n			,,	

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method)

TestAmerica - Seattle, WA

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-11 (G)	PE-4-11)		Soil	l		Sample	d: 08/2	4/07 13:11			
Benzene		EPA 8260B	ND		1.48	ug/kg dry	lx	7106045	09/06/07 08:00	09/06/07 14:27	
1,2-Dibromoethane (ED	OB)	II.	- ND	(0000000	4.93	30	10.5	11.		ii.	
1,2-Dichloroethane		W.	ND	(50),000	1.23	ш		II.	.10	u u	
Ethylbenzene		Ü	ND		3.95	u	u	N.	н.	u u	
Methyl tert-butyl ether		<u>ii</u>	ND		0.987	11	U	u	0.005	и	
1-Hexane		H .	ND		4.93	2003	390	u.	0.300	11	
Naphthalene		W.	ND	-	9.87	n.		Ü	10	*	
Toluene		<b>u</b>	ND	3-3-3-3	1.48		H	n	H.	n	
Total Xylenes			ND		9.87	и			u:	311	
Surrogate(s): 1,	2-DCA-d4	±.	- N - M - M - M - M - M - M - M - M - M	124%		60 - 140 %	n				
	oluene-d8			100%		60 - 140 %	·			#	
	-BFB			104%		60 - 140 %	•			u	
POH1091-15 (G	PE-6-11)		Soi	I		Sampl	ed: 08/2	24/07 15:05			
Benzene		EPA 8260B	ND	8 <del>-1-4-</del> 2	2.02	ug/kg dry	1x	7106045	09/06/07 08:00	09/06/07 14:55	
1,2-Dibromoethane (EI	)B)	"	ND		6.75	"	10		u	u	
1,2-Dichloroethane	<i>-</i>		ND	0.000000	1.69	11			u	п	
Ethylbenzene		.11	ND .		5.40	W.	H.	11	'n		
Methyl tert-butyl ether		4 H	ND		1,35	u.	н			te.	
		310	15.9	C1522	6.75					и	
ı-Hexane				55775	13.5	"	н	11	10	w.	
Naphthalene			ND	<del></del>		ii	W		71	u	
Toluene		**	ND		2.02			30			
Total Xylenes		7.00 To the contract of the co	ND		13.5					400	
Surrogate(s): 1,	,2-DCA-d4			130%		60 - 140 %	"			H	
T	Coluene-d8			127%		60 - 140 %	n			#	
4	-BFB			121%		60 - 140 %	"			""	
PQH1091-17 (G	PE-7-10)		So	il		Samp	ed: 08/	24/07 14:20			
Benzene		EPA 8260B	ND		2.49	ug/kg dry	lx	7107059	09/07/07 18:10	09/07/07 22:44	
1,2-Dibromoethane (EI	DB)	8 <b>11</b> 3	ND		8.29	n	10.	00	(B)	•	
1,2-Dichloroethane	133	(10)	ND		2.07	ÿ.		u		ji.	
Ethylbenzene		Œ	ND		6.63	n		a	u	н	
Methyl tert-butyl ether		п	ND		1.66	*H	ж	п	11	H:	
n-Hexane		m:	ND		8.29	30	ЭН :	н.	эн.		
Naphthalene	*	W.	ND		16.6				н	, and the second	
Toluene		ű.	ND	100000	2.49	·			4	и	
Total Xylenes		<u> </u>	ND	-	16.6	5H:	Sins	н	н	n	
Surrogate(s): 1	,2-DCA-d4		in the last of the	118%		65 - 145 %	,,			,,	
	Toluene-d8			121%		55 - 145 %	n			n	
	Morie WO			108%		50 - 145 %				~ <u>.</u>	

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Volatile Organic Compounds (Special List) per EPA Method 8260B (Low Soil Method)

TestAmerica - Seattle, WA

Analyte Method Result MDL\* MRL Units Dil Batch Prepared Analyzed Notes





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

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Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Physical Parameters by APHA/ASTM/EPA Methods

TestAmerica - Seattle, WA

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQH1091-02	(GPE-1-11)		Soil			Sam	pled: 08/2	4/07 10:32			,
Dry Weight		BSOPSPL003R0 8	74.7	-	1.00	%	1x	7110045	09/10/07 16:44	09/10/07 16:45	
PQH1091-05	(GPE-2-11)		Soil	a) S		Sam	pled: 08/2	24/07 09:49		2	
Dry Weight		BSOPSPL003R0 8	78.3		1,00	%	1 x	7110045	09/10/07 16:44	09/10/07 16:45	
PQH1091-11	(GPE-4-11)		Soil	10		San	pled: 08/2	24/07 13:11			
Dry Weight		BSOPSPL003R0 8	75.5		1.00	%	1x	7110045	09/10/07 16:44	09/10/07 16:45	
PQH1091-15	(GPE-6-11)		Soil			San	npled: 08/2	24/07 15:05			
Dry Weight	Lange Political	BSOPSPL003R0 8	76.4		1.00	%	1 <b>x</b>	7110045	09/10/07 16:44	09/10/07 16:45	
PQH1091-17	(GPE-7-10)		Soi	1	18	San	npled: 08/	24/07 14:20		t.	
Dry Weight		BSOPSPL003R0 8	60,2	<u> 1960 (196</u>	1,00	%	lx	7110045	09/10/07 16:44	09/10/07 16:45	





PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

DRAFT: Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

QC Batch: 7081445	Water P	reparation	Method:	EPA 5030B										
Analyte	Method	Result	MDL	* MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	) Analyzed	Notes
Blank (7081445-BLK1)								Extr	ncted:	08/30/07 09	:31			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND		80.0	ug/l	1x	17	077	<del>57</del> 4		-	75	08/3 1/07 06:26	
Surrogate(s): 4-BFB		Recovery:	88.7%	Lin	its: 50-150%	II .							08/31/07 06:26	
LCS (7081445-BS1)			(8)	*	β).			Extr	acted:	08/30/07 09	:31			
4-BFB			91.4%		50-150%	lx							08/31/07 05:54	
LCS (7081445-BS2)								Extr	acted:	08/30/07 09	:31		Market and the second	
Gasoline Range Hydrocarbons	NW TPH-Gx	401	<del></del> ?	80.0	ug/l	lx	24	500	80.2%	(70-130)	¥40		08/31/07 01:10	
Surrogate(s): 4-BFB		Recovery:	95.3%	Lin	nits: 50-150%	"					111		08/31/07 01:10	******
LCS Dup (7081445-BSD2)								Extr	acted:	08/30/07 09	31			
Gasoline Range Hydrocarbons	NW TPH-Gx	385		80.0	ug/l	1x	-	500	77.0%	(70-130)	4.12%	6 (35)	08/31/07 01:42	
Surrogate(s): 4-BFB		Recovery:	95.1%	Lin	nits: 50-150%	п							08/31/07 01:42	
Duplicate (7081445-DUP1)				OC Source:	PQH0352-01	REI		Ext	acted:	08/30/07 09	9:31			
Gasoline Range Hydrocarbons	NW TPH-Gx	12100		800	ug/l	10x	12500	-77	1750		3.57%	6 (35)	08/31/07 02:45	
Surrogate(s): 4-BFB		Recovery:	120%	Lin	nits: 50-150%	lx							08/31/07 02:45	2
D U. o. to (7001445 DUD2)				OC Source	PQH1091-03			Ext	racted:	08/30/07 0	9:31			
Duplicate (7081445-DUP2) Gasoline Range Hydrocarbons	NW TPH-Gx	244	(ACE)	80.0	ug/l	1x	275	1-2	1946		11.79	6 (35)	08/31/07 03:48	
Surrogate(s): 4-BFB		Recovery:	85.4%	Lit	mits: 50-150%	и							08/31/07 03:48	
N				OC Source	: POH0965-0	Ď.		Ext	racted:	08/30/07 0	9:31			
Matrix Spike (7081445-MS1)			76.2%	QC Source	50-150%								08/31/07 08:00	1
						29		New Control	toccennero•	08/30/07 0	0.21			
Matrix Spike Dup (7081445-MSI	D-41				: PQH0965-0									

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

1800 Blankenship Road Suite 440

West Linn, OR 97068

**SLR-Portland** 

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

DRA	AFT: Gasoline	Hydroca			-Gx Method - Portland, Ol		aboratoi	y Qua	my C	omiroi r	csuits			
QC Batch: 7081533	Soil Pre	paration M	ethod: El	PA 5035 M	odified									
Analyte	Method	Result	MDL	* MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits	) Analyzed	Notes
Blank (7081533-BLK1)								Exti	acted:	08/31/07 13	3:52			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	411	1.98	mg/kg wet	1x		**	5 <b>55</b> 5				09/05/07 12:37	
Surrogate(s): a,a,a-TFT		Recovery:	118%	. L	imits: 50-150%	:10							09/05/07 12:37	
LCS (7081533-BS2)								Ext	acted:	08/31/07 13	3:52			
Gasoline Range Hydrocarbons	NW TPH-Gx	23.8	***	3.85	mg/kg wet	1x	-	24.1	98.8%	(70-130)	122	-22	09/01/07 14:08	
Surrogate(s): a,a,a-TFT	The state of the s	Recovery:	125%	L	imits: 50-150%	n		93					09/01/07 14:08	
Duplicate (7081533-DUP1)				QC Source	е: РОН0767-05	Š.		Ext	racted:	08/31/07 1	3:52		2	
Gasoline Range Hydrocarbons	NW TPH-Gx	21600	(1104)	364	mg/kg wet	1x	17800	-	924)		19.6%	6 (40)	09/01/07 20:35	
Surrogate(s): a,a,a-TFT		Recovery:	125%	1	imits: 50-150%	,,							09/01/07 20:35	
Duplicate (7081533-DUP2)		-		QC Source	e: PQH1091-1	g		Ext	racted:	08/31/07 1	3:52			
Gasoline Range Hydrocarbons	NW TPH-Gx	155	1000	3,96	mg/kg dry	lx	173			-	11.59	6 (40)	09/02/07 03:01	-
Surrogate(s): a,a,a-TFT		Recovery:	99.3%	1	Limits: 50-150%	"							09/02/07 03:01	
Matrix Spike (7081533-MS2)	0.1140			QC Source	re; PQH1091-1	)	50	Ext	racted:	08/31/07 1	3:52			
Gasoline Range Hydrocarbons	NW TPH-Gx	4.53	17	5.15	mg/kg dry	1x	ND	32.2	14.1%	(65-130)	-	220	09/02/07 05:46	М
Surrogate(s): a,a,a-TFT		Recovery:	103%	, i	Limits: 50-150%	п		11(40)					09/02/07 05:46	
QC Batch: 7090070		8 7/0	9510× 100s - 005	EPA 5030										

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits	) Analyzed	Notes
Blank (7090070-BLK1)								Ext	acted:	09/04/07 13:	:50			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	***	80.0	ug/l	1x	177	1.00			-22	_	09/05/07 17:51	
Surrogate(s): 4-BFB	-	Recovery:	95.2%	Lin	nits; 50-150%	"							09/05/07 17:51	
LCS (7090070-BS1)					2 gs			Ext	racted:	09/04/07 13	:50			
Gasoline Range Hydrocarbons	NW TPH-Gx	384		80.0	ug/l	1x		500	76.9%	(70-130)			09/05/07 16:56	
Surrogate(s): 4-BFB		Recovery:	89.9%	Lin	nits: 50-150%	"							09/05/07 16:56	
LCS Dup (7090070-BSD1)								Ext	racted:	09/04/07 13	:50			
Gasoline Range Hydrocarbons	NW TPH-Gx	477	-222	80.0	ug/l	1x		500	95.3%	(70-130)	21.5%	(35)	09/05/07 17:24	
Surrogate(s): 4-BFB		Recovery:	101%	Lin	nits: 50-150%	"							09/05/07 17:24	
Duplicate (7090070-DUP2)				QC Source:	PQH1010-0	2RE1		Ext	racted:	09/04/07 13	5:50			
Gasoline Range Hydrocarbons	NW TPH-Gx	13000	Comm	800	ug/ĺ	10x	13300			3,555	2.26%	(35)	09/05/07 23:33	
Surrogate(s): 4-BFB		Recovery:	113%	Lii	nits: 50-150%	i Ix							09/05/07 23:33	

DRAFT REPORT





THE LEADER IN ENVIRONMENTAL TESTING

### Draft Report

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

#### DRAFT: Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 7090166	Soil Prep	aration M	lethod: EPA	5035 M	odified	8								
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits	) Analyzed	Notes
Blank (7090166-BLK1)								Exti	acted:	09/06/07 14	1:25			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	***	3.86	mg/kg wet	1x .	-	1244		10 <del>44</del> 1		-	09/06/07 14:58	
Surrogate(s): a,a,a-TFT		Recovery:	119%	L	imits: 50-150%	н							09/06/07 14:58	
LCS (7090166-BS1)								Ext	acted:	09/06/07 14	1:25			
Gasoline Range Hydrocarbons	NW TPH-Gx	21.5	(555	3.68	mg/kg wet	1x	( <del></del> )	23.0	93.3%	(70-130)	( <del>nn</del>		09/06/07 15:26	
Surrogate(s): a,a,a-TFT		Recovery:	122%	L	imits: 50-150%	n							09/06/07 15:26	
<b>Duplicate</b> (7090166-DUP1)				QC Source	e: PQH0992-01			Ext	acted:	09/06/07 14	1:12			
Gasoline Range Hydrocarbons	NW TPH-Gx	23.0		5.85	mg/kg dry	1x	11.7	723		-	65.1%	(40)	09/06/07 16:49	R
Surrogate(s): a,a,a-TFT		Recovery:	105%	L	imits: 50-150%	"							09/06/07 16:49	
Duplicate (7090166-DUP2)				QC Source	e: PQH1091-11	Į.		Ext	racted;	09/06/07 14	1:12			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-	4.21	mg/kg dry	lx	ND	-		441	30.2%	(40)	09/07/07 10:38	
Surrogate(s): a,a,a-TFT		Recovery:	92.3%	L	imits: 50-150%	u					4-1		09/07/07 10:38	
Matrix Spike (7090166-MS1)	(t)			QC Source	e: PQH1342-01			Ext	racted:	09/06/07 14	1:12			
Gasoline Range Hydrocarbons	NW TPH-Gx	28.1		4.87	mg/kg dry	lx	0.793	30.5	89.6%	(65-130)	155	11000	09/07/07 12:28	
Surrogate(s): a,a,a-TFT		Recovery:	92.5%	L	imits: 50-150%	"						vei,	09/07/07 12:28	





PORTLAND, OR

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THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

### DRAFT: Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method - Laboratory Quality Control Results TestAmerica - Portland, OR

QC Batch: 7081504	Water P	reparation	Method: EI	A 3520/6	600 Series									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits	) Analyzed	Notes
Blank (7081504-BLK1)								Exti	acted:	08/31/07 10	:30			
Diesel Range Organics	NWTPH-Dx	ND	222	0.250	mg/l	lx		-	-		-		08/31/07 13:51	
Heavy Oil Range Hydrocarbons	.05	ND	200	0.500			**	***				-	н	
Surrogate(s): 1-Chlorooctadecane		Recovery:	102%	Lit	mits: 50-150%	n							08/31/07 13:51	20
LCS (7081504-BS1)								Ext	racted:	08/31/07 10	:30			
Diesel Range Organics	NWTPH-Dx	2.61		0.250	mg/l	1x	: <del></del>	2.50	104%	(50-150)	777		08/31/07 13:15	
Heavy Oil Range Hydrocarbons	Ü	1.78		0.500	/W	m		1.51	118%	100	-		3 <b>10</b> .7	
Surrogate(s): I-Chlorooctadecane	J. 5. C.	Recovery:	109%	Li	mits: 50-150%	"						- 10 miles (000)	08/31/07 13:15	
LCS Dup (7081504-BSD1)		2.	*		) X			Ext	racted:	08/31/07 10	:30			-
Diesel Range Organics	NWTPH-Dx	2.60		0.250	mg/l	1x	-	2,50	104%	(50-150)	0.414	% (50)	08/31/07 13:33	
Heavy Oil Range Hydrocarbons	u	1.77	0. <del>0.00</del>	0.500	ii.	11	6 <u>00</u>	1.51	117%		0.590	% "	и	
Surrogate(s): 1-Chlorooctadecane		Recovery:	107%	Li	mits: 50-150%	"							08/31/07 13:33	i i

QC Batch: 7081505	Soil Pre	paration M	lethod: EPA	3550 Fu	els									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Note
Blank (7081505-BLK1)								Extr	acted:	08/31/07 13	:00			
Diesel Range Organics	NWTPH-Dx	ND		12,5	mg/kg wet	1 x	220	522			1	-	08/31/07 16:10	
Heavy Oil Range Hydrocarbons	au.	ND		25.0	н		223	SALE	-	-	(44)		*	
Surrogate(s): 1-Chlorooctadecane		Recovery:	93.7%	L	mits: 50-150%	11							08/31/07 16:10	
LCS (7081505-BS1)								Exti	acted:	08/31/07 13	3:00			
Diesel Range Organics	NWTPH-Dx	130		12.5	mg/kg wet	lx		125	104%	(50-150)	3.75		08/31/07 15:35	
Heavy Oil Range Hydrocarbons	H	77.7		25,0				75.5	103%	.11	-	100	31	69
Surrogate(s): 1-Chlorooctadecane		Recovery:	100%	L	imits: 50-150%	n.							08/31/07 15:35	
Duplicate (7081505-DUP1)				QC Sourc	e: PQH1091-0	1		Ext	racted:	08/31/07 13	3:00			
Diesel Range Organics	NWTPH-Dx	176	1000	16.7	mg/kg dry	1x	150		+		16.3%	(50)	08/31/07 16:46	
Heavy Oil Range Hydrocarbons	ű	267		33.5	2113	10	234	-			13.5%			
Surrogate(s): 1-Chlorooctadecane		Recovery:	77.6%	L	imits: 50-150%	, "							08/31/07 16:46	
Duplicate (7081505-DUP2)				QC Source	e: PQH1091-0	02		Ext	racted:	08/31/07 1	3:00			
Diesel Range Organics	NWTPH-Dx	59.6		15.8	mg/kg dry	1x	43.1		122		32.2%	(50)	08/31/07 17:22	
Heavy Oil Range Hydrocarbons	n .	ND	7 <u>252</u>	31.6	н		ND		-20	344 D	5.50%	9 1	ш	
Surrogate(s): 1-Chlorooctadecane		Recovery:	75.6%	1	imits: 50-150%	ó ".							08/31/07 17:22	(1)

DRAFT REPORT





PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created:

09/24/07 17:22

DRAFT: Extractable Petroleum Hydrocarbons per Washington DOE - Laboratory Quality	Control Results
TestAmerica - Portland, OR	

QC Batch: 7090284	Soil Pre	paration M	ethod: EPA	3550 Fu	els									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Note
Blank (7090284-BLK1)								Extr	acted:	09/07/07 17	:10			
C8-C10 Aromatics	WDOE EPH	ND		5.00	mg/kg wet	lx	221	9423	-			441	09/15/07 11:45	
C10-C12 Aromatics	(II	ND		5.00		10		3 <b>44</b> 3	-	WE.				
C12-C16 Aromatics	30	ND	302	5.00	11	b	545	3443	22			-	u	
C16-C21 Aromatics	· ii	ND	7222	5.00	10			1000	**	-			ii	
C21-C34 Aromatics	u	ND	(9494	5.00	u	11	-		**		***	***	9	
C8-C10 Aliphatics	0	ND	S-2002	5.00	H			-		1999	**	***	"	
C10-C12 Aliphatics	U	ND	N <del>ame</del>	5.00			**			100	***		n	
C12-C16 Aliphatics	и	ND	-	5.00	u	n.		=	-		-	m#:	Э	
C16-C21 Aliphatics		ND		5.00	103	HC - 11			1000	155	-		v	
C21-C34 Aliphatics		ND	<del></del>	5.00	H	0.		===		:57		575	30	
Surrogate(s): o-Terphenyl		Recovery:	70.1%	L	imits: 60-1409	V6 "							09/15/07 11:45	
Squalane		52	106%		60-140	% "							"	
CC (7000204 DC1)								Ext	racted:	09/07/07 13	7:10			
CS (7090284-BS1) C8-C10 Aromatics	WDOE EPH	3.62		3.60	mg/kg wet	lx	- 2	5.00	72.5%				09/17/07 14:03	
C10-C12 Aromatics	WDOE EFF	3.62		3.60	III BY KE WOL	11.	-	11	72.5%			22	"	
C12-C16 Aromatics	и	13.5		5.00		н	-	15.0	89.8%	(10 150)		222		
C16-C21 Aromatics	и.	23.8		5.00			-	25.0	95.3%		-	100	W	
C21-C34 Aromatics		30.3		5.00			22	35.0	86.5%			144		
C8-C10 Aliphatics		10.5	22	5.00	0	ij	_	15.0	69.7%		122	-	09/15/07 12:16	
C10-C12 Aliphatics	(100)	10.5		5.00	n	ü		9.95	106%	(70-130)		124		
C12-C16 Aliphatics	н.	19.9		5.00		'n		19.8	101%	"	-	100	u	
C16-C21 Aliphatics	н	34.2		5.00			722	34.9	98,1%	. 11	-		0	
C21-C34 Aliphatics	e.	63.2		5.00		36	-	64.9	97.4%		; <del>==</del>	-	jir.	
Surrogate(s): o-Terphenyl		Recovery:	103%	1	imits: 60-140	% "							09/17/07 14:03	1
Squalane			103%		60-140								09/15/07 12:16	
vicina di dispersioni di n														
Duplicate (7090284-DUP1)					e: PQH1091	,01	0.00000	Ext	racted:	09/07/07 1		- Chorer	Marine and a second a second and a second and a second and a second and a second an	_
C8-C10 Aromatics	WDOE EPH	ND		6,46	mg/kg dry	lx	ND	1996		***	NR	4/6 3/2	09/15/07 12:44	
C10-C12 Aromatics		ND		6.46			ND	100	***		9.07%		н.	
C12-C16 Aromatics	М.	ND	( <del>2002)</del>	6.46	н		ND	344		***	0.7669			
C16-C21 Aromatics	H.	9.84		6.46		u	10.2	386	***	-77	3.41%		0.	
C21-C34 Aromatics	и	ND	***	6,46	u	н	ND	(37.)	***	55	35.7%		ur.	
C8-C10 Aliphatics		ND		6.46	16.	10	ND	6 <del>17</del> .5	550		37.1%		н,	
C10-C12 Aliphatics	W	ND		6.46	и		ND	3 <del>70</del> 3	<del></del>	V75:	6.95%		11.	
C12-C16 Aliphatics	H	16.4	-	6.46	1 II	ЭС	16.1	25 <del>7</del> 8	<del>(2.7</del> .	#	1.96%		II;	
C16-C21 Aliphatics		17.4		6.46	<b>20</b>	710	17.2	3. <del>77</del> 3	(77)	-	1.30%		u.	
C21-C34 Aliphatics	"	10.9	S###	6.46	300	0.00	9.52		44		13.6%	/a "	),	
Surrogate(s): o-Terphenyl		Recovery:	90.6%		Limits: 60-140	1% "							09 15 07 12:4-	1

DRAFT REPORT





PORTLAND, OR

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1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number: Project Manager:

008.205.00007

Steve Hammer

Report Created:

09/24/07 17:22

DRAFT: Extractable Petroleum Hydrocarbons per Washington DOE - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 7090284

Soil Preparation Method:

EPA 3550 Fuels

Analyte

Method

Result

MDL\* MRL Units

QC Source: PQH1091-02

Dil

Source Result

Spike % (Limits) % (Limits) Analyzed
Amt REC

Notes

Duplicate (7090284-DUP1)

Surrogate(s): Squalane

Recovery: 101%

Limits: 60-140%

Extracted: 09/07/07 17:10

09/15/07 12:44

DRAFT REPORT





PORTLAND, OR

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THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

West Linn, OR 97068

1800 Blankenship Road Suite 440

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 7081372	Water P	reparation N	1ethod: 352	20B Liq-I	Liq									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7081372-BLK1)								Extr	acted:	08/29/07 17	:25			
1-Methylnaphthalene	EPA 8270C	ND		5,00	ug/l	1x		( <del>HP</del> )		447			09/08/07 12:57	
Acenaphthene	.00	ND		5.00	in .			0-0		440	(	44	ii	
Acenaphthylene	. 11	ND		5.00	31		***	-	-	**:			Ü	
Anthracene	ONCE	ND		5.00	70	11	***	0		***		**	W	
Benzo (a) anthracene	316	ND		5.00	300	36	==	( <b>***</b> )		-		-	ŭ	
Benzo (a) pyrene	∂ <b>н</b> ⊘	ND		5.00		200	==	8 <del>50</del> 3	77		1.00		w	
Benzo (b) fluoranthene	10.7	ND	0 <del>222</del>	5.00	3166	и		8770	777	575			30	
Benzo (ghi) perylene	, m	ND		5.00	383	0.00			777	7775			11	
Benzo (k) fluoranthene	(96)	ND		5.00	.00	ж.	-						п	
Benzoic Acid		ND	( <u>2012)</u>	50.0	n.	u	993	-	-	<del>22</del> ]		44	30	
Benzyl alcohol		ND		10.0		11	22			440	122	-	ii	
4-Bromophenyl phenyl ether	n	ND	1222	5.00	u	11		-	22			22	ü	
Butyl benzyl phthalate	н	ND	22 <del>222</del>	5.00	w	н		223		122)	(22)	20	,	
4-Chloro-3-methylphenol	и	ND	7 <b>90-</b>	5.00	u.		-				-11		Ü	
I-Chloroaniline	н	ND	11888	20,0				44			2442		û	
Bis(2-chloroethoxy)methane		ND	Name of the last o	10.0	.11		-					-		
3is(2-chloroethyl)ether	TWE	ND		5.00	0.00								30	
Bis(2-chloroisopropyl)ether	in News	ND	> <del></del>	10.0	36	111					87 		В	
2-Chloronaphthalene	⊕u:	ND		5.00	5(0)	(1)					**:		ar c	
2-Chlorophenol		ND		5.00	3.0	05					***		3001	
4-Chlorophenyl phenyl ether	200	ND		5.00	890	и,							30	
Chrysene	(8)	ND		5.00	8.000	9.	122	22	144	22	1/		(0)	
Di-n-butyl phthalate	н	ND	224	5.00	u	ŭ.	22			22	22	-	10	
Di-n-octyl phthalate	н	ND	202	5.00	11	ű	022	22	1200	1000 1007	222	100	u .	
Dibenzo (a,h) anthracene	н	ND		5,00				1250			222	122	u	385
Dibenzofuran	п	ND	220	5.00	n	ŭ		250	520	120	220		11	
1,2-Dichlorobenzene	n .	ND		5.00		ii	122	222	200	122	220	122	ń	
1,3-Dichlorobenzene		ND		5.00		ii		-					W.	
1,4-Dichlorobenzene		ND		5.00		ii	1000		-				m.	
3,3'-Dichlorobenzidine	u	ND		5.00	n	n			_				10	
2,4-Dichlorophenol	a	ND		5,00	200	n		550 <del>AN</del>				100	n.	
Diethyl phthalate		ND		5,00	000							-	10	
	163	ND		10.0	н	"	100				-		300	
2,4-Dimethylphenol	н				H:	11	: <del></del>	***	1		-	=		
Dimethyl phthalate	н:	ND	****	5.00	16		\$ <del>70</del> 7	87	655	-	####	1995		
4,6-Dinitro-2-methylphenol		ND	60 <del>007.7</del> %	10.0			122	177	1.77	1.77	ħØ.	-		
2,4-Dinitrophenol		ND	95176 (	25.0			1955	1000	(75)	177	77	:55		
2,4-Dinitrotoluene		ND		5.00			<del></del>	1772	(555	155	7.7	(5)		
2,6-Dinitrotoluene	<b>W</b> :	ND		5,00	II.		<del>188</del>	<del></del>	-		**	-	a.H.:	
Bis(2-ethylhexyl)phthalate		ND	220	10.0	IC.	**	122				-		7. O	

DRAFT REPORT





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager: Steve Hammer

Report Created:

09/24/07 17:22

## DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results TestAmerica - Portland, OR

Islank (7081372-BLK1) Iduoranthene Iduorene Iduorene Iduorene Idexachlorobenzene Idexachlorobutadiene Idexachlorocyclopentadiene Idexachlorocthane Idexachlo	EPA 8270C	ND ND ND ND ND ND ND ND ND ND		5.00 5.00 5.00 10.0 10.0	ug/l	1x "	Result		REC	08/29/07 17  	7:25  	- 1	09/08/07 12:57 u	
luoranthene luorene lexachlorobenzene lexachlorobutadiene lexachlorocyclopentadiene lexachloroethane ndeno (1,2,3-cd) pyrene sophoroneMethylnaphthalene		ND ND ND ND ND	    	5.00 5.00 10.0 10.0			_	-	-	=			W.	
luorene iexachlorobenzene iexachlorobutadiene iexachlorocyclopentadiene iexachlorocthane indeno (1,2,3-cd) pyrene sophorone -Methylnaphthalene		ND ND ND ND ND	    	5.00 5.00 10.0 10.0			-			-	-			
lexachlorobenzene lexachlorobutadiene lexachlorocyclopentadiene lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane lexachlorocthane	11 11 11 11 11 11 11 11 11 11 11 11 11	ND ND ND ND	200 200 200	5.00 10.0 10.0	H H					-	***		(#)	
iexachlorobutadiene lexachlorocyclopentadiene lexachloroethane ndeno (1,2,3-cd) pyrene sophorone -Methylnaphthalene	и и и и	ND ND ND		10.0	H H	. 11								
fexachlorocyclopentadiene fexachloroethane ndeno (1,2,3-cd) pyrene sophorone -Methylnaphthalene	u u u	ND ND ND	222		ű		94		1998	-			30	
fexachloroethane ndeno (1,2,3-cd) pyrene sophorone -Methylnaphthalene	п и и	ND ND		10.0		u			-	-	57	-25	(10.)	
ndeno (1,2,3-cd) pyrene sophorone -Methylnaphthalene		ND			W.	H.			1000			177	.11	
sophorone -Methylnaphthalene	n n			5.00	u		244		100		55		30.	
-Methylnaphthalene	n u		1-44	5.00	11	п				-55		-		
5.65.56		ND		5,00	*	n	) <del></del>	. <del></del>	\$ <b>35</b> 0.		-	7 <u>22</u>	u	
ment ipnerior		ND	-	10.0	u	й	1.77			24		100	6	
-,4-Methylphenol	(6)	ND	(HHH	5.00	н	n	957		-		122		11	
Japhthalene	.0	ND	( <del>sta</del>	5.00	<b>u</b>	и	15 <del>55</del> 0	-		(ARCV)	22	8448	ji	
-Nitroaniline	(10)	ND	-	5.00	ж	30	-		224		322	( <u>44</u> )		
-Nitroaniline	6	ND		10.0	30	30			220	1.001	-	-		
-Nitroaniline		ND	53 ###	10,0	39	30	120		<u> 144</u>			<del></del> 0		
Vitrobenzene	10	ND		5,00	11	u	246	1000	143		3300		'n	
2-Nitrophenol	11	ND		5.00		it	440					<del></del> 77	W	
I-Nitrophenol	**	ND	***	25.0	n	u	-		-			-	(i)	
N-Nitrosodi-n-propylamine	15	ND		10.0		ii.	500	((**)		**			.0	
N-Nitrosodiphenylamine	u	ND	222	5,00	н	ů.	-	**		(77)	25		2007	
Pentachlorophenol	u	ND		10.0	•	11		==1	-		65		(H)	
Phenanthrene	J)	ND	1220	5.00					175		D.E		.0	
Phenol		ND		5.00	п	"		-	1775				и	
Pyrene	n -	ND		5.00		0	-		-	(=0	-		u	
1,2,4-Trichlorobenzene		ND		5.00	100	er.			1.55	-		192	H.	
2,4,5-Trichlorophenol		ND .		5.00	er.	ttc					V2.			
2,4,6-Trichlorophenol	п	ND		5.00	βĒ	u	155			022			16	
Surrogate(s): 2-Fluorobiphenyl		Recovery:	64.0%	Li	imits: 22-120	0% "							09/08/07 12::	57
2-Fluorophenol			69.7%		5-12								,,	
Nitrobenzene-d5			85.5%		26-12	7% "							(H)	
Phenol-d6			81.7%		4-12	1% "							•	
p-Terphenyl-d14			73.3%		37-13	0% "							"	

DRAFT REPORT





PORTLAND, OR

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THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

West Linn, OR 97068

1800 Blankenship Road Suite 440

Project Name:

Crowley

Project Number: Project Manager: 008.205.00007

Steve Hammer

Report Created:

09/24/07 17:22

### DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Bate	h: 7081372	Water I	reparation	Method: 35	20B Liq-I	_iq									
Analyte		Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Note
LCS (7081372	2-BS1)								Ext	acted:	08/29/07 17	:25			
Acenaphthene		EPA 8270C	55.0	-	5.00	ug/l	1x	-	75.0	73.4%	(56-120)			09/08/07 13:40	
4-Chloro-3-methylp	henol	10	94,7		5.00	н	11	-	150	63.2%	(37-131)		-	v	
2-Chlorophenol		N.	102	***	5.00	11	п		и	67.9%	(31-130)			<b>u</b>	-
1,4-Dichlorobenzen	е	0	50.3		5.00	n	10	-	75,0	67.1%	(8-124)			in .	
2,4-Dinitrotoluene		u ·	54.5		5.00	0	w	-	300	72.7%	(50-127)		100	000	
4-Nitrophenol		н	90.4	1000	25.0	и	u	-	150	60.2%	(1-157)		:===	THE	
N-Nitrosodi-n-prop	/lamine	n:	67.5		10.0	ЭН	31	177	75.0	90.0%	(44-129)	-	155	101	
Pentachlorophenol		ME.	100	17703	10,0	.0	ж	175	150	66.8%	(23-149)		100	000	
Phenol		*	89.6		5,00	300	н			59.7%	(1-145)	-	155	(M)	
Pyrene			54.3		5.00	3.907		184	75.0	72.4%	(56-125)			1.00	
1,2,4-Trichlorobenz	ene	v.	52.8	202	5.00		. 0	12	0.	70,5%	(33-116)			in.	
Surrogate(s):	2-Fluorobiphenyl		Recovery:	66.6%	Lin	iits: 22-120%	"							09/08/07 13:40	
Dinvogenetion	2-Fluorophenol		necorety.	65.2%	Lim	5-120%	"							"	
	Nitrohenzene-d5		*	80.8%		26-127%	**							n	
	Phenol-d6			72.8%		4-121%	u							n	
	p-Terphenyl-d14			70.2%		37-130%	и							"	
	2,4,6-Tribromophenol			75.7%		21-129%	п				*			"	
LCS Dup (70	81372-BSD1)								Ext	racted;	08/29/07 1	7:25		=	
Acenaphthene		EPA 8270C	58.7		5.00	ug/l	1x	-	75.0	78.2%	(56-120)	6.40%	6 (50)	09/08/07 14:22	
4-Chloro-3-methylp	henol	н	101	, <del></del> -	5.00	(H)	H	( <del>)  </del>	150	67.2%	(37-131)	6.25%	6 "	200	
2-Chlorophenol		я	103	(222)	5.00	<b>51</b> ()	300	8 <del>55</del> 8	HE.	68.4%	(31-130)	0.7939	/o "	HE.	
1,4-Dichlorobenzen	e	н	49.4	(998)	5.00	000	30	-	75.0	65.8%	(8-124)	1.93%	6 "	HE.	
2,4-Dinitrotoluene		л	59.6		5.00	(10)	:00		16	79.4%	(50-127)	8.86%	6 "	u:	
4-Nitrophenol			107		25.0	192	38.7		150	71.5%	(1-157)	17.19	6 "	m.	
N-Nitrosodi-n-prop	ylamine		70.6	224	10.0			_	75.0	94.2%	(44-129)	4.52%	6 "	н	
Pentachlorophenol		u	106	1000	10.0	0		221	150	70.6%	(23-149)	5.55%	6 "	o	
Phenol			94.4	1202	5.00	h		223	**	63.0%	(1-145)	5.32%	6 "	ŭ	
Pyrene			56.0		5.00	, ii	и		75.0	74.7%	Contractor	3.19%	6 "	U	
1,2,4-Trichlorobenz	ene	i i	54.7	-	5.00	(n)	10		n	72.9%				Ü.	
Surrogate(s):	2-Fluorobiphenyl		Recovery:	68.1%	Lin	nits: 22-120%	u			100 m 100 m				09/08/07 14:22	6
Surrogate(s):	2-Fluorophenol		35	69.0%		5-120%	n							и	
	Nitrohenzene-d5			83.5%		26-127%								( <b>H</b> )	
	Nuronenzene-as														
	Phenol-d6			78.6%		4-121%	"							in .	
						4-121% 37-130%								"	

DRAFT REPORT





PORTLAND, OR

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THE LEADER IN ENVIRONMENTAL TESTING

**SLR-Portland** 

1800 Blankenship Road Suite 440

West Linn, OR 97068

Project Name:

Crowley

Project Number:

008.205.00007

Project Manager:

Steve Hammer

Report Created: 09/24/07 17:22

DRAFT: Semivolatile Organic Compounds per EPA Method 8270C - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 7081433	Soil Prep	paration Meth	nod: EPA	3550										
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7081433-BLK1)								Extra	ncted:	08/30/07 11	:30			
l-Methylnaphthalene	EPA 8270C	ND	1000	0.329	mg/kg wet	1x	-22	22		×	-		09/08/07 22:56	
Acenaphthene	35	ND	V-55-5	0.329	. 10	11			-				08/31/07 12:54	
Acenaphthylene	п	ND		0.329	u		122			144	-		,H.	
Anthracene	u	ND	***	0.329		u	122			(***)		100	THE STATE OF THE S	
Benzo (a) anthracene	311	ND	- 111	0.329	н	ti	788	-	(44)		100	100	н	
Benzo (a) pyrene	3077	ND	220	0,329	u				-	(100)	100	100	311	
Benzo (b) fluoranthene		ND		0.329	**	11	0.00		(88)		100	100	0	22
Benzo (ghi) perylene	ii .	ND	2223	0.329	n.	H ,	( <del>100</del> )				355	1.	300	
Benzo (k) fluoranthene		ND		0.329	0		S##6	100	***	<del></del>	177	8772	( <b>u</b> )	
Benzoic Acid	.0	ND	***	0,996	W.	**	-	-			155	-	1.00	
Benzyl alcohol		ND		0.996	п	"			770	77			ii.	
4-Bromophenyl phenyl ether	41	ND		0,329	w	u	9. <del>73</del> 4	O	===	==			ű.	
Butyl benzyl phthalate	0	ND		0.329	ff	31	777			-			ii.	
4-Chloro-3-methylphenol		ND	1999	0.329	и	31				-			, M	
4-Chloroaniline	и	ND		1.99		35					22	223	W.	
Bis(2-chloroethoxy)methane	100	ND		0.329	н	38 1	440	N <u>292</u> 9	22	d 34		<u> 220</u> )	H	
Bis(2-chloroethyl)ether	1.00	ND	1555	0,329	.0		-	10000	-	22	**			
Bis(2-chloroisopropyl)ether	66	ND		0,329	38	11		× 2221	-			***	21	
2-Chloronaphthalene	<b>u</b>	ND		0.329	u		22			:==				
2-Chlorophenol	10	ND		0.329		u	20	₩.	**	-			10	
4-Chlorophenyl phenyl ether	ж.	ND		0.329	н	и.			186				n	
Chrysene		ND		0.329	w	,,			***	100	177		ш	
Di-n-butyl phthalate	Ü	ND		0.996				<del></del>	( <del>***</del>	<del>ात्रत</del>		-	ж	
Di-n-octyl phthalate	H-	ND		0.329	n	10	-	<del></del> -	1	6 <b>77</b> 6			30 (	
Dibenzo (a,h) anthracene	•	ND		0.329	u	•			c <del>as</del> c	S== 1	170	-55	(00)	
Dibenzofuran	•	ND	( and a	0.329		- 11	1.55			-	155	-	300	
1,2-Dichlorobenzene	9	ND	::===	0.996	THE STREET	W	155	==	11.00	70 11 <del>77</del> 0		-	.0	
1,3-Dichlorobenzene		ND	***	0.996	2.00	Œ	8,000	-	U.57 (		-	3	11	
1,4-Dichlorobenzene		ND	***	0.996	и		( <del>55</del> )			+	922	122		
3,3'-Dichlorobenzidine	**	ND	****	0.996	0.	u.	-				7 <u>2</u> 2		u	
2,4-Dichlorophenol	0	ND		0.329	uc	311				227	1000	-	n.	
Diethyl phthalate	100	ND	<del>555</del> 8	0,329	и	м	-	122	22	200	-	· -	ū.	
2,4-Dimethylphenol	∂ <b>n</b> ⊖	ND	557	0.996		20		102		24	1024	-	п	
Dimethyl phthalate	, we	ND		0.329		n	528		-	22	X-	0 #1	9	
4,6-Dinitro-2-methylphenol	300	ND		0.996	n	u	227	-			-	-	W	
2,4-Dinitrophenol	36	ND		1.99	10		22	8441	-	**	-		"	
2,4-Dinitrotoluene	316	ND		0.498	ÿ.	0		1			-		"	
2,6-Dinitrotoluene	. 11	ND		0.498		n							9	
Bis(2-ethylhexyl)phthalate	7. <b>4</b> 0.2	ND	222	1.99	'n								n	

DRAFT REPORT

