SLR

January 28, 2008

Mr. Paul Skyllingstad
Hydrogeologist
Washington State Department of Ecology
P.O. Box 47706
Olympia, WA 98504-7706

RE: Additional Soil Sampling Conducted on December 20, 2007
Former Columbia Marine Lines Facility
6305 Lower River Road, Vancouver, Washington

Dear Paul:

On behalf of Crowley Maritime Corporation, SLR International Corp coordinated a Geoprobe soil sampling event on December 20, 2007 at the Former Columbia Marine Lines Facility located at 6305 Lower River Road, Vancouver, Washington. This letter summarizes the purpose, methods and procedures, and results of the soil sampling event.

PURPOSE

Soil sampling was completed to obtain additional total petroleum hydrocarbon (TPH) fractionation data for use in developing cleanup levels at the site. The sample locations were selected to coincide with locations of higher concentrations of TPH based on historical sampling, to provide representative fractionation data of the composition of the TPH.

DECEMBER 20, 2007 GEOPROBE EVENT

Eight temporary Geoprobe borings (GPF-1 to GPF-8) were completed on December 20, 2007 to collect soil samples for laboratory analysis. Geoprobe services were provided by Cascade Drilling of Portland, Oregon using a track-mounted Geoprobe rig. Approximate boring locations are depicted on **Figure 1**. Samples were shipped to Environmental Science Corp (ESC) of Juliet, Tennessee for analysis.

The Geoprobe borings were advanced from the ground surface through the fill sand and into the native silt. The total depth of these borings ranged from 15 to 20 feet. The borings were completed as continuous-core borings allowing for visual inspection of the recovered soil. Samples were collected from each boring location from the soil in the core that exhibited the highest apparent impact by petroleum hydrocarbons, based on field observations.

Description of Geology

The site is located within the Columbia River Basin within about 600 feet of the Columbia River. Geologic units identified on or adjacent to the site include:

- Fill soils: In general, the uppermost soils at this site are fill soils that range from about 2 to 17 feet in thickness. Fill soils generally consist of very loose to very dense fine to medium sand (dredge sands) with no (or trace) silt.

- Fine-grained native soils: These soils formed the original surface soils beneath the site. These soils include silty sands, silts, fine sandy silts, clayey silts, and clays. In general, these soils consist of fluvial silts and fine sandy silts. These fine-grained native soils are apparently at least 20 feet thick beneath all areas of the site, and extend above and below the typical (non-flood) stage of the adjacent Colombia River. These soils are consistently reported to contain traces of organic material or woody debris.

- Coarse-grained native soils: These soils include fluvial sands, gravelly sands, and sandy gravels. Site investigations have defined dense to very dense fine to medium sand directly beneath the fine-grained native soils at MW 20. Investigations at a neighboring site indicate that fine to medium sands occur at elevations between mean sea level (0) and about -70 feet, and are underlain by at least 20 feet of sandy gravels.

The original (pre-fill) site topography is not known; however, data suggest that one or more swales were present beneath the site. The infiltration ponds were excavated into fill soils. The bases of the infiltration ponds were generally at or near the base of the fill. After use, the ponds were filled with dredge sand type soils.

The soils observed in the borings conducted on December 20, 2007 generally reflect these conditions. Unconsolidated sand with organic material, including wood debris, was observed from ground surface to 12 to 18 feet. The sand was underlain by the fine grained native soils. In those borings in which evidence of hydrocarbon was detected, the hydrocarbon impacts generally began at approximately 8 to 12 feet bgs and extended to the top of the silt.

Samples Collected

All work at the site was conducted in accordance with the Site-Specific Health and Safety Plan.

Soil samples were collected continuously to characterize stratigraphy. Samples were screened for visual evidence of staining and for odor and also with a photoionization detector (PID). For

borings in which hydrocarbon was observed, the portion of the sample where petroleum was most evident was collected into sample jars for analysis by Ecology's Extractable Petroleum Hydrocarbon (EPH) and using EPA Method 5035 soil core samplers for Volatile Petroleum Hydrocarbon (VPH) analyses.

Remaining impacted soil was collected into additional sample jars or EPA 5035 soil core samplers (as applicable) for analysis of total petroleum hydrocarbons as diesel (NWTPH-Dx) without silica gel cleanup; NWTPH-Dx with silica gel cleanup; benzene, toluene, ethylbenzene, xylenes, naphthalene, 1-methyl naphthalene, 2-methyl naphthalene, n-hexane, MTBE, and 1,2-dichloroethane (EDC) by EPA Method 8260C; and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270SIM. Soil boring logs including lithologic descriptions and field screening results are included in **Attachment 1** to this letter.

Samples were collected from 6 of the 8 borings. Samples were not collected from GPF-4 and GPF-7 due to there being no observable evidence of petroleum impacts in either sample. Samples were packed in a cooler, placed on ice, and dropped off at the laboratory's shipping location in Vancouver, Washington. The laboratory's representative re-packed the samples for shipment to the laboratory. All sample handling was conducted under established chain-of-custody protocols.

Soil borings were abandoned with bentonite chips after sampling was completed.

Analytical Results

The results of the analysis are summarized in **Table 1** and **Table 2**. Laboratory analytical reports are included in **Attachment 2** to this letter.

The TPH-Dx results with silica gel cleanup ranged from 22 milligrams per kilogram (mg/kg) to 4,000 mg/kg. To evaluate the amount of polar, biogenic material being identified as TPH-Dx in the samples, the extract used to analyze for TPH-Dx was treated with a silica gel cleanup and then re-analyzed for TPH-Dx. The results of the analyses following silica gel cleanup were 39% to 68% of the results without silica gel cleanup, indicating that there was a significant non-petroleum component to the TPH-Dx (i.e. 32% to 61% of the material detected by the test without silica gel cleanup was polar, biogenic material removed with silica gel cleanup). **Table 1** presents a comparison of the soil TPH results with and without silica gel cleanup. Site soils have historically exhibited high levels of organics and woody debris, and it was expected that the silica gel cleanup would result in lower TPH-Dx results.

CONCLUSIONS

Six soil samples were collected for analysis by:

- TPH-Dx without silica gel cleanup
- TPH-Dx with silica gel cleanup
- EPH/VPH
- BTEX, naphthalene, 1-methyl naphthalene, 2-methyl naphthalene, n-hexane, MTBE, and EDC
- PAHs

The results from these samples are suitable for use in the MTCATPH spreadsheet for the calculation of cleanup levels for soil, and they will be used for the development of cleanup standards in a Focused Feasibility Study Report. Additionally, the results show that 30% to 60% of the TPH-Dx identified in soil samples is due to polar, biogenic material and is not related petroleum hydrocarbons.

If you have any questions about the results of this sampling event, please contact us at (503) 723-4423.

Sincerely,

SLR International Corp

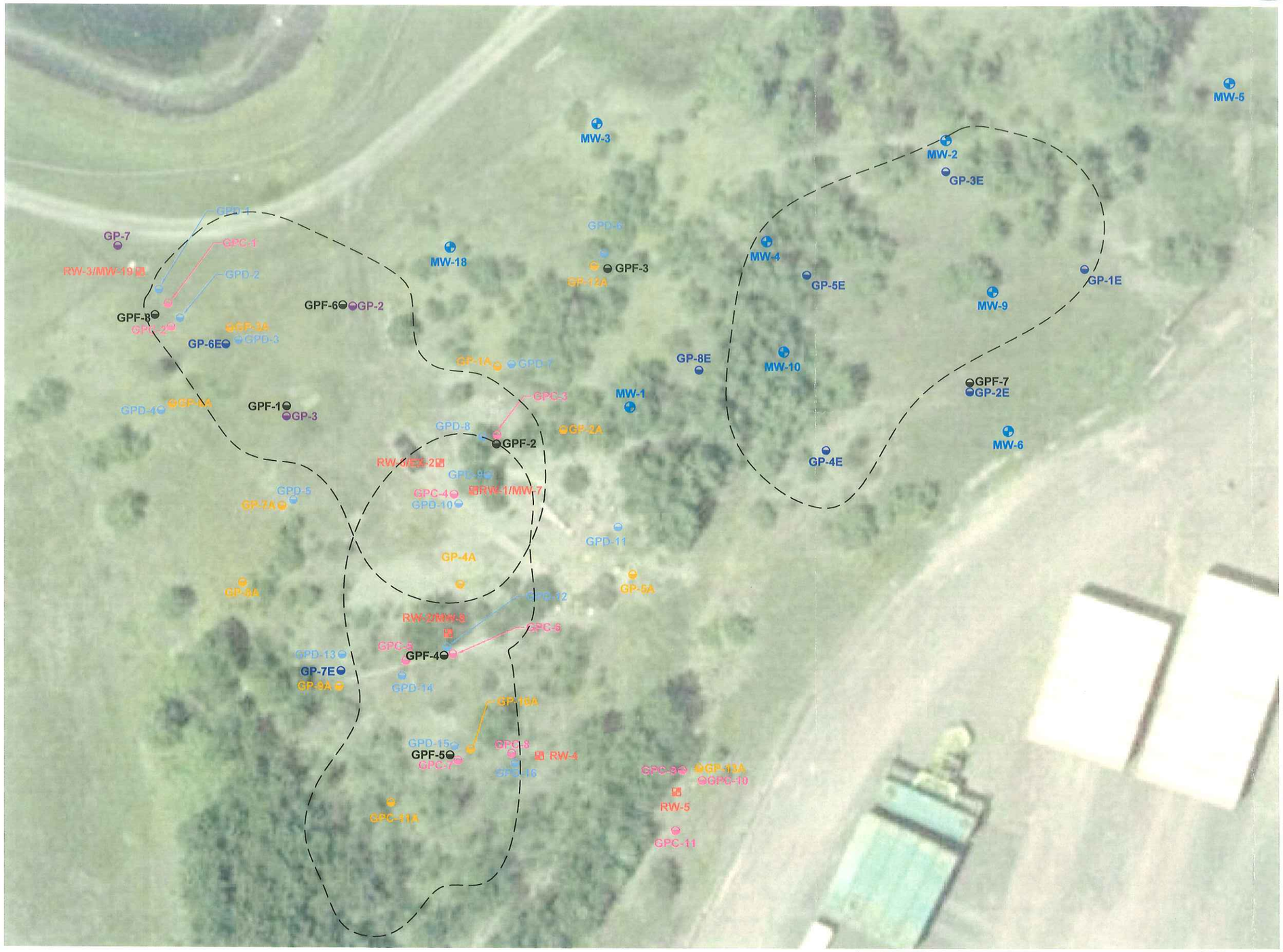
Steven R. Hammer, P.E.
Senior Chemical Engineer

Steven E. Locke, P.E.
Principal Chemical Engineer

cc: Stephen Wilson, Crowley Marin Services

Attachment

FIGURE



LEGEND

- GROUNDWATER MONITORING WELL
- EXTRACTION WELL
- GEOPROBE BORING (MAY 1999)
- GEOPROBE BORING (SEPTEMBER 1999)
- GEOPROBE BORING (JANUARY 2002)
- GEOPROBE BORING (MAY 2005)
- GEOPROBE BORING (AUGUST 2007)
- GEOPROBE BORING (DECEMBER 2007)
- APPROX. LOCATIONS OF FORMER PONDS

N

0 40 80

SCALE IN FEET

SLR International Corp
1800 Blankenship Road
Suite 440
West Linn, OR 97068
T: 503-723-4423
F: 503-723-4436

DATE 01/08
DWN. EMG
APPR. ____
REVIS. ____
PROJECT NO.
008.0205.00007

FIGURE 1
FORMER COLUMBIA MARINE LINES FACILITY
6305 LOWER RIVER ROAD
VANCOUVER, WASHINGTON

SOIL BORING LOCATION MAP

TABLES

Table 1. Soil Analytical Data
Former Columbia Marine Lines Facility
6305 Lower River Road, Vancouver, Washington

Sample Location	Depth (feet bgs)	Sample Date	TPH-Dx Without Silica Gel Cleanup		TPH-Dx With Silica Gel Cleanup			Total of EPH/VPH Analysis	BTEX (mg/Kg)			
			Diesel (mg/Kg)	Heavy Oil (mg/Kg)	Diesel (mg/Kg)	With Silica Gel / Without Silica Gel	Heavy Oil (mg/Kg)		Benzene	Toluene	Ethyl-benzene	Total Xylenes
GPF-1	14.0	12/20/2007	**22**	**6.9**	**8.6**	39%	<5	**5,034**	<0.00032	<0.0012	**0.00049**	**0.0016**
GPF-2	13.5	12/21/2007	**1,500**	<100	**940**	63%	<100	**4,377**	<0.00032	**0.0029**	**0.0017**	**0.0047**
GPF-3	12.5	12/22/2007	**590**	<50	**220**	37%	<50	**490**	<0.015	<0.056	<0.010	<0.021
GPF-5	14.0	12/23/2007	**4,000**	**360**	**2,700**	68%	<250	**2,700**	<0.00032	<0.0012	<0.00023	<0.00046
GPF-6	14.0	12/24/2007	**2,100**	**210**	**920**	44%	<50	**4,418**	<0.180	<0.690	<0.130	<0.26
GPF-8	14.0	12/25/2007	**2,900**	**190**	**1,300**	45%	<50	**1,497**	<0.016	<0.059	**0.014**	<0.022

NOTES

TPH-G = Total petroleum hydrocarbons as gasoline analysis by Washington DOE Method WTPH-G or by Northwest Method NWTPH-G; results in milligrams per kilogram (mg/Kg).

TPH-D = TPH as diesel analysis by Washington DOE Method WTPH-D or by Northwest Method NWTPH-D with silica gel cleanup analysis based on possible biogenic intererence; results in mg/Kg.

TPH-O = TPH as heavy oil analysis by Washington DOE Method WTPH-D or by Northwest Method NWTPH-D with silica gel cleanup analysis based on possible biogenic intererence; results in mg/Kg.

EPH = Extractable Petroleum Hydrocarbons by Washington DOE Method.

VPH = Volatile Petroleum Hydrocarbons by Washington DOE Method.

BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260C

Bold Detected above the method reporting limit.

< Not detected above the indicated detection limit.

Table 2. EPH/VPH, PAH, and VOC Analytical Results
Former Columbia Marine Lines Facility
6305 Lower River Road, Vancouver, Washington

Test	Chemical	GPF-1-1207 (mg/kg)	GPF-2-1207 (mg/kg)	GPF-3-1207 (mg/kg)	GPF-5-1207 (mg/kg)	GPF-6-1207 (mg/kg)	GPF-8-1207 (mg/kg)
EPH	AL_EC>5-6	--	--	--	--	--	--
EPH	AL_EC>6-8	--	--	--	--	--	--
EPH	AL_EC>8-10	**73**	**24**	**1.2**	**7.7**	**29**	**14**
EPH	AL_EC>10-12	**520**	**200**	**19**	**91**	**170**	**160**
EPH	AL_EC>12-16	**1400**	**550**	**180**	**590**	**400**	**460**
EPH	AL_EC>16-21	**620**	**320**	**140**	**420**	**170**	**160**
EPH	AL_EC>21-34	**80**	**66**	**42**	**47**	**24**	**33**
EPH	AR_EC>8-10	**1.25**	**1.75**	**1.2**	**1.2**	**4.1**	**1.2**
EPH	AR_EC>10-12	**49**	**160**	**1.2**	**8.8**	**160**	**24**
EPH	AR_EC>12-16	**320**	**840**	**3.4**	**150**	**660**	**120**
EPH	AR_EC>16-21	**420**	**1500**	**41**	**340**	**800**	**120**
EPH	AR_EC>21-34	**60**	**420**	**25**	**35**	**130**	**24**
VPH	AL_EC>5-6	**6**	**10.5**	**4.8**	**6**	**4.8**	**5.5**
VPH	AL_EC>6-8	**51**	**10.5**	**4.8**	**6**	**110**	**5.5**
VPH	AL_EC>8-10	**73**	**10.5**	**4.8**	**6**	**95**	**5.5**
VPH	AL_EC>10-12	**190**	**10.5**	**4.8**	**6**	**160**	**35**
VPH	AL_EC>12-16	--	--	--	--	--	--
VPH	AL_EC>16-21	--	--	--	--	--	--
VPH	AL_EC>21-34	--	--	--	--	--	--
VPH	AR_EC>8-10	**220**	**35**	**4.8**	**47**	**340**	**54**
VPH	AR_EC>10-12	**540**	**98**	**4.8**	**350**	**790**	**150**
VPH	AR_EC>12-13	**410**	**90**	**4.8**	**350**	**360**	**120**
VPH	AR_EC>16-21	--	--	--	--	--	--
VPH	AR_EC>21-34	--	--	--	--	--	--
VOC 8260B	Benzene	<0.00032	<0.00032	<0.015	<0.00032	<0.180	<0.016
VOC 8260B	Toluene	<0.0012	**0.0029**	<0.056	<0.0012	<0.690	<0.059
VOC 8260B	Ethylbenzene	**0.00049**	**0.0017**	<0.010	<0.00023	<0.130	**0.014**
VOC 8260B	Xylenes	**0.0016**	**0.0047**	<0.021	<0.00046	<0.26	<0.022
PAH 8270M-SIM	Naphthalene	**0.01**	**1.0**	**0.16**	**0.16**	**0.46**	**0.086**
PAH 8270M-SIM	1-Methyl Naphthalene	**0.23**	**17**	**1.3**	**7.2**	**7.8**	**3.8**
PAH 8270M-SIM	2-Methyl Naphthalene	<0.0012	**1.8**	**0.077**	**0.08**	**0.06**	**0.044**
VOC 8260B	n-Hexane	<0.0033	**0.011**	<0.15	<0.0033	<1.9	<0.16
VOC 8260B	MTBE	<0.00028	<0.0028	<0.013	<0.00028	<0.16	<0.014
VOC 8260B	Ethylene Dibromide (EDB)	--	--	--	--	--	--
VOC 8260B	1,2 Dichloroethane	<0.00053	<0.00053	<0.024	<0.00053	<0.300	<0.026
PAH 8270M-SIM	Benzo(a)anthracene	**0.0084**	**0.29**	**0.084**	**0.13**	**0.048**	**0.033**
PAH 8270M-SIM	Benzo(b)fluoranthene	**0.0054**	**0.18**	**0.084**	**0.091**	**0.028**	<0.011
PAH 8270M-SIM	Benzo(k)fluoranthene	**0.0015**	**0.053**	**0.023**	**0.032**	**0.0073**	<0.0047
PAH 8270M-SIM	Benzo(a)pyrene	**0.0031**	**0.14**	**0.06**	**0.066**	**0.021**	**0.012**
PAH 8270M-SIM	Chrysene	**0.01**	**0.44**	**0.098**	**0.16**	**0.074**	**0.042**
PAH 8270M-SIM	Dibenzo(a,h)anthracene	<0.00093	<0.019	**0.015**	<0.019	<0.0093	<0.0093
PAH 8270M-SIM	Indeno(1,2,3-cd)pyrene	**0.0016**	**0.064**	**0.031**	**0.031**	<0.011	<0.011
PAH 8270M-SIM	Acenaphthene	**0.019**	**0.83**	**0.043**	**1.1**	**0.38**	**0.2**
PAH 8270M-SIM	Acenaphthylene	**0.004**	**0.18**	**0.0083**	**0.23**	**0.084**	**0.042**
PAH 8270M-SIM	Anthracene	**0.012**	**0.74**	**0.074**	**1.4**	**0.24**	**0.15**
PAH 8270M-SIM	Benzo(ghi)perylene	**0.0023**	**0.092**	**0.04**	**0.044**	**0.016**	<0.011
PAH 8270M-SIM	Fluoranthene	**0.05**	**0.92**	**0.22**	**0.42**	**0.13**	**0.052**
PAH 8270M-SIM	Fluorene	**0.026**	**1.8**	**0.059**	**1.9**	**0.72**	**0.31**
PAH 8270M-SIM	Phenanthrene	**0.05**	**3.5**	**0.12**	**4.9**	**1.2**	**0.63**
PAH 8270M-SIM	Pyrene	**0.047**	**0.99**	**0.24**	**0.64**	**0.18**	**0.12**

NOTES
Bold = Indicates the compound was detected in the sample.
-- = Not analyzed.

ATTACHMENT 1

SOIL BORING LOGS

Project: Crowley - Vancouver		Boring/Well Name: GPF-1
Boring Location: GPF-1	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 915	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 925	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
		50	0 0 0		0 5	SP		SAND (SP): brown, moist, poorly graded, medium dense, no hydrocarbon odor. 5mm dark organic layer at 4' bgs	
		50	1.1 4.2 18		10	SP		SAND (SP): brown, moist, poorly graded, medium dense, hydrocarbon odor	
			30			SP		SAND (SP): gray, moist, poorly graded, dense, strong hydrocarbon odor, wood waste debris	
GPF-1-13 @ 930		50	6 18 30		15	SM		Silty SAND (SM): moist, poorly graded, dense, very strong hydrocarbon odor	
					20			Boring abandoned @ 15' with bentonite	

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-2
Boring Location: GPF-2	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 945	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 950	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
			0		0				
			0						
		50	0			SP		SAND (SP): Brown, moist, poorly graded, medium dense, no hydrocarbon odor.	
			0		5				
			0						
		50							
			0						
			20		10	O		ORGANICS (O): Layer of brown to black wood waste, hydrocarbon odor	
								SAND (SP): brown to gray, moist, poorly graded, dense, few wood debris, hydrocarbon odor	
		50	60			SP			
GPF-2-12 @ 1000			15		15	SM		Silty SAND (SM): gray, wet @ 14.5' bgs, dense, hydrocarbon odor	
								Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-3
Boring Location: GPF-3	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1005	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1010	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
			0		0				
		40	0						
			0		5	SP		SAND (SP): Brown to gray, moist, poorly graded, moist, loose, hydrocarbon odor from 8 - 12' bgs.	
		40	0						
GPF-3-11 @ 1020			0		10				
			2.5						
		40	10			SM		SAND (SP): gray, poorly graded, moist, medium dense, hydrocarbon odor and sheen	
			12						
			1.5		15			SAND (SP): gray to brown, poorly graded, moist, medium dense, very slight hydrocarbon odor	
			1.4					SAND (SP): brown, poorly graded, moist, medium dense, hydrocarbon odor	
		50	4.4						
			2.6					SILT (ML): gray to brown, moist, medium stiff, some fine sand	
					20			Boring abandoned @ 20' with bentonite	

Depth of Boring (bgs): 20	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-4
Boring Location: GPF-4	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1015	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1020	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
		40	0		0	SP		SAND (SP): Brown, poorly graded, dry, very loose	
								SAND (SP): Brown, poorly graded, damp, trace minor constituents (1-2 mm), loose	
		40			5	SP		SAND (SP): Brown, damp, trace organics (5-15mm), no hydrocarbon odor	
					10	SP		SAND (SP): brown, moist, medium dense, poorly graded	
		40				SP		SAND (SP): brown, dry, loose, poorly graded, organic chunks (5-15mm)	
						SM		Silty SAND (SM): moist, brown to gray, medium dense	
			0		15	SM		Silty SAND (SM): moist, brown to gray, dense, no hydrocarbon odor	
								No sample collected from GPF-4 Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-5
Boring Location: GPF-5	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1035	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1040	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
		30	0		0	SP		SAND (SP): brown, poorly graded, damp, medium dense, no hydrocarbon odor, thin brown organic layer @ 7' bgs	
			0		5				
		40	1.7			SP		SAND (SP): brown, poorly graded, medium dense, damp, hydrocarbon odor	
			10		10	SM		Silty SAND (SM): gray, poorly graded, medium dense, hydrocarbon odor	
GPF-5-13 @1100		40	1.1			SP		SAND (SP): brown, moist, dense, slight hydrocarbon odor	
			6.2		15	SM		Silty SAND (SM): gray, moist, dense, hydrocarbon odor	
								Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-6
Boring Location: GPF-6	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1055	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1100	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
			1.5		0	SP		SAND (SP): brown, damp, poorly graded, medium dense, slight hydrocarbon odor	
		50	1.8						
			2			SP		SAND (SP): brown to gray, moist, poorly graded	
			2.5		5	SP		SAND (SP): brown, dry, poorly graded, medium dense	
						SP		SAND (SP): brown, moist, medium dense, slight hydrocarbon odor, poorly graded	
			3.7						
		60	7.4			SP		SAND (SP): gray, moist, medium dense, hydrocarbon odor, poorly graded	
			19.1						
			5.1		10				
			13.8			SP		SAND (SP): brown, moist, medium dense, hydrocarbon odor, poorly graded	
		75							
GPF-6-13 @1120			34.1			SM		SAND (SP): gray, moist, medium dense, strong hydrocarbon odor, poorly graded	
			14.1		15				
								Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-7
Boring Location: GPF-7	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1120	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1125	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment or Well Construction Details
		30	0		0	SP		SAND (SP): brown, moist, poorly graded, little organic debris (2-20mm)	
		40			5	SP		SAND (SP): gray to brown, poorly graded, wet, medium dense, no hydrocarbon odor	
		75	0		10	ML		SILT (ML): gray, stiff, wet	
					15			No sample collected from GPF-7 Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

Project: Crowley - Vancouver		Boring/Well Name: GPF-8
Boring Location: GPF-8	Job #: 008.0205.00007	
Drilling Company: Cascade	Logged by: Chris Lee	
Equipment: Geoprobe Track Rig	Start Date/Time: 12/20/07 1145	
Sampling Method: Geoprobe	Finish Date/Time: 12/20/07 1150	
Hammer Weight:	Monitoring Device: PID	
Screened Interval (bgs):	First Water (bgs):	

Sample I.D.	Sample Interval	Recovery (%)	PID (ppm)	Blow Counts	Depth (feet bgs)	USCS Code	Graphic Log	Lithologic Description	Boring Abandonment Details
			0		0				
		40	0			SP		SAND (SP): Brown, poorly graded, few fines, medium dense, few minor organics, moist. Slight hydrocarbon odor (increasing with depth)	
			0		5				
			32.9						
		50							
			36.4		10				
			49.1			SP		SAND (SP): Brown, poorly graded, few fines, medium dense, few minor organics, moist, gray to brown. Strong hydrocarbon odor with sheen	
		75							
			23.5						
			60.7						
GPF-8-13 @ 1200			56.7		15				
								Boring abandoned @ 15' with bentonite	
					20				

Depth of Boring (bgs): 15	Filter Pack:
Depth of Well (bgs):	Annulus Seal:
	Surface Seal:

ATTACHMENT 2

LABORATORY ANALYTICAL REPORTS

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Report Summary

Monday January 07, 2008

Report Number: L325166
Samples Received: 12/21/07
Client Project: Crowley

Description: 008.0205.00007

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

Date Received : December 21, 2007
Description : 008.0205.00007

Sample ID : GPF-1-1207 13-15FT

Collected By : C. Lee
Collection Date : 12/20/07 09:30

ESC Sample # : L325166-01

Site ID :

Project # : Crowley

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	74.0			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.00032	0.0014	mg/kg		8260B	01/02/08	1
Toluene	U	0.0012	0.0068	mg/kg		8260B	01/02/08	1
Ethylbenzene	0.00049	0.00023	0.0014	mg/kg	J	8260B	01/02/08	1
Xylenes, Total	0.0016	0.00046	0.0040	mg/kg	J	8260B	01/02/08	1
n-Hexane	U	0.0033	0.014	mg/kg		8260B	01/02/08	1
Naphthalene	U	0.00040	0.0068	mg/kg		8260B	01/02/08	1
Methyl tert-butyl ether	U	0.00028	0.0014	mg/kg		8260B	01/02/08	1
1,2-Dibromoethane	U	0.00032	0.0014	mg/kg		8260B	01/02/08	1
1,2-Dichloroethane	U	0.00053	0.0014	mg/kg		8260B	01/02/08	1
Surrogate Recovery								
Toluene-d8	117.			% Rec.		8260B	01/02/08	1
Dibromofluoromethane	110.			% Rec.		8260B	01/02/08	1
4-Bromofluorobenzene	156.			% Rec.	J1	8260B	01/02/08	1
Diesel Range Organics (DRO)	22.	2.0	5.4	mg/kg		NWTPHDX	12/23/07	1
Residual Range Organics (RRO)	6.9	5.0	14.	mg/kg	J	NWTPHDX	12/23/07	1
Surrogate Recovery								
o-Terphenyl	54.6			% Rec.		NWTPHDX	12/23/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.012	0.00077	0.0081	mg/kg		8270C-SI	01/04/08	1
Acenaphthene	0.019	0.0016	0.0081	mg/kg		8270C-SI	01/04/08	1
Acenaphthylene	0.0040	0.0011	0.0081	mg/kg	J	8270C-SI	01/04/08	1
Benzo(a)anthracene	0.0084	0.0011	0.0081	mg/kg		8270C-SI	01/04/08	1
Benzo(a)pyrene	0.0031	0.00083	0.0081	mg/kg	J	8270C-SI	01/04/08	1
Benzo(b)fluoranthene	0.0054	0.0011	0.0081	mg/kg	JJ3	8270C-SI	01/04/08	1
Benzo(g,h,i)perylene	0.0023	0.0011	0.0081	mg/kg	J	8270C-SI	01/04/08	1
Benzo(k)fluoranthene	0.0015	0.00047	0.0081	mg/kg	J	8270C-SI	01/04/08	1
Chrysene	0.010	0.00063	0.0081	mg/kg		8270C-SI	01/04/08	1
Dibenz(a,h)anthracene	U	0.00093	0.0081	mg/kg		8270C-SI	01/04/08	1
Fluoranthene	0.050	0.00081	0.0081	mg/kg		8270C-SI	01/04/08	1
Fluorene	0.026	0.0018	0.0081	mg/kg		8270C-SI	01/04/08	1
Indeno(1,2,3-cd)pyrene	0.0016	0.0011	0.0081	mg/kg	J	8270C-SI	01/04/08	1
Naphthalene	0.010	0.00088	0.0081	mg/kg		8270C-SI	01/04/08	1
Phenanthrene	0.050	0.00079	0.0081	mg/kg		8270C-SI	01/04/08	1
Pyrene	0.047	0.00060	0.0081	mg/kg		8270C-SI	01/04/08	1
1-Methylnaphthalene	0.23	0.00071	0.0081	mg/kg		8270C-SI	01/04/08	1
2-Methylnaphthalene	U	0.0012	0.0081	mg/kg		8270C-SI	01/04/08	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-01 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

ESC Sample # : L325166-01

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-1-1207 13-15FT

Project # : Crowley

Collected By : C. Lee
Collection Date : 12/20/07 09:30

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.011	0.044	mg/kg		8270C-SI	01/04/08	1
Surrogate Recovery								
Nitrobenzene-d5	82.1			% Rec.		8270C-SI	01/04/08	1
2-Fluorobiphenyl	61.5			% Rec.		8270C-SI	01/04/08	1
p-Terphenyl-d14	47.8			% Rec.	J2	8270C-SI	01/04/08	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-01 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

ESC Sample # : L325166-02

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-2-1207 12-15FT

Project # : Crowley

Collected By : C. Lee
Collection Date : 12/20/07 10:00

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	72.0			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.00032	0.0014	mg/kg		8260B	01/02/08	1
Toluene	0.0029	0.0012	0.0069	mg/kg	J	8260B	01/02/08	1
Ethylbenzene	0.0017	0.00023	0.0014	mg/kg		8260B	01/02/08	1
Xylenes, Total	0.0047	0.00046	0.0042	mg/kg		8260B	01/02/08	1
n-Hexane	0.011	0.0033	0.014	mg/kg	J	8260B	01/02/08	1
Naphthalene	U	0.00040	0.0069	mg/kg		8260B	01/02/08	1
Methyl tert-butyl ether	U	0.00028	0.0014	mg/kg		8260B	01/02/08	1
1,2-Dibromoethane	U	0.00032	0.0014	mg/kg		8260B	01/02/08	1
1,2-Dichloroethane	U	0.00053	0.0014	mg/kg		8260B	01/02/08	1
Surrogate Recovery								
Toluene-d8	134.			% Rec.	J1	8260B	01/02/08	1
Dibromofluoromethane	108.			% Rec.		8260B	01/02/08	1
4-Bromofluorobenzene	499.			% Rec.	J1	8260B	01/02/08	1
Diesel Range Organics (DRO)	1500	40.	110	mg/kg		NWTPHDX	12/24/07	20
Residual Range Organics (RRO)	U	100	280	mg/kg		NWTPHDX	12/24/07	20
Surrogate Recovery								
o-Terphenyl	0.00			% Rec.	J7	NWTPHDX	12/24/07	20
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.74	0.015	0.17	mg/kg		8270C-SI	01/04/08	20
Acenaphthene	0.83	0.032	0.17	mg/kg		8270C-SI	01/04/08	20
Acenaphthylene	0.18	0.022	0.17	mg/kg		8270C-SI	01/04/08	20
Benzo(a)anthracene	0.29	0.022	0.17	mg/kg		8270C-SI	01/04/08	20
Benzo(a)pyrene	0.14	0.017	0.17	mg/kg	J	8270C-SI	01/04/08	20
Benzo(b)fluoranthene	0.18	0.023	0.17	mg/kg	J3	8270C-SI	01/04/08	20
Benzo(g,h,i)perylene	0.092	0.022	0.17	mg/kg	J	8270C-SI	01/04/08	20
Benzo(k)fluoranthene	0.053	0.0094	0.17	mg/kg	J	8270C-SI	01/04/08	20
Chrysene	0.44	0.013	0.17	mg/kg		8270C-SI	01/04/08	20
Dibenz(a,h)anthracene	U	0.019	0.17	mg/kg		8270C-SI	01/04/08	20
Fluoranthene	0.92	0.016	0.17	mg/kg		8270C-SI	01/04/08	20
Fluorene	1.8	0.036	0.17	mg/kg		8270C-SI	01/04/08	20
Indeno(1,2,3-cd)pyrene	0.064	0.021	0.17	mg/kg	J	8270C-SI	01/04/08	20
Naphthalene	1.0	0.018	0.17	mg/kg		8270C-SI	01/04/08	20
Phenanthrene	3.5	0.016	0.17	mg/kg		8270C-SI	01/04/08	20
Pyrene	0.99	0.012	0.17	mg/kg		8270C-SI	01/04/08	20
1-Methylnaphthalene	17.	0.014	0.17	mg/kg		8270C-SI	01/04/08	20
2-Methylnaphthalene	1.8	0.024	0.17	mg/kg		8270C-SI	01/04/08	20

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-02 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 07,2008

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

ESC Sample # : L325166-02

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-2-1207 12-15FT

Project # : Crowley

Collected By :
Collection Date : 12/20/07 10:00

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.22	0.92	mg/kg		8270C-SI	01/04/08	20
Surrogate Recovery								
Nitrobenzene-d5	0.00			% Rec.	J7	8270C-SI	01/04/08	20
2-Fluorobiphenyl	0.00			% Rec.	J7	8270C-SI	01/04/08	20
p-Terphenyl-d14	0.00			% Rec.	J7	8270C-SI	01/04/08	20

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-02 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

Date Received : December 21, 2007
Description : 008.0205.00007

ESC Sample # : L325166-03

Sample ID : GPF-3-1207 11-14FT

Site ID :

Collected By :
Collection Date : 12/20/07 10:20

Project # : Crowley

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	81.6			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.015	0.056	mg/kg	O	8260B	01/02/08	46
Toluene	U	0.056	0.28	mg/kg	O	8260B	01/02/08	46
Ethylbenzene	U	0.010	0.056	mg/kg	O	8260B	01/02/08	46
Xylenes, Total	U	0.021	0.17	mg/kg	O	8260B	01/02/08	46
n-Hexane	U	0.15	0.56	mg/kg	O	8260B	01/02/08	46
Naphthalene	U	0.018	0.28	mg/kg	O	8260B	01/02/08	46
Methyl tert-butyl ether	U	0.013	0.056	mg/kg	O	8260B	01/02/08	46
1,2-Dibromoethane	U	0.014	0.056	mg/kg	O	8260B	01/02/08	46
1,2-Dichloroethane	U	0.024	0.056	mg/kg	O	8260B	01/02/08	46
Surrogate Recovery								
Toluene-d8	110.			% Rec.		8260B	01/02/08	46
Dibromofluoromethane	103.			% Rec.		8260B	01/02/08	46
4-Bromofluorobenzene	147.			% Rec.	J1	8260B	01/02/08	46
Diesel Range Organics (DRO)	590	20.	49.	mg/kg		NWTPHDX	12/24/07	10
Residual Range Organics (RRO)	U	50.	120	mg/kg		NWTPHDX	12/24/07	10
Surrogate Recovery								
o-Terphenyl	77.7			% Rec.		NWTPHDX	12/24/07	10
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.074	0.00077	0.0074	mg/kg		8270C-SI	01/04/08	1
Acenaphthene	0.043	0.0016	0.0074	mg/kg		8270C-SI	01/04/08	1
Acenaphthylene	0.0083	0.0011	0.0074	mg/kg		8270C-SI	01/04/08	1
Benzo(a)anthracene	0.084	0.0011	0.0074	mg/kg		8270C-SI	01/04/08	1
Benzo(a)pyrene	0.060	0.00083	0.0074	mg/kg		8270C-SI	01/04/08	1
Benzo(b)fluoranthene	0.084	0.0011	0.0074	mg/kg	J3	8270C-SI	01/04/08	1
Benzo(g,h,i)perylene	0.040	0.0011	0.0074	mg/kg		8270C-SI	01/04/08	1
Benzo(k)fluoranthene	0.023	0.00047	0.0074	mg/kg		8270C-SI	01/04/08	1
Chrysene	0.098	0.00063	0.0074	mg/kg		8270C-SI	01/04/08	1
Dibenz(a,h)anthracene	0.015	0.00093	0.0074	mg/kg		8270C-SI	01/04/08	1
Fluoranthene	0.22	0.00081	0.0074	mg/kg		8270C-SI	01/04/08	1
Fluorene	0.059	0.0018	0.0074	mg/kg		8270C-SI	01/04/08	1
Indeno(1,2,3-cd)pyrene	0.031	0.0011	0.0074	mg/kg		8270C-SI	01/04/08	1
Naphthalene	0.16	0.00088	0.0074	mg/kg		8270C-SI	01/04/08	1
Phenanthrene	0.12	0.00079	0.0074	mg/kg		8270C-SI	01/04/08	1
Pyrene	0.24	0.00060	0.0074	mg/kg		8270C-SI	01/04/08	1
1-Methylnaphthalene	1.3	0.00071	0.0074	mg/kg		8270C-SI	01/04/08	1
2-Methylnaphthalene	0.077	0.0012	0.0074	mg/kg		8270C-SI	01/04/08	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-03 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-03 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 07,2008

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

ESC Sample # : L325166-03

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-3-1207 11-14FT

Project # : Crowley

Collected By :
Collection Date : 12/20/07 10:20

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.011	0.040	mg/kg		8270C-SI	01/04/08	1
Surrogate Recovery								
Nitrobenzene-d5	2460			% Rec.	J1	8270C-SI	01/04/08	1
2-Fluorobiphenyl	103.			% Rec.		8270C-SI	01/04/08	1
p-Terphenyl-d14	64.8			% Rec.		8270C-SI	01/04/08	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-03 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-03 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

Date Received : December 21, 2007
Description : 008.0205.00007

ESC Sample # : L325166-04

Sample ID : GPF-5-1207 13-15FT

Site ID :

Collected By :
Collection Date : 12/20/07 11:00

Project # : Crowley

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	90.2			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.00032	0.0011	mg/kg		8260B	01/03/08	1
Toluene	U	0.0012	0.0055	mg/kg		8260B	01/03/08	1
Ethylbenzene	U	0.00023	0.0011	mg/kg		8260B	01/03/08	1
Xylenes, Total	U	0.00046	0.0033	mg/kg		8260B	01/03/08	1
n-Hexane	U	0.0033	0.011	mg/kg	J3	8260B	01/03/08	1
Naphthalene	U	0.00040	0.0055	mg/kg		8260B	01/03/08	1
Methyl tert-butyl ether	U	0.00028	0.0011	mg/kg		8260B	01/03/08	1
1,2-Dibromoethane	U	0.00032	0.0011	mg/kg		8260B	01/03/08	1
1,2-Dichloroethane	U	0.00053	0.0011	mg/kg		8260B	01/03/08	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/03/08	1
Dibromofluoromethane	106.			% Rec.		8260B	01/03/08	1
4-Bromofluorobenzene	103.			% Rec.		8260B	01/03/08	1
Diesel Range Organics (DRO)	4000	20.	44.	mg/kg		NWTPHDX	12/24/07	10
Residual Range Organics (RRO)	360	50.	110	mg/kg		NWTPHDX	12/24/07	10
Surrogate Recovery								
o-Terphenyl	130.			% Rec.		NWTPHDX	12/24/07	10
Polynuclear Aromatic Hydrocarbons								
Anthracene	1.4	0.015	0.13	mg/kg		8270C-SI	01/04/08	20
Acenaphthene	1.1	0.032	0.13	mg/kg		8270C-SI	01/04/08	20
Acenaphthylene	0.23	0.022	0.13	mg/kg		8270C-SI	01/04/08	20
Benzo(a)anthracene	0.13	0.022	0.13	mg/kg		8270C-SI	01/04/08	20
Benzo(a)pyrene	0.066	0.017	0.13	mg/kg	J	8270C-SI	01/04/08	20
Benzo(b)fluoranthene	0.091	0.023	0.13	mg/kg	JJ3	8270C-SI	01/04/08	20
Benzo(g,h,i)perylene	0.044	0.022	0.13	mg/kg	J	8270C-SI	01/04/08	20
Benzo(k)fluoranthene	0.032	0.0094	0.13	mg/kg	J	8270C-SI	01/04/08	20
Chrysene	0.16	0.013	0.13	mg/kg		8270C-SI	01/04/08	20
Dibenz(a,h)anthracene	U	0.019	0.13	mg/kg		8270C-SI	01/04/08	20
Fluoranthene	0.42	0.016	0.13	mg/kg		8270C-SI	01/04/08	20
Fluorene	1.9	0.036	0.13	mg/kg		8270C-SI	01/04/08	20
Indeno(1,2,3-cd)pyrene	0.031	0.021	0.13	mg/kg	J	8270C-SI	01/04/08	20
Naphthalene	0.16	0.018	0.13	mg/kg		8270C-SI	01/04/08	20
Phenanthrene	4.9	0.016	0.13	mg/kg		8270C-SI	01/04/08	20
Pyrene	0.64	0.012	0.13	mg/kg		8270C-SI	01/04/08	20
1-Methylnaphthalene	7.2	0.014	0.13	mg/kg		8270C-SI	01/04/08	20
2-Methylnaphthalene	0.080	0.024	0.13	mg/kg	J	8270C-SI	01/04/08	20

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-04 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 07,2008

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

ESC Sample # : L325166-04

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-5-1207 13-15FT

Project # : Crowley

Collected By :
Collection Date : 12/20/07 11:00

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.22	0.73	mg/kg		8270C-SI	01/04/08	20
Surrogate Recovery								
Nitrobenzene-d5	0.00			% Rec.	J7	8270C-SI	01/04/08	20
2-Fluorobiphenyl	0.00			% Rec.	J7	8270C-SI	01/04/08	20
p-Terphenyl-d14	0.00			% Rec.	J7	8270C-SI	01/04/08	20

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-04 (MISC-SUB) - subcontracted to Analytical Resources Inc

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

Date Received : December 21, 2007
Description : 008.0205.00007

ESC Sample # : L325166-05

Sample ID : GPF-6-1207 13-15FT

Site ID :

Collected By :
Collection Date : 12/20/07 11:20

Project # : Crowley

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	94.1			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.18	0.60	mg/kg	O	8260B	01/02/08	570
Toluene	U	0.69	3.0	mg/kg	O	8260B	01/02/08	570
Ethylbenzene	U	0.13	0.60	mg/kg	O	8260B	01/02/08	570
Xylenes, Total	U	0.26	1.8	mg/kg	O	8260B	01/02/08	570
n-Hexane	U	1.9	6.0	mg/kg	O	8260B	01/02/08	570
Naphthalene	U	0.23	3.0	mg/kg	O	8260B	01/02/08	570
Methyl tert-butyl ether	U	0.16	0.60	mg/kg	O	8260B	01/02/08	570
1,2-Dibromoethane	U	0.18	0.60	mg/kg	O	8260B	01/02/08	570
1,2-Dichloroethane	U	0.30	0.60	mg/kg	O	8260B	01/02/08	570
Surrogate Recovery								
Toluene-d8	110.			% Rec.		8260B	01/02/08	570
Dibromofluoromethane	104.			% Rec.		8260B	01/02/08	570
4-Bromofluorobenzene	110.			% Rec.		8260B	01/02/08	570
Diesel Range Organics (DRO)	2100	10.	21.	mg/kg		NWTPHDX	12/26/07	5
Residual Range Organics (RRO)	210	25.	53.	mg/kg		NWTPHDX	12/26/07	5
Surrogate Recovery								
o-Terphenyl	79.7			% Rec.		NWTPHDX	12/26/07	5
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.24	0.0077	0.064	mg/kg		8270C-SI	01/04/08	10
Acenaphthene	0.38	0.016	0.064	mg/kg		8270C-SI	01/04/08	10
Acenaphthylene	0.084	0.011	0.064	mg/kg		8270C-SI	01/04/08	10
Benzo(a)anthracene	0.048	0.011	0.064	mg/kg	J	8270C-SI	01/04/08	10
Benzo(a)pyrene	0.021	0.0083	0.064	mg/kg	J	8270C-SI	01/04/08	10
Benzo(b)fluoranthene	0.028	0.011	0.064	mg/kg	JJ3	8270C-SI	01/04/08	10
Benzo(g,h,i)perylene	0.016	0.011	0.064	mg/kg	J	8270C-SI	01/04/08	10
Benzo(k)fluoranthene	0.0073	0.0047	0.064	mg/kg	J	8270C-SI	01/04/08	10
Chrysene	0.074	0.0063	0.064	mg/kg		8270C-SI	01/04/08	10
Dibenz(a,h)anthracene	U	0.0093	0.064	mg/kg		8270C-SI	01/04/08	10
Fluoranthene	0.13	0.0081	0.064	mg/kg		8270C-SI	01/04/08	10
Fluorene	0.72	0.018	0.064	mg/kg		8270C-SI	01/04/08	10
Indeno(1,2,3-cd)pyrene	U	0.011	0.064	mg/kg		8270C-SI	01/04/08	10
Naphthalene	0.46	0.0088	0.064	mg/kg		8270C-SI	01/04/08	10
Phenanthrene	1.2	0.0079	0.064	mg/kg		8270C-SI	01/04/08	10
Pyrene	0.18	0.0060	0.064	mg/kg		8270C-SI	01/04/08	10
1-Methylnaphthalene	7.8	0.0071	0.064	mg/kg		8270C-SI	01/04/08	10
2-Methylnaphthalene	0.060	0.012	0.064	mg/kg	J	8270C-SI	01/04/08	10

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-05 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-05 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 07,2008

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

ESC Sample # : L325166-05

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-6-1207 13-15FT

Project # : Crowley

Collected By :
Collection Date : 12/20/07 11:20

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.11	0.35	mg/kg		8270C-SI	01/04/08	10
Surrogate Recovery								
Nitrobenzene-d5	3090			% Rec.	J1	8270C-SI	01/04/08	10
2-Fluorobiphenyl	61.8			% Rec.		8270C-SI	01/04/08	10
p-Terphenyl-d14	46.5			% Rec.	J2	8270C-SI	01/04/08	10

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-05 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-05 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

January 07,2008

Date Received : December 21, 2007
Description : 008.0205.00007

ESC Sample # : L325166-06

Sample ID : GPF-8-1207 13-15FT

Site ID :

Collected By :
Collection Date : 12/20/07 12:00

Project # : Crowley

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Miscellaneous	U		See Atta				12/24/07	1
Total Solids	90.7			%		2540G	12/31/07	1
Volatile Organics								
Benzene	U	0.016	0.054	mg/kg		8260B	01/03/08	49
Toluene	U	0.059	0.27	mg/kg		8260B	01/03/08	49
Ethylbenzene	0.014	0.011	0.054	mg/kg	J	8260B	01/03/08	49
Xylenes, Total	U	0.022	0.16	mg/kg		8260B	01/03/08	49
n-Hexane	U	0.16	0.54	mg/kg	J3	8260B	01/03/08	49
Naphthalene	U	0.019	0.27	mg/kg		8260B	01/03/08	49
Methyl tert-butyl ether	U	0.014	0.054	mg/kg		8260B	01/03/08	49
1,2-Dibromoethane	U	0.015	0.054	mg/kg		8260B	01/03/08	49
1,2-Dichloroethane	U	0.026	0.054	mg/kg		8260B	01/03/08	49
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	01/03/08	49
Dibromofluoromethane	103.			% Rec.		8260B	01/03/08	49
4-Bromofluorobenzene	116.			% Rec.		8260B	01/03/08	49
Diesel Range Organics (DRO)	2900	10.	22.	mg/kg		NWTPHDX	12/26/07	5
Residual Range Organics (RRO)	190	25.	55.	mg/kg		NWTPHDX	12/26/07	5
Surrogate Recovery								
o-Terphenyl	128.			% Rec.		NWTPHDX	12/26/07	5
Polynuclear Aromatic Hydrocarbons								
Anthracene	0.15	0.0077	0.066	mg/kg		8270C-SI	01/04/08	10
Acenaphthene	0.20	0.016	0.066	mg/kg		8270C-SI	01/04/08	10
Acenaphthylene	0.042	0.011	0.066	mg/kg	J	8270C-SI	01/04/08	10
Benzo(a)anthracene	0.033	0.011	0.066	mg/kg	J	8270C-SI	01/04/08	10
Benzo(a)pyrene	0.012	0.0083	0.066	mg/kg	J	8270C-SI	01/04/08	10
Benzo(b)fluoranthene	U	0.011	0.066	mg/kg	J3	8270C-SI	01/04/08	10
Benzo(g,h,i)perylene	U	0.011	0.066	mg/kg		8270C-SI	01/04/08	10
Benzo(k)fluoranthene	U	0.0047	0.066	mg/kg		8270C-SI	01/04/08	10
Chrysene	0.042	0.0063	0.066	mg/kg	J	8270C-SI	01/04/08	10
Dibenz(a,h)anthracene	U	0.0093	0.066	mg/kg		8270C-SI	01/04/08	10
Fluoranthene	0.052	0.0081	0.066	mg/kg	J	8270C-SI	01/04/08	10
Fluorene	0.31	0.018	0.066	mg/kg		8270C-SI	01/04/08	10
Indeno(1,2,3-cd)pyrene	U	0.011	0.066	mg/kg		8270C-SI	01/04/08	10
Naphthalene	0.086	0.0088	0.066	mg/kg		8270C-SI	01/04/08	10
Phenanthrene	0.63	0.0079	0.066	mg/kg		8270C-SI	01/04/08	10
Pyrene	0.12	0.0060	0.066	mg/kg		8270C-SI	01/04/08	10
1-Methylnaphthalene	3.8	0.0071	0.066	mg/kg		8270C-SI	01/04/08	10
2-Methylnaphthalene	0.044	0.012	0.066	mg/kg	J	8270C-SI	01/04/08	10

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-06 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-06 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 07,2008

Steve Hammer
SLR International Corp.
1800 Blankenship Road, Suite 440
West Linn, OR 97068

ESC Sample # : L325166-06

Date Received : December 21, 2007
Description : 008.0205.00007

Site ID :

Sample ID : GPF-8-1207 13-15FT

Project # : Crowley

Collected By :
Collection Date : C. Lee
12/20/07 12:00

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
2-Chloronaphthalene	U	0.11	0.36	mg/kg		8270C-SI	01/04/08	10
Surrogate Recovery								
Nitrobenzene-d5	1530			% Rec.	J1	8270C-SI	01/04/08	10
2-Fluorobiphenyl	45.3			% Rec.		8270C-SI	01/04/08	10
p-Terphenyl-d14	48.8			% Rec.	J2	8270C-SI	01/04/08	10

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:

The reported analytical results relate only to the sample submitted
Reported: 01/07/08 16:42 Printed: 01/07/08 16:52
L325166-06 (MISC-SUB) - subcontracted to Analytical Resources Inc
L325166-06 (V8260HEX) - Non-target compounds too high to run at a lower dilution.

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L325166-01	Residual Range Organics (RRO)	J
	Acenaphthylene	J
	Benzo(a)pyrene	J
	Benzo(b)fluoranthene	JJ3
	Benzo(g,h,i)perylene	J
	Benzo(k)fluoranthene	J
	Indeno(1,2,3-cd)pyrene	J
	p-Terphenyl-d14	J2
	Ethylbenzene	J
	Xylenes, Total	J
L325166-02	4-Bromofluorobenzene	J1
	o-Terphenyl	J7
	Benzo(a)pyrene	J
	Benzo(b)fluoranthene	J3
	Benzo(g,h,i)perylene	J
	Benzo(k)fluoranthene	J
	Indeno(1,2,3-cd)pyrene	J
	Nitrobenzene-d5	J7
	2-Fluorobiphenyl	J7
	p-Terphenyl-d14	J7
	Toluene	J
	n-Hexane	J
	Toluene-d8	J1
L325166-03	4-Bromofluorobenzene	J1
	Benzo(b)fluoranthene	J3
	Nitrobenzene-d5	J1
	Benzene	O
	Toluene	O
	Ethylbenzene	O
	Xylenes, Total	O
	n-Hexane	O
	Naphthalene	O
	Methyl tert-butyl ether	O
	1,2-Dibromoethane	O
	1,2-Dichloroethane	O
	4-Bromofluorobenzene	J1
L325166-04	Benzo(a)pyrene	J
	Benzo(b)fluoranthene	JJ3
	Benzo(g,h,i)perylene	J
	Benzo(k)fluoranthene	J
	Indeno(1,2,3-cd)pyrene	J
	2-Methylnaphthalene	J
	Nitrobenzene-d5	J7
	2-Fluorobiphenyl	J7
	p-Terphenyl-d14	J7
	n-Hexane	J3
L325166-05	Benzo(a)anthracene	J
	Benzo(a)pyrene	J
	Benzo(b)fluoranthene	JJ3
	Benzo(g,h,i)perylene	J
	Benzo(k)fluoranthene	J
	2-Methylnaphthalene	J
	Nitrobenzene-d5	J1
	p-Terphenyl-d14	J2
	Benzene	O
	Toluene	O
	Ethylbenzene	O
	Xylenes, Total	O
	n-Hexane	O
	Naphthalene	O
	Methyl tert-butyl ether	O
	1,2-Dibromoethane	O
	1,2-Dichloroethane	O
L325166-06	Acenaphthylene	J
	Benzo(a)anthracene	J
	Benzo(a)pyrene	J
	Benzo(b)fluoranthene	J3
	Chrysene	J
	Fluoranthene	J

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
	2-Methylnaphthalene	J
	Nitrobenzene-d5	J1
	p-Terphenyl-d14	J2
	Ethylbenzene	J
	n-Hexane	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/07/08 at 16:52:51

TSR Signing Reports: 134
R5 - Desired TAT

Refer client to Accounting.

Sample: L325166-01 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954
Sample: L325166-02 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954
Sample: L325166-03 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954
Sample: L325166-04 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954
Sample: L325166-05 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954
Sample: L325166-06 Account: SLRWLOR Received: 12/21/07 09:00 Due Date: 12/31/07 00:00 RPT Date: 01/07/08 16:42
Stir bars preserved with DI water. Need to freeze. MISC-Sub - VPH/EPH sent directly to sub lab,
ARI. PO#S9954

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

SLR International Corp.
Steve Hammer
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Quality Assurance Report
Level II

L325166

January 07, 2008

Laboratory Blank

Analyte	Result	Units	Date Analyzed	Batch
Total Solids	< .1	%	12/31/07 14:53	WG337496
1,2-Dibromoethane	< .001	mg/kg	01/02/08 10:17	WG338024
1,2-Dichloroethane	< .001	mg/kg	01/02/08 10:17	WG338024
Benzene	< .001	mg/kg	01/02/08 10:17	WG338024
Ethylbenzene	< .001	mg/kg	01/02/08 10:17	WG338024
Methyl tert-butyl ether	< .001	mg/kg	01/02/08 10:17	WG338024
n-Hexane	< .01	mg/kg	01/02/08 10:17	WG338024
Naphthalene	< .005	mg/kg	01/02/08 10:17	WG338024
Toluene	< .005	mg/kg	01/02/08 10:17	WG338024
Xylenes, Total	< .003	mg/kg	01/02/08 10:17	WG338024
1,2-Dibromoethane	< .001	mg/kg	01/03/08 12:51	WG338211
1,2-Dichloroethane	< .001	mg/kg	01/03/08 12:51	WG338211
Benzene	< .001	mg/kg	01/03/08 12:51	WG338211
Ethylbenzene	< .001	mg/kg	01/03/08 12:51	WG338211
Methyl tert-butyl ether	< .001	mg/kg	01/03/08 12:51	WG338211
n-Hexane	< .01	mg/kg	01/03/08 12:51	WG338211
Naphthalene	< .005	mg/kg	01/03/08 12:51	WG338211
Toluene	< .005	mg/kg	01/03/08 12:51	WG338211
Xylenes, Total	< .003	mg/kg	01/03/08 12:51	WG338211
1-Methylnaphthalene	< .33	ppm	01/04/08 09:41	WG338243
2-Chloronaphthalene	< .33	ppm	01/04/08 09:41	WG338243
2-Methylnaphthalene	< .33	ppm	01/04/08 09:41	WG338243
Acenaphthene	< .33	ppm	01/04/08 09:41	WG338243
Acenaphthylene	< .33	ppm	01/04/08 09:41	WG338243
Anthracene	< .33	ppm	01/04/08 09:41	WG338243
Benzo(a)anthracene	< .33	ppm	01/04/08 09:41	WG338243
Benzo(a)pyrene	< .33	ppm	01/04/08 09:41	WG338243
Benzo(b)fluoranthene	< .33	ppm	01/04/08 09:41	WG338243
Benzo(g,h,i)perylene	< .33	ppm	01/04/08 09:41	WG338243
Benzo(k)fluoranthene	< .33	ppm	01/04/08 09:41	WG338243
Chrysene	< .33	ppm	01/04/08 09:41	WG338243
Dibenz(a,h)anthracene	< .33	ppm	01/04/08 09:41	WG338243
Fluoranthene	< .33	ppm	01/04/08 09:41	WG338243
Fluorene	< .33	ppm	01/04/08 09:41	WG338243
Indeno(1,2,3-cd)pyrene	< .33	ppm	01/04/08 09:41	WG338243
Naphthalene	< .33	ppm	01/04/08 09:41	WG338243
Phenanthrene	< .33	ppm	01/04/08 09:41	WG338243
Pyrene	< .33	ppm	01/04/08 09:41	WG338243

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	77.8	78.7	1.20	5	L325175-02	WG337496

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	50.0	100.	85-115	WG337496
1,2-Dibromoethane	mg/kg	.05	0.0543	109.	64-129	WG338024
1,2-Dichloroethane	mg/kg	.05	0.0505	101.	55-139	WG338024
Benzene	mg/kg	.05	0.0481	96.1	65-123	WG338024
Ethylbenzene	mg/kg	.05	0.0506	101.	69-124	WG338024
Methyl tert-butyl ether	mg/kg	.05	0.0503	101.	56-132	WG338024
n-Hexane	mg/kg	.05	0.0520	104.	66-148	WG338024
Naphthalene	mg/kg	.05	0.0392	78.3	63-146	WG338024
Toluene	mg/kg	.05	0.0473	94.7	69-120	WG338024

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

SLR International Corp.
Steve Hammer
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Quality Assurance Report
Level II

L325166

January 07, 2008

Xylenes, Total	mg/kg	.15	0.151	101.	69-126	WG338024

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,2-Dibromoethane	mg/kg	.05	0.0576	115.	64-129	WG338211
1,2-Dichloroethane	mg/kg	.05	0.0546	109.	55-139	WG338211
Benzene	mg/kg	.05	0.0539	108.	65-123	WG338211
Ethylbenzene	mg/kg	.05	0.0558	112.	69-124	WG338211
Methyl tert-butyl ether	mg/kg	.05	0.0560	112.	56-132	WG338211
n-Hexane	mg/kg	.05	0.0576	115.	66-148	WG338211
Naphthalene	mg/kg	.05	0.0544	109.	63-146	WG338211
Toluene	mg/kg	.05	0.0522	104.	69-120	WG338211
Xylenes, Total	mg/kg	.15	0.166	110.	69-126	WG338211
1-Methylnaphthalene	ppm	.1667	0.110	65.8	41-122	WG338243
2-Chloronaphthalene	ppm	.033	0.0217	65.7	47-128	WG338243
2-Methylnaphthalene	ppm	.1667	0.105	63.1	41-119	WG338243
Acenaphthene	ppm	.033	0.0225	68.2	56-125	WG338243
Acenaphthylene	ppm	.033	0.0229	69.5	53-138	WG338243
Anthracene	ppm	.033	0.0236	71.6	57-132	WG338243
Benzo(a)anthracene	ppm	.033	0.0243	73.6	60-119	WG338243
Benzo(a)pyrene	ppm	.033	0.0235	71.1	53-133	WG338243
Benzo(b)fluoranthene	ppm	.033	0.0217	65.8	52-128	WG338243
Benzo(g,h,i)perylene	ppm	.033	0.0252	76.3	50-134	WG338243
Benzo(k)fluoranthene	ppm	.033	0.0253	76.8	53-125	WG338243
Chrysene	ppm	.033	0.0213	64.6	59-124	WG338243
Dibenz(a,h)anthracene	ppm	.033	0.0258	78.3	53-135	WG338243
Fluoranthene	ppm	.033	0.0238	72.2	57-132	WG338243
Fluorene	ppm	.033	0.0246	74.4	60-126	WG338243
Indeno(1,2,3-cd)pyrene	ppm	.033	0.0250	75.9	52-133	WG338243
Naphthalene	ppm	.1667	0.0951	57.1	40-120	WG338243
Phenanthrene	ppm	.033	0.0230	69.6	58-129	WG338243
Pyrene	ppm	.033	0.0214	64.7	60-127	WG338243

Laboratory Control Sample Duplicate

Analyte	Units	LCSD Res	Ref Res	RPD	Limit	%Rec	Batch
1,2-Dibromoethane	mg/kg	0.0523	0.0543	3.75	23	105	WG338024
1,2-Dichloroethane	mg/kg	0.0499	0.0505	1.12	15	100	WG338024
Benzene	mg/kg	0.0476	0.0481	0.895	13	95	WG338024
Ethylbenzene	mg/kg	0.0478	0.0506	5.74	15	96	WG338024
Methyl tert-butyl ether	mg/kg	0.0507	0.0503	0.870	16	101	WG338024
n-Hexane	mg/kg	0.0517	0.0520	0.596	12	103	WG338024
Naphthalene	mg/kg	0.0399	0.0392	1.95	21	80	WG338024
Toluene	mg/kg	0.0466	0.0473	1.47	13	93	WG338024
Xylenes, Total	mg/kg	0.142	0.151	6.26	14	95	WG338024
1,2-Dibromoethane	mg/kg	0.0513	0.0576	11.6	23	103	WG338211
1,2-Dichloroethane	mg/kg	0.0481	0.0546	12.6	15	96	WG338211
Benzene	mg/kg	0.0482	0.0539	11.2	13	96	WG338211
Ethylbenzene	mg/kg	0.0524	0.0558	6.27	15	105	WG338211
Methyl tert-butyl ether	mg/kg	0.0485	0.0560	14.4	16	97	WG338211
n-Hexane	mg/kg	0.0500	0.0576	14.2	12	100	WG338211
Naphthalene	mg/kg	0.0445	0.0544	19.9	21	89	WG338211
Toluene	mg/kg	0.0488	0.0522	6.73	13	98	WG338211
Xylenes, Total	mg/kg	0.154	0.166	7.55	14	102	WG338211
1-Methylnaphthalene	ppm	0.127	0.110	14.3	28	76	WG338243
2-Chloronaphthalene	ppm	0.0243	0.0217	11.4	20	74	WG338243
2-Methylnaphthalene	ppm	0.123	0.105	15.4	27	74	WG338243
Acenaphthene	ppm	0.0236	0.0225	4.87	23	72	WG338243
Acenaphthylene	ppm	0.0238	0.0229	3.57	23	72	WG338243
Anthracene	ppm	0.0260	0.0236	9.47	17	79	WG338243

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

SLR International Corp.
Steve Hammer
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Quality Assurance Report
Level II

L325166

January 07, 2008

Analyte	Units	LCSD Res	Ref Res	RPD	Limit	%Rec	Batch
Benzo(a)anthracene	ppm	0.0257	0.0243	5.72	17	78	WG338243

Laboratory Control Sample Duplicate

Analyte	Units	LCSD Res	Ref Res	RPD	Limit	%Rec	Batch
Benzo(a)pyrene	ppm	0.0267	0.0235	12.9	19	81	WG338243
Benzo(b)fluoranthene	ppm	0.0298	0.0217	31.4	19	90	WG338243
Benzo(g,h,i)perylene	ppm	0.0283	0.0252	11.8	17	86	WG338243
Benzo(k)fluoranthene	ppm	0.0224	0.0253	12.3	18	68	WG338243
Chrysene	ppm	0.0236	0.0213	10.2	17	71	WG338243
Dibenz(a,h)anthracene	ppm	0.0288	0.0258	10.9	17	87	WG338243
Fluoranthene	ppm	0.0262	0.0238	9.49	16	79	WG338243
Fluorene	ppm	0.0248	0.0246	1.07	18	75	WG338243
Indeno(1,2,3-cd)pyrene	ppm	0.0283	0.0250	12.4	16	86	WG338243
Naphthalene	ppm	0.111	0.0951	15.6	27	67	WG338243
Phenanthrene	ppm	0.0241	0.0230	4.77	17	73	WG338243
Pyrene	ppm	0.0230	0.0214	7.25	18	70	WG338243

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2-Dibromoethane	mg/kg	0.249	0.00	.05	99.7	57-120	L325659-30	WG338024
1,2-Dichloroethane	mg/kg	0.211	0.00	.05	84.5	46-147	L325659-30	WG338024
Benzene	mg/kg	0.207	0.00	.05	83.0	54-119	L325659-30	WG338024
Ethylbenzene	mg/kg	0.215	0.00	.05	86.0	47-111	L325659-30	WG338024
Methyl tert-butyl ether	mg/kg	0.232	0.00	.05	92.7	63-131	L325659-30	WG338024
n-Hexane	mg/kg	0.144	0.00	.05	57.8	44-130	L325659-30	WG338024
Naphthalene	mg/kg	0.186	0.00	.05	74.2	33-125	L325659-30	WG338024
Toluene	mg/kg	0.205	0.00	.05	81.8	54-109	L325659-30	WG338024
Xylenes, Total	mg/kg	0.639	0.00	.15	85.2	51-107	L325659-30	WG338024
1,2-Dibromoethane	mg/kg	2.19	0.00	.05	87.5	57-120	L325411-02	WG338211
1,2-Dichloroethane	mg/kg	2.47	0.00	.05	98.7	46-147	L325411-02	WG338211
Benzene	mg/kg	2.37	0.00	.05	94.9	54-119	L325411-02	WG338211
Ethylbenzene	mg/kg	2.97	0.940	.05	81.1	47-111	L325411-02	WG338211
Methyl tert-butyl ether	mg/kg	2.48	0.00	.05	99.4	63-131	L325411-02	WG338211
n-Hexane	mg/kg	2.16	0.00	.05	86.3	44-130	L325411-02	WG338211
Naphthalene	mg/kg	4.27	1.50	.05	111.	33-125	L325411-02	WG338211
Toluene	mg/kg	2.43	0.00	.05	97.0	54-109	L325411-02	WG338211
Xylenes, Total	mg/kg	6.50	0.210	.15	83.9	51-107	L325411-02	WG338211
1-Methylnaphthalene	ppm	0.131	0.00	.1667	78.5	41-122	L325348-01	WG338243
2-Chloronaphthalene	ppm	0.0261	0.00	.033	79.0	47-128	L325348-01	WG338243
2-Methylnaphthalene	ppm	0.130	0.00	.1667	78.0	41-119	L325348-01	WG338243
Acenaphthene	ppm	0.0243	0.00	.033	73.7	56-125	L325348-01	WG338243
Acenaphthylene	ppm	0.0259	0.00	.033	78.6	53-138	L325348-01	WG338243
Anthracene	ppm	0.0270	0.00	.033	81.8	57-132	L325348-01	WG338243
Benzo(a)anthracene	ppm	0.0283	0.00	.033	85.8	60-119	L325348-01	WG338243
Benzo(a)pyrene	ppm	0.0289	0.00	.033	87.5	53-133	L325348-01	WG338243
Benzo(b)fluoranthene	ppm	0.0264	0.00	.033	80.1	52-128	L325348-01	WG338243
Benzo(g,h,i)perylene	ppm	0.0309	0.00	.033	93.7	50-134	L325348-01	WG338243
Benzo(k)fluoranthene	ppm	0.0299	0.00	.033	90.7	53-125	L325348-01	WG338243
Chrysene	ppm	0.0275	0.00	.033	83.2	59-124	L325348-01	WG338243
Dibenz(a,h)anthracene	ppm	0.0315	0.00	.033	95.4	53-135	L325348-01	WG338243
Fluoranthene	ppm	0.0284	0.00	.033	86.1	57-132	L325348-01	WG338243
Fluorene	ppm	0.0268	0.00	.033	81.1	60-126	L325348-01	WG338243
Indeno(1,2,3-cd)pyrene	ppm	0.0312	0.00	.033	94.6	52-133	L325348-01	WG338243
Naphthalene	ppm	0.116	0.00	.1667	69.4	40-120	L325348-01	WG338243
Phenanthrene	ppm	0.0259	0.00	.033	78.4	58-129	L325348-01	WG338243
Pyrene	ppm	0.0253	0.00	.033	76.7	60-127	L325348-01	WG338243

Matrix Spike Duplicate

Analyte	Units	MSD Res	Ref Res	RPD	Limit	%Rec	Ref Samp	Batch

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

SLR International Corp.
Steve Hammer
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Quality Assurance Report
Level II

L325166

January 07, 2008

Analyte	Units	Matrix Spike MSD Res	Duplicate Ref Res	RPD	Limit	%Rec	Ref Samp	Batch
1,2-Dibromoethane	mg/kg	0.240	0.249	3.88	16	95.9	L325659-30	WG338024
1,2-Dichloroethane	mg/kg	0.210	0.211	0.440	14	84.2	L325659-30	WG338024
Benzene	mg/kg	0.209	0.207	0.878	15	83.7	L325659-30	WG338024
Ethylbenzene	mg/kg	0.210	0.215	2.47	20	83.9	L325659-30	WG338024
Methyl tert-butyl ether	mg/kg	0.235	0.232	1.31	13	93.9	L325659-30	WG338024
n-Hexane	mg/kg	0.136	0.144	5.71	32	54.6	L325659-30	WG338024
Naphthalene	mg/kg	0.184	0.186	0.827	22	73.6	L325659-30	WG338024
Toluene	mg/kg	0.204	0.205	0.298	19	81.6	L325659-30	WG338024
Xylenes, Total	mg/kg	0.617	0.639	3.63	19	82.2	L325659-30	WG338024
1,2-Dibromoethane	mg/kg	2.21	2.19	0.778	16	88.2	L325411-02	WG338211
1,2-Dichloroethane	mg/kg	2.44	2.47	1.09	14	97.7	L325411-02	WG338211
Benzene	mg/kg	2.36	2.37	0.687	15	94.2	L325411-02	WG338211
Ethylbenzene	mg/kg	3.00	2.97	1.02	20	82.4	L325411-02	WG338211
Methyl tert-butyl ether	mg/kg	2.47	2.48	0.497	13	98.9	L325411-02	WG338211
n-Hexane	mg/kg	2.12	2.16	1.62	32	84.9	L325411-02	WG338211
Naphthalene	mg/kg	3.99	4.27	6.61	22	99.8	L325411-02	WG338211
Toluene	mg/kg	2.44	2.43	0.540	19	97.6	L325411-02	WG338211
Xylenes, Total	mg/kg	6.57	6.50	1.08	19	84.8	L325411-02	WG338211
1-Methylnaphthalene	ppm	0.109	0.131	18.0	28	65.6	L325348-01	WG338243
2-Chloronaphthalene	ppm	0.0205	0.0261	24.0	20	62.1	L325348-01	WG338243
2-Methylnaphthalene	ppm	0.106	0.130	20.9	27	63.3	L325348-01	WG338243
Acenaphthene	ppm	0.0207	0.0243	15.8	23	62.9	L325348-01	WG338243
Acenaphthylene	ppm	0.0219	0.0259	16.7	23	66.4	L325348-01	WG338243
Anthracene	ppm	0.0228	0.0270	16.9	17	69.1	L325348-01	WG338243
Benzo(a)anthracene	ppm	0.0236	0.0283	18.2	17	71.5	L325348-01	WG338243
Benzo(a)pyrene	ppm	0.0240	0.0289	18.2	17	72.9	L325348-01	WG338243
Benzo(b)fluoranthene	ppm	0.0233	0.0264	12.8	19	70.5	L325348-01	WG338243
Benzo(g,h,i)perylene	ppm	0.0256	0.0309	18.7	17	77.7	L325348-01	WG338243
Benzo(k)fluoranthene	ppm	0.0229	0.0299	26.7	18	69.3	L325348-01	WG338243
Chrysene	ppm	0.0225	0.0275	19.7	17	68.3	L325348-01	WG338243
Dibenz(a,h)anthracene	ppm	0.0260	0.0315	19.0	17	78.8	L325348-01	WG338243
Fluoranthene	ppm	0.0231	0.0284	20.6	16	70.0	L325348-01	WG338243
Fluorene	ppm	0.0228	0.0268	15.9	18	69.2	L325348-01	WG338243
Indeno(1,2,3-cd)pyrene	ppm	0.0259	0.0312	18.8	16	78.3	L325348-01	WG338243
Naphthalene	ppm	0.0953	0.116	19.3	27	57.2	L325348-01	WG338243
Phenanthrene	ppm	0.0233	0.0259	10.6	17	70.5	L325348-01	WG338243
Pyrene	ppm	0.0217	0.0253	15.5	18	65.7	L325348-01	WG338243

Batch number /Run number / Sample number cross reference

WG336795: R346713: L325166-01 02 03 04
WG336828: R347116: L325166-05 06
WG337496: R347603: L325166-01 02 03 04 05 06
WG338024: R347789: L325166-01 02 03 05
WG338211: R348003: L325166-04 06
WG338243: R348011: L325166-01 02 03 04 05 06
WG337417: R348220: L325166-01 02 03 04 05 06

* * Calculations are performed prior to rounding of reported values .

ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

SLR International Corp.
Steve Hammer
1800 Blankenship Road, Suite 440

West Linn, OR 97068

Quality Assurance Report
Level II

L325166

January 07, 2008

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Chain of Custody Page 1 of 1

Company Name/Address
SLR
1800 Blankenship Road
Suite 440
West Linn, OR 97068

Alternate Billing: ESC

Report to: Steve Hammer
E-mail to: shammer@slrcorp.com

Prepared by:
ENVIRONMENTAL Science Corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

Project Description: Crowley
City/State: Vancouver, WA
PHONE: 503-723-4423 FAX:
Client Project No.: 008.0205.00007
Lab Project #:
Collected by: C. Lee
Site/Facility ID#:
P.O.#:
Collected by(signature): [signature]
Rush? (Lab MUST be Notified)
___ Same Day.......200%
___ Next Day........100%
___ Two Day.........50%
Date Results Needed:
Email? __No __Yes
FAX? __No __Yes
Packed on Ice N___ Y X

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Analysis/Container/Preservative: NWTPH Dx; 8270 SIMPAH (lowlevel); 8260/5035 select list; VPH*; EPH*

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	NWTPH Dx	8270 SIMPAH (lowlevel)	8260/5035 select list	VPH*	EPH*	Remarks/contaminant	Sample # (lab only)
GPF-1-1207		Soil	13-15'	12/20/07	930	9	✓	✓	✓	✓	✓		L325166-01
GPF-2-1207		↓	12-15'	↓	1000	↓	↓	↓	↓	↓	↓		02
GPF-3-1207		↓	11-14'	↓	1030	↓	↓	↓	↓	↓	↓		03
GPF-5-1207		↓	13-15'	↓	1100	↓	↓	↓	↓	↓	↓		04
GPF-6-1207		↓	13-15'	↓	1130	↓	↓	↓	↓	↓	↓		05
GPF-8-1207		↓	13-15'	↓	1200	↓	↓	↓	↓	↓	↓		06

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT-Other______

pH______ Temp______
Flow______ Other______

Remarks: * VPH/EPH Direct ship to ALT, Tukwila 9446 7870 2146

Relinquished by:(Signature	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__ Other__		Condition: (lab use only)
[signature]	12-20	200	Carl L. [signature]			OK
Relinquisher by:(Signature) Carl L. [signature]	Date: 12-20	Time: 1400	Received by: (Signature)	Temp: 3.7°C	Bottles Received: 30+16	
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 12/20/07	Time: 9:00	pH Checked: NCF:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

January 7, 2008

Mark Beasley
Environmental Science Corp.
12065 Lebanon Road
Mt. Julient, TN 37122

RE: Project: Crowley
ARI Job No: MD30

Dear Mr. Beasley:

Please find enclosed chain of custody documentation and data report for samples from the project referenced above.

Sample receipt and details of these analyses are discussed in the Case Narrative.

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

Please note that current ARI control limits are available at www.arilabs.com.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan Dunnihoo
Client Service Manager
sue@arilabs.com
206/695-6207

Enclosures

cc: eFile MD30

SD/sdrd

ANALYTICAL
RESOURCES
INCORPORATED

Case Narrative

Client: Environmental Science Corp
Project: Crowley
Matrix: Soil
ARI Job No. MD30

Sample receipt

Analytical Resources, Inc. (ARI) accepted six soil samples and a trip blank on December 21, 2007, at a temperature of 2.0°C measured by IR thermometer following ARI SOP. At the request of ESC, samples were identified by alternate samples IDs from those listed on the COC at receipt.

Volatile Petroleum Hydrocarbons by WDOE VPH

The samples were analyzed within required holding times.

Initial and continuing calibrations were within limits, with exceptions. Closing CCALs for the VPH were high by 6%. Samples were reanalyzed with similar results, indicating matrix effect. No further action was taken.

The method blanks were clean at the reporting limit. The LCS samples were run in duplicate with recoveries and RPDs within limits.

Surrogate recoveries were within limits, with the exception of L325166-05. The sample was rerun at dilution with acceptable recoveries. Outliers are attributed to matrix interference.

All samples required analysis at dilution due to analytes above the calibrated range of the instrument. Both sets of results have been included here.

The MS/MSD had recoveries and RPD within limits.

Extractable Petroleum Hydrocarbons by WDOE EPH

The samples were extracted and analyzed within required holding times.

Initial and continuing calibrations were within limits, with exceptions. The closing CCALs for the EPH aliphatic range C16-C21 was high of limits by 2%, the aromatic range C16-C21 was high by 4%. The outliers were allowed based on the matrix effect exhibited by the VPH analysis.

The method blank was clean at the reporting limit, with exceptions. Low level blank contamination is not unusual at this level of detection. Associated sample results have been "B"-flagged.

LCS recoveries were within limits.

Surrogate recoveries were within limits.

The MS/MSD recoveries could not be calculated, due to high concentrations within the target ranges. RPDs were within limits.

MD 30

Company Name/Address
SLR
1800 Blankenship Road,
Suite 440
West Linn, OR 97068

Alternate Billing
ART

Report to: Steve Hammer
E-mail to: shammer@slrcorp.com

Project Description: Crowley
City/State: Vancouver, WA

PHONE: (503) 723-4423
FAX:
Client Project No. 008.0205.00007
Lab Project #
Collected by: C. Lee
Site/Facility ID#
P.O.#
Collected by(signature):
Packed on Ice N___ Y X

Rush? (Lab MUST be Notified)
_____Same Day.....200%
_____Next Day.....100%
_____Two Day.....50%

Date Results Needed
Email?___No___Yes
FAX?___No___Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	NWTPH-DX	8270 SIM PAH Low level	8260/5035 - Select List	VPH *	EPH *	Remarks/contaminant	Sample # (lab only)
GPF-1-1207		Soil	13-15'	12/20/07	930	9							
GPF-2-1207			12-15'		1000								
GPF-3-1207			11-14'		1020								
GPF-5-1207			13-15'		1100								
GPF-6-1207			13-15'		1120								
GPF-8-1207			13-15'		1200								

Prepared by:
ENVIRONMENTAL Science Corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

Chain of Custody Page 1 of 1

CoCode (lab use only)
Template/Prelogin
Shipped Via

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

Remarks: * VPH/EPH direct ship to ARI, Tukwila

pH_____ Temp_____
Flow_____ Other_____

Relinquisher by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__Other__	Condition (lab use only)
Relinquisher by:(Signature) Carl Lee	Date: 12-20-07	Time: 1600	Received by: (Signature) 12/21/07	Temp	Bottles Received:
Relinquisher by:(Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time: pH Checked: NCF:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: SLR Project Name: Crowley

COC No: _____ Delivered by: FED-EX

Assigned ARI Job No: MD30 Tracking No: _____

Preliminary Examination Phase:

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

Were custody papers included with the cooler? (YES) NO

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

Record cooler temperature (recommended 2.0-6.0 °C for chemistry 2.0 °C

Cooler Accepted by: [signature] Date: 12/21/07 Time: 1145

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ICE

Was sufficient ice used (if appropriate)? (YES) NO

Were all bottles sealed in individual plastic bags? (YES) NO

Did all bottle arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation checklist) YES (NO)

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Samples Logged by: Bob Caple Date: 12/21/07 Time: 1350

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

Explain discrepancies or negative responses:

FedEx

FRI - 21 DEC A1
PRIORITY OVERNIGHT

TRK# 0200 8627 8203 7864

SEA
WA-US
98168

85-BFIA

Part #_156297-435 RITT 11/07

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-01
SAMPLE

Lab Sample ID: MD30A
LIMS ID: 07-27714
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/24/07 23:30
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 20.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1200	< 1,200 U
108-88-3	Toluene	1200	< 1,200 U
100-41-4	**Ethylbenzene**	**1200**	**2,600**
	m,p-Xylene	2500	< 2,500 U
95-47-6	**o-Xylene**	**1200**	**1,300**
1634-04-4	Methyl tert-Butyl Ether	1200	< 1,200 U
109-66-0	n-Pentane	1200	< 1,200 U
110-54-3	n-Hexane	1200	< 1,200 U
111-65-9	**n-Octane**	**1200**	**7,500**
124-18-5	**n-Decane**	**1200**	**6,100**
112-40-3	**n-Dodecane**	**1200**	**12,000**

Range	RL	Result
C8-C10 Aromatics (PID)	**12,000**	**220,000**
C10-C12 Aromatics (PID)	**12,000**	**540,000**
C12-C13 Aromatics (PID)	**12,000**	**410,000**
C5-C6 Aliphatics	12,000	< 12,000 U
C6-C8 Aliphatics	**12,000**	**51,000**
C8-C10 Aliphatics	**12,000**	**73,000**
C10-C12 Aliphatics	**12,000**	**190,000**

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	90.8%
FID: 2,5-Dibromotoluene	92.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-01
DILUTION

Lab Sample ID: MD30A
LIMS ID: 07-27714
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 21:13
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 20.3 mg-dry-wt

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	1200	< 1,200	U
108-88-3	Toluene	1200	< 1,200	U
100-41-4	Ethylbenzene	1200	2,700	
	m,p-Xylene	2500	< 2,500	U
95-47-6	o-Xylene	1200	1,400	
1634-04-4	Methyl tert-Butyl Ether	1200	< 1,200	U
109-66-0	n-Pentane	1200	< 1,200	U
110-54-3	n-Hexane	1200	< 1,200	U
111-65-9	n-Octane	1200	7,600	
124-18-5	n-Decane	1200	5,900	
112-40-3	n-Dodecane	1200	13,000	

Range	RL	Result	
C8-C10 Aromatics (PID)	12,000	220,000	
C10-C12 Aromatics (PID)	12,000	570,000	
C12-C13 Aromatics (PID)	12,000	420,000	
C5-C6 Aliphatics	12,000	< 12,000	U
C6-C8 Aliphatics	12,000	52,000	
C8-C10 Aliphatics	12,000	100,000	
C10-C12 Aliphatics	12,000	180,000	

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	90.4%
FID: 2,5-Dibromotoluene	93.8%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-02
SAMPLE

Lab Sample ID: MD30B
LIMS ID: 07-27715
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/25/07 00:00
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 12.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	2100	< 2,100 U
108-88-3	Toluene	2100	< 2,100 U
100-41-4	Ethylbenzene	2100	< 2,100 U
	m,p-Xylene	4200	< 4,200 U
95-47-6	o-Xylene	2100	< 2,100 U
1634-04-4	Methyl tert-Butyl Ether	2100	< 2,100 U
109-66-0	n-Pentane	2100	< 2,100 U
110-54-3	n-Hexane	2100	< 2,100 U
111-65-9	n-Octane	2100	< 2,100 U
124-18-5	**n-Decane**	**2100**	**3,200**
112-40-3	n-Dodecane	2100	< 2,100 U

Range	RL	Result
C8-C10 Aromatics (PID)	**21,000**	**35,000**
C10-C12 Aromatics (PID)	**21,000**	**98,000**
C12-C13 Aromatics (PID)	**21,000**	**90,000**
C5-C6 Aliphatics	21,000	< 21,000 U
C6-C8 Aliphatics	21,000	< 21,000 U
C8-C10 Aliphatics	21,000	< 21,000 U
C10-C12 Aliphatics	21,000	< 21,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	101%
FID: 2,5-Dibromotoluene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-02
DILUTION

Lab Sample ID: MD30B
LIMS ID: 07-27715
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 17:38
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 12.2 mg-dry-wt

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	2000	< 2,000	U
108-88-3	Toluene	2000	< 2,000	U
100-41-4	Ethylbenzene	2000	< 2,000	U
	m,p-Xylene	4100	< 4,100	U
95-47-6	o-Xylene	2000	< 2,000	U
1634-04-4	Methyl tert-Butyl Ether	2000	< 2,000	U
109-66-0	n-Pentane	2000	< 2,000	U
110-54-3	n-Hexane	2000	< 2,000	U
111-65-9	n-Octane	2000	< 2,000	U
124-18-5	**n-Decane**	**2000**	**2,900**	
112-40-3	**n-Dodecane**	**2000**	**2,900**	

Range	RL	Result	
C8-C10 Aromatics (PID)	**20,000**	**31,000**	
C10-C12 Aromatics (PID)	**20,000**	**93,000**	
C12-C13 Aromatics (PID)	**20,000**	**83,000**	
C5-C6 Aliphatics	20,000	< 20,000	U
C6-C8 Aliphatics	20,000	< 20,000	U
C8-C10 Aliphatics	20,000	< 20,000	U
C10-C12 Aliphatics	**20,000**	**51,000**	

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	101%
FID: 2,5-Dibromotoluene	106%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-03
SAMPLE

Lab Sample ID: MD30C
LIMS ID: 07-27716
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/25/07 00:30
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 26.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	960	< 960 U
108-88-3	Toluene	960	< 960 U
100-41-4	Ethylbenzene	960	< 960 U
	m,p-Xylene	1900	< 1,900 U
95-47-6	o-Xylene	960	< 960 U
1634-04-4	Methyl tert-Butyl Ether	960	< 960 U
109-66-0	n-Pentane	960	< 960 U
110-54-3	n-Hexane	960	< 960 U
111-65-9	n-Octane	960	< 960 U
124-18-5	n-Decane	960	< 960 U
112-40-3	n-Dodecane	960	< 960 U

Range	RL	Result
C8-C10 Aromatics (PID)	9,600	< 9,600 U
C10-C12 Aromatics (PID)	9,600	< 9,600 U
C12-C13 Aromatics (PID)	9,600	< 9,600 U
C5-C6 Aliphatics	9,600	< 9,600 U
C6-C8 Aliphatics	9,600	< 9,600 U
C8-C10 Aliphatics	9,600	< 9,600 U
C10-C12 Aliphatics	9,600	< 9,600 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	113%
FID: 2,5-Dibromotoluene	95.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: L325166-03
DILUTION

Lab Sample ID: MD30C
LIMS ID: 07-27716
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 18:09
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 25.6 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	980	< 980 U
108-88-3	Toluene	980	< 980 U
100-41-4	Ethylbenzene	980	< 980 U
	m,p-Xylene	2000	< 2,000 U
95-47-6	o-Xylene	980	< 980 U
1634-04-4	Methyl tert-Butyl Ether	980	< 980 U
109-66-0	n-Pentane	980	< 980 U
110-54-3	n-Hexane	980	< 980 U
111-65-9	n-Octane	980	< 980 U
124-18-5	n-Decane	980	< 980 U
112-40-3	n-Dodecane	980	< 980 U

Range	RL	Result
C8-C10 Aromatics (PID)	9,800	< 9,800 U
C10-C12 Aromatics (PID)	9,800	< 9,800 U
C12-C13 Aromatics (PID)	**9,800**	**13,000**
C5-C6 Aliphatics	9,800	< 9,800 U
C6-C8 Aliphatics	9,800	< 9,800 U
C8-C10 Aliphatics	9,800	< 9,800 U
C10-C12 Aliphatics	9,800	< 9,800 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	99.2%
FID: 2,5-Dibromotoluene	99.2%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-04
SAMPLE

Lab Sample ID: MD30D
LIMS ID: 07-27717
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/25/07 01:01
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 20.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1200	< 1,200 U
108-88-3	Toluene	1200	< 1,200 U
100-41-4	Ethylbenzene	1200	< 1,200 U
	m,p-Xylene	2500	< 2,500 U
95-47-6	o-Xylene	1200	< 1,200 U
1634-04-4	Methyl tert-Butyl Ether	1200	< 1,200 U
109-66-0	n-Pentane	1200	< 1,200 U
110-54-3	n-Hexane	1200	< 1,200 U
111-65-9	n-Octane	1200	< 1,200 U
124-18-5	**n-Decane**	**1200**	**6,400**
112-40-3	**n-Dodecane**	**1200**	**4,500**

Range	RL	Result
C8-C10 Aromatics (PID)	**12,000**	**47,000**
C10-C12 Aromatics (PID)	**12,000**	**350,000**
C12-C13 Aromatics (PID)	**12,000**	**350,000**
C5-C6 Aliphatics	12,000	< 12,000 U
C6-C8 Aliphatics	12,000	< 12,000 U
C8-C10 Aliphatics	12,000	< 12,000 U
C10-C12 Aliphatics	12,000	< 12,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	91.8%
FID: 2,5-Dibromotoluene	85.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-04
DILUTION

Lab Sample ID: MD30D
LIMS ID: 07-27717
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 21:44
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 19.9 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1300	< 1,300 U
108-88-3	Toluene	1300	< 1,300 U
100-41-4	Ethylbenzene	1300	< 1,300 U
	m,p-Xylene	2500	< 2,500 U
95-47-6	o-Xylene	1300	< 1,300 U
1634-04-4	Methyl tert-Butyl Ether	1300	< 1,300 U
109-66-0	n-Pentane	1300	< 1,300 U
110-54-3	n-Hexane	1300	< 1,300 U
111-65-9	n-Octane	1300	< 1,300 U
124-18-5	**n-Decane**	**1300**	**7,800**
112-40-3	**n-Dodecane**	**1300**	**4,800**

Range	RL	Result
C8-C10 Aromatics (PID)	**13,000**	**56,000**
C10-C12 Aromatics (PID)	**13,000**	**410,000**
C12-C13 Aromatics (PID)	**13,000**	**370,000**
C5-C6 Aliphatics	13,000	< 13,000 U
C6-C8 Aliphatics	13,000	< 13,000 U
C8-C10 Aliphatics	13,000	< 13,000 U
C10-C12 Aliphatics	13,000	< 13,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	90.2%
FID: 2,5-Dibromotoluene	88.2%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-05
SAMPLE

Lab Sample ID: MD30E
LIMS ID: 07-27718
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/25/07 01:31
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 26.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	960	< 960 U
108-88-3	Toluene	960	< 960 U
100-41-4	**Ethylbenzene**	**960**	**4,900**
	m,p-Xylene	1900	< 1,900 U
95-47-6	**o-Xylene**	**960**	**2,300**
1634-04-4	Methyl tert-Butyl Ether	960	< 960 U
109-66-0	n-Pentane	960	< 960 U
110-54-3	n-Hexane	960	< 960 U
111-65-9	**n-Octane**	**960**	**14,000**
124-18-5	**n-Decane**	**960**	**9,300**
112-40-3	**n-Dodecane**	**960**	**14,000**

Range	RL	Result
C8-C10 Aromatics (PID)	9,600	340,000
C10-C12 Aromatics (PID)	9,600	790,000 E
C12-C13 Aromatics (PID)	9,600	360,000 E
C5-C6 Aliphatics	9,600	< 9,600 U
C6-C8 Aliphatics	9,600	110,000
C8-C10 Aliphatics	9,600	95,000
C10-C12 Aliphatics	9,600	160,000

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	55.8%
FID: 2,5-Dibromotoluene	58.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-05
DILUTION

Lab Sample ID: MD30E
LIMS ID: 07-27718
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 19:41
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 2.62 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	9500	< 9,500 U
108-88-3	Toluene	9500	< 9,500 U
100-41-4	Ethylbenzene	9500	< 9,500 U
	m,p-Xylene	19000	< 19,000 U
95-47-6	o-Xylene	9500	< 9,500 U
1634-04-4	Methyl tert-Butyl Ether	9500	< 9,500 U
109-66-0	n-Pentane	9500	< 9,500 U
110-54-3	n-Hexane	9500	< 9,500 U
111-65-9	**n-Octane**	**9500**	**15,000**
124-18-5	**n-Decane**	**9500**	**44,000**
112-40-3	n-Dodecane	9500	< 9,500 U

Range	RL	Result
C8-C10 Aromatics (PID)	**95,000**	**400,000**
C10-C12 Aromatics (PID)	**95,000**	**900,000**
C12-C13 Aromatics (PID)	**95,000**	**620,000**
C5-C6 Aliphatics	95,000	< 95,000 U
C6-C8 Aliphatics	**95,000**	**130,000**
C8-C10 Aliphatics	**95,000**	**180,000**
C10-C12 Aliphatics	**95,000**	**440,000**

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	99.2%
FID: 2,5-Dibromotoluene	110%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-06
SAMPLE

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/25/07 02:02
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 23.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1100	< 1,100 U
108-88-3	Toluene	1100	< 1,100 U
100-41-4	Ethylbenzene	1100	< 1,100 U
	m,p-Xylene	2200	< 2,200 U
95-47-6	o-Xylene	1100	< 1,100 U
1634-04-4	Methyl tert-Butyl Ether	1100	< 1,100 U
109-66-0	n-Pentane	1100	< 1,100 U
110-54-3	n-Hexane	1100	< 1,100 U
111-65-9	n-Octane	1100	< 1,100 U
124-18-5	**n-Decane**	**1100**	**4,000**
112-40-3	n-Dodecane	1100	< 1,100 U

Range	RL	Result
C8-C10 Aromatics (PID)	**11,000**	**54,000**
C10-C12 Aromatics (PID)	**11,000**	**150,000**
C12-C13 Aromatics (PID)	**11,000**	**120,000**
C5-C6 Aliphatics	11,000	< 11,000 U
C6-C8 Aliphatics	11,000	< 11,000 U
C8-C10 Aliphatics	11,000	< 11,000 U
C10-C12 Aliphatics	**11,000**	**35,000**

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	98.6%
FID: 2,5-Dibromotoluene	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-06
DILUTION

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/28/07 18:40
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 22.7 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1100	< 1,100 U
108-88-3	Toluene	1100	< 1,100 U
100-41-4	Ethylbenzene	1100	< 1,100 U
	m,p-Xylene	2200	< 2,200 U
95-47-6	o-Xylene	1100	< 1,100 U
1634-04-4	Methyl tert-Butyl Ether	1100	< 1,100 U
109-66-0	n-Pentane	1100	< 1,100 U
110-54-3	n-Hexane	1100	< 1,100 U
111-65-9	n-Octane	1100	< 1,100 U
124-18-5	**n-Decane**	**1100**	**4,800**
112-40-3	**n-Dodecane**	**1100**	**3,600**

Range	RL	Result
C8-C10 Aromatics (PID)	**11,000**	**42,000**
C10-C12 Aromatics (PID)	**11,000**	**120,000**
C12-C13 Aromatics (PID)	**11,000**	**85,000**
C5-C6 Aliphatics	11,000	< 11,000 U
C6-C8 Aliphatics	11,000	< 11,000 U
C8-C10 Aliphatics	11,000	< 11,000 U
C10-C12 Aliphatics	**11,000**	**52,000**

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	102%
FID: 2,5-Dibromotoluene	110%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: TRIP BLANK SAMPLE

Lab Sample ID: MD30G
LIMS ID: 07-27720
Matrix: Water
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed: 12/24/07 14:22
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	5.0	< 5.0 U
108-88-3	Toluene	5.0	< 5.0 U
100-41-4	Ethylbenzene	5.0	< 5.0 U
	m,p-Xylene	10	< 10 U
95-47-6	o-Xylene	5.0	< 5.0 U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0 U
109-66-0	n-Pentane	5.0	< 5.0 U
110-54-3	n-Hexane	5.0	< 5.0 U
111-65-9	n-Octane	5.0	< 5.0 U
124-18-5	n-Decane	5.0	< 5.0 U
112-40-3	n-Dodecane	5.0	< 5.0 U

Range	RL	Result
C8-C10 Aromatics (PID)	50	< 50 U
C10-C12 Aromatics (PID)	50	< 50 U
C12-C13 Aromatics (PID)	50	< 50 U
C5-C6 Aliphatics	50	< 50 U
C6-C8 Aliphatics	50	< 50 U
C8-C10 Aliphatics	50	< 50 U
C10-C12 Aliphatics	50	< 50 U

Values reported in µg/L (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	115%
FID: 2,5-Dibromotoluene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: MB-122407
METHOD BLANK

Lab Sample ID: MB-122407
LIMS ID: 07-27714
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Analyzed: 12/24/07 12:27
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 55.6 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	450	< 450 U
108-88-3	Toluene	450	< 450 U
100-41-4	Ethylbenzene	450	< 450 U
	m,p-Xylene	900	< 900 U
95-47-6	o-Xylene	450	< 450 U
1634-04-4	Methyl tert-Butyl Ether	450	< 450 U
109-66-0	n-Pentane	450	< 450 U
110-54-3	n-Hexane	450	< 450 U
111-65-9	n-Octane	450	< 450 U
124-18-5	n-Decane	450	< 450 U
112-40-3	n-Dodecane	450	< 450 U

Range	RL	Result
C8-C10 Aromatics (PID)	4,500	< 4,500 U
C10-C12 Aromatics (PID)	4,500	< 4,500 U
C12-C13 Aromatics (PID)	4,500	< 4,500 U
C5-C6 Aliphatics	4,500	< 4,500 U
C6-C8 Aliphatics	4,500	< 4,500 U
C8-C10 Aliphatics	4,500	< 4,500 U
C10-C12 Aliphatics	4,500	< 4,500 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	97.6%
FID: 2,5-Dibromotoluene	94.6%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: MB-122807
METHOD BLANK

Lab Sample ID: MB-122807
LIMS ID: 07-27715
Matrix: Soil
Data Release Authorized:
Reported: 01/07/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Analyzed: 12/28/07 12:22
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 55.6 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	450	< 450 U
108-88-3	Toluene	450	< 450 U
100-41-4	Ethylbenzene	450	< 450 U
	m,p-Xylene	900	< 900 U
95-47-6	o-Xylene	450	< 450 U
1634-04-4	Methyl tert-Butyl Ether	450	< 450 U
109-66-0	n-Pentane	450	< 450 U
110-54-3	n-Hexane	450	< 450 U
111-65-9	n-Octane	450	< 450 U
124-18-5	n-Decane	450	< 450 U
112-40-3	n-Dodecane	450	< 450 U

Range	RL	Result
C8-C10 Aromatics (PID)	4,500	< 4,500 U
C10-C12 Aromatics (PID)	4,500	< 4,500 U
C12-C13 Aromatics (PID)	4,500	< 4,500 U
C5-C6 Aliphatics	4,500	< 4,500 U
C6-C8 Aliphatics	4,500	< 4,500 U
C8-C10 Aliphatics	4,500	< 4,500 U
C10-C12 Aliphatics	4,500	< 4,500 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery	
PID: 2,5-Dibromotoluene	94.2%
FID: 2,5-Dibromotoluene	98.0%

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007

Client ID	PDBT	FDBT	TOT OUT
MB-122407	97.6%	94.6%	0
LCS-122407	103%	98.6%	0
LCSD-122407	108%	104%	0
L325166-01	90.8%	92.0%	0
L325166-01 DL	90.4%	93.8%	0
MB-122807	94.2%	98.0%	0
LCS-122807	104%	103%	0
LCSD-122807	103%	102%	0
L325166-02	101%	103%	0
L325166-02 DL	101%	106%	0
L325166-03	113%	95.8%	0
L325166-03 DL	99.2%	99.2%	0
L325166-04	91.8%	85.2%	0
L325166-04 DL	90.2%	88.2%	0
L325166-05	55.8%*	58.0%*	2
L325166-05 DL	99.2%	110%	0
L325166-05 MS	95.6%	110%	0
L325166-05 MSD	95.4%	109%	0
L325166-06	98.6%	107%	0
L325166-06 DL	102%	110%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 07-27714 to 07-27719

FORM-II VPH

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-122807
LCS/LCSD

Lab Sample ID: LCS-122807
LIMS ID: 07-27715
Matrix: Soil
Data Release Authorized: VJS
Reported: 01/03/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/28/07 10:51
Date Analyzed LCSD: 12/28/07 11:21
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 55.6 mg-dry-wt

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4360	4500	96.9%	4290	4500	95.3%	1.6%
Toluene	4280	4500	95.1%	4290	4500	95.3%	0.2%
Ethylbenzene	4410	4500	98.0%	4400	4500	97.8%	0.2%
m,p-Xylene	8650	8990	96.2%	8620	8990	95.9%	0.3%
o-Xylene	4330	4500	96.2%	4310	4500	95.8%	0.5%
Methyl tert-Butyl Ether	4280	4500	95.1%	4170	4500	92.7%	2.6%
Naphthalene	4360	4500	96.9%	4390	4500	97.6%	0.7%
1,2,3-Trimethylbenzene	4390	4500	97.6%	4300	4500	95.6%	2.1%
1-Methylnaphthalene	5170	4500	115%	5100	4500	113%	1.4%
n-Pentane	4420	4500	98.2%	4330	4500	96.2%	2.1%
n-Hexane	4330	4500	96.2%	4190	4500	93.1%	3.3%
n-Octane	4420	4500	98.2%	4300	4500	95.6%	2.8%
n-Decane	4820	4500	107%	4790	4500	106%	0.6%
n-Dodecane	5150	4500	114%	5110	4500	114%	0.8%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	104%	103%
FID: 2,5-Dibromotoluene	103%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: L325166-05
MS/MSD

Lab Sample ID: MD30E
LIMS ID: 07-27718
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/03/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Analyzed MS: 12/28/07 20:12
Date Analyzed MSD: 12/28/07 20:42
Instrument/Analyst: PID1/PKC

Sample Amount: 2.62 mg-dry-wt
Sample Amount: 2.62 mg-dry-wt
Purge Volume: 5.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzene	< 962	91000	95400	95.4%	91000	95400	95.4%	0.0%
Toluene	< 962	91200	95400	95.6%	91900	95400	96.3%	0.8%
Ethylbenzene	4860	100000	95400	99.7%	100000	95400	99.7%	0.0%
m,p-Xylene	< 1920	181000	191000	94.8%	181000	191000	94.8%	0.0%
o-Xylene	2310	99200	95400	102%	99800	95400	102%	0.6%
Methyl tert-Butyl Ether	< 962	89900	95400	94.2%	89900	95400	94.2%	0.0%
Naphthalene	23500	128000	95400	110%	131000	95400	113%	2.3%
1,2,3-Trimethylbenzene	5190	115000	95400	115%	117000	95400	117%	1.7%
1-Methylnaphthalene	43500 E	195000	95400	159%	202000	95400	166%	3.5%
n-Pentane	< 962	94400	95400	99.0%	91900	95400	96.3%	2.7%
n-Hexane	< 962	89100	95400	93.4%	87900	95400	92.1%	1.4%
n-Octane	14100	125000	95400	116%	124000	95400	115%	0.8%
n-Decane	9310	108000	95400	103%	112000	95400	108%	3.6%
n-Dodecane	14400	79700	95400	68.4%	84500	95400	73.5%	5.8%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	MS	MSD
PID: 2,5-Dibromotoluene	95.6%	95.4%
FID: 2,5-Dibromotoluene	110%	109%

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-122407
LCS/LCSD

Lab Sample ID: LCS-122407
LIMS ID: 07-27714
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/03/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/24/07 10:56
Date Analyzed LCSD: 12/24/07 11:27
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 55.6 mg-dry-wt

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4280	4500	95.1%	4430	4500	98.4%	3.4%
Toluene	4310	4500	95.8%	4460	4500	99.1%	3.4%
Ethylbenzene	4390	4500	97.6%	4540	4500	101%	3.4%
m,p-Xylene	8740	8990	97.2%	9000	8990	100%	2.9%
o-Xylene	4350	4500	96.7%	4480	4500	99.6%	2.9%
Methyl tert-Butyl Ether	4220	4500	93.8%	4370	4500	97.1%	3.5%
Naphthalene	4280	4500	95.1%	4390	4500	97.6%	2.5%
1,2,3-Trimethylbenzene	4520	4500	100%	4700	4500	104%	3.9%
1-Methylnaphthalene	4880	4500	108%	5180	4500	115%	6.0%
n-Pentane	4610	4500	102%	4670	4500	104%	1.3%
n-Hexane	4350	4500	96.7%	4410	4500	98.0%	1.4%
n-Octane	4340	4500	96.4%	4400	4500	97.8%	1.4%
n-Decane	4840	4500	108%	4910	4500	109%	1.4%
n-Dodecane	5320	4500	118%	5430	4500	121%	2.0%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	103%	108%
FID: 2,5-Dibromotoluene	98.6%	104%

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007

Client ID	PDBT	FDBT	TOT OUT
TRIP BLANK	115%	101%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 07-27720 to 07-27720

FORM-II VPH

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-01
SAMPLE

Lab Sample ID: MD30A
LIMS ID: 07-27714
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 20.5%

Sample Amount: 7.98 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 19:41
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 19:41
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,500	73,000
C10-C12 Aliphatics	2,500	520,000
C12-C16 Aliphatics	2,500	1,400,000
C16-C21 Aliphatics	2,500	620,000
C21-C34 Aliphatics	2,500	80,000
C8-C10 Aromatics	2,500	< 2,500 U
C10-C12 Aromatics	2,500	49,000
C12-C16 Aromatics	2,500	320,000
C16-C21 Aromatics	2,500	420,000
C21-C34 Aromatics	2,500	60,000

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	62.9%
Aromatic	Ortho-terphenyl	84.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: L325166-02
SAMPLE

Lab Sample ID: MD30B
LIMS ID: 07-27715
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 42.9%

Sample Amount: 5.71 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 16:44
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 20:03
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	3,500	24,000 B
C10-C12 Aliphatics	3,500	200,000
C12-C16 Aliphatics	3,500	550,000
C16-C21 Aliphatics	3,500	320,000
C21-C34 Aliphatics	3,500	66,000
C8-C10 Aromatics	3,500	< 3,500 U
C10-C12 Aromatics	3,500	160,000
C12-C16 Aromatics	3,500	840,000
C16-C21 Aromatics	3,500	1,500,000
C21-C34 Aromatics	3,500	420,000

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	84.3%
Aromatic	Ortho-terphenyl	66.7%

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-03
SAMPLE

Lab Sample ID: MD30C
LIMS ID: 07-27716
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 16.1%

Sample Amount: 8.44 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 20:25
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 20:25
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,400	< 2,400 U
C10-C12 Aliphatics	2,400	19,000
C12-C16 Aliphatics	2,400	180,000
C16-C21 Aliphatics	2,400	140,000
C21-C34 Aliphatics	2,400	42,000
C8-C10 Aromatics	2,400	< 2,400 U
C10-C12 Aromatics	2,400	< 2,400 U
C12-C16 Aromatics	2,400	3,400
C16-C21 Aromatics	2,400	41,000
C21-C34 Aromatics	2,400	25,000

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	70.5%
Aromatic	Ortho-terphenyl	99.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: L325166-04
SAMPLE

Lab Sample ID: MD30D
LIMS ID: 07-27717
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 18.6%

Sample Amount: 8.17 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 20:47
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 20:47
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,400	7,700 B
C10-C12 Aliphatics	2,400	91,000
C12-C16 Aliphatics	2,400	590,000
C16-C21 Aliphatics	2,400	420,000
C21-C34 Aliphatics	2,400	47,000
C8-C10 Aromatics	2,400	< 2,400 U
C10-C12 Aromatics	2,400	8,800
C12-C16 Aromatics	2,400	150,000
C16-C21 Aromatics	2,400	340,000
C21-C34 Aromatics	2,400	35,000

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	60.9%
Aromatic	Ortho-terphenyl	96.1%

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

ANALYTICAL RESOURCES INCORPORATED

Sample ID: L325166-05
SAMPLE

Lab Sample ID: MD30E
LIMS ID: 07-27718
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 12.3%

Sample Amount: 8.82 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 17:29
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 21:09
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,300	29,000
C10-C12 Aliphatics	2,300	170,000
C12-C16 Aliphatics	2,300	400,000
C16-C21 Aliphatics	2,300	170,000
C21-C34 Aliphatics	2,300	24,000
C8-C10 Aromatics	2,300	4,100
C10-C12 Aromatics	2,300	160,000
C12-C16 Aromatics	2,300	660,000
C16-C21 Aromatics	2,300	800,000
C21-C34 Aromatics	2,300	130,000

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	81.1%
Aromatic	Ortho-terphenyl	68.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: MB-010208
METHOD BLANK

Lab Sample ID: MB-010208
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Extracted: 01/02/08
Percent Moisture: NA

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 15:39
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 15:39
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	**2,000**	**2,200**
C10-C12 Aliphatics	2,000	< 2,000 U
C12-C16 Aliphatics	2,000	< 2,000 U
C16-C21 Aliphatics	2,000	< 2,000 U
C21-C34 Aliphatics	2,000	< 2,000 U
C8-C10 Aromatics	2,000	< 2,000 U
C10-C12 Aromatics	2,000	< 2,000 U
C12-C16 Aromatics	2,000	< 2,000 U
C16-C21 Aromatics	2,000	< 2,000 U
C21-C34 Aromatics	2,000	< 2,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	63.8%
Aromatic	Ortho-terphenyl	88.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: L325166-06
SAMPLE

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 16.8%

Sample Amount: 8.37 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 21:31
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 21:31
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	**2,400**	**14,000 B**
C10-C12 Aliphatics	**2,400**	**160,000**
C12-C16 Aliphatics	**2,400**	**460,000**
C16-C21 Aliphatics	**2,400**	**160,000**
C21-C34 Aliphatics	**2,400**	**33,000**
C8-C10 Aromatics	2,400	< 2,400 U
C10-C12 Aromatics	**2,400**	**24,000**
C12-C16 Aromatics	**2,400**	**120,000**
C16-C21 Aromatics	**2,400**	**120,000**
C21-C34 Aromatics	**2,400**	**24,000**

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	64.3%
Aromatic	Ortho-terphenyl	85.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: L325166-06
MATRIX SPIKE

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 16.8%

Sample Amount: 8.35 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 21:53
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 21:53
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,400	---
C10-C12 Aliphatics	2,400	---
C12-C16 Aliphatics	2,400	---
C16-C21 Aliphatics	2,400	---
C21-C34 Aliphatics	**2,400**	**28,000**
C8-C10 Aromatics	2,400	< 2,400 U
C10-C12 Aromatics	2,400	---
C12-C16 Aromatics	2,400	---
C16-C21 Aromatics	2,400	---
C21-C34 Aromatics	2,400	---

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	61.3%
Aromatic	Ortho-terphenyl	87.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: L325166-06
MATRIX SPIKE DUP

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted: 01/02/08
Percent Moisture: 16.8%

Sample Amount: 8.35 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 22:15
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 22:15
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,400	---
C10-C12 Aliphatics	2,400	---
C12-C16 Aliphatics	2,400	---
C16-C21 Aliphatics	2,400	---
C21-C34 Aliphatics	**2,400**	**26,000**
C8-C10 Aromatics	2,400	< 2,400 U
C10-C12 Aromatics	2,400	---
C12-C16 Aromatics	2,400	---
C16-C21 Aromatics	2,400	---
C21-C34 Aromatics	2,400	---

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	58.4%
Aromatic	Ortho-terphenyl	74.1%

ANALYTICAL RESOURCES INCORPORATED

ALEPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007

Client ID	COD	TOT OUT
L325166-01	62.9%	0
L325166-02	84.3%	0
L325166-03	70.5%	0
L325166-04	60.9%	0
L325166-05	81.1%	0
MB-010208	63.8%	0
LCS-010208	66.5%	0
L325166-06	64.3%	0
L325166-06 MS	61.3%	0
L325166-06 MSD	58.4%	0

	LCS/MB LIMITS	QC LIMITS
(COD) = 1-Chlorooctadecane	(25-117)	(21-112)

Prep Method: SW3550B
Log Number Range: 07-27714 to 07-27719

FORM-II ALEPH

ANALYTICAL RESOURCES INCORPORATED

AREPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007

Client ID	OTER	TOT OUT
L325166-01	84.9%	0
L325166-02	66.7%	0
L325166-03	99.3%	0
L325166-04	96.1%	0
L325166-05	68.9%	0
MB-010208	88.9%	0
LCS-010208	75.5%	0
L325166-06	85.8%	0
L325166-06MS	87.8%	0
L325166-06MSD	74.1%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = Ortho-terphenyl	(41-116)	(28-121)

Prep Method: SW3550B
Log Number Range: 07-27714 to 07-27719

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: LCS-010208
LAB CONTROL

Lab Sample ID: LCS-010208
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: NA
Date Received: NA

Date Extracted: 01/02/08

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 01/04/08 16:01
Instrument/Analyst: FID4B/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 01/04/08 16:01
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
C8-C10 Aliphatics	8700	15000	58.0%
C10-C12 Aliphatics	8900	15000	59.3%
C12-C16 Aliphatics	12000	15000	80.0%
C16-C21 Aliphatics	12000	15000	80.0%
C10-C12 Aromatics	7800	15000	52.0%
C12-C16 Aromatics	10400	15000	69.3%
C16-C21 Aromatics	23400	30000	78.0%
C21-C34 Aromatics	21300	30000	71.0%

Results reported in µg/kg

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	66.5%
Aromatic	Ortho-terphenyl	75.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: L325166-06
MS/MSD

Lab Sample ID: MD30F
LIMS ID: 07-27719
Matrix: Soil
Data Release Authorized: VTS
Reported: 01/05/08

QC Report No: MD30-Environmental Science Corp
Project: Crowley
008.0205.00007
Date Sampled: 12/20/07
Date Received: 12/21/07

Date Extracted MS/MSD: 01/02/08

Sample Amount MS: 8.35 g-dry-wt
MSD: 8.35 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL

Aliphatic
Date Analyzed MS: 01/04/08 21:53
MSD: 01/04/08 22:15
Instrument/Analyst MS: FID4B/JGR
MSD: FID4B/JGR

Dilution Factor MS: 1.00
MSD: 1.00

Aromatic
Date Analyzed MS: 01/04/08 21:53
MSD: 01/04/08 22:15
Instrument/Analyst MS: FID4A/JGR
MSD: FID4A/JGR

Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
C8-C10 Aliphatics	14500	26500	18000	66.8%	25700	18000	62.3%	3.1%
C10-C12 Aliphatics	157000	170000	18000	NA	163000	18000	NA	4.2%
C12-C16 Aliphatics	465000	446000	18000	NA	425000	18000	NA	4.8%
C16-C21 Aliphatics	165000	163000	18000	NA	147000	18000	NA	10.3%
C10-C12 Aromatics	24000	33200	18000	51.2%	35300	18000	62.9%	6.1%
C12-C16 Aromatics	119000	121000	18000	NA	122000	18000	NA	0.8%
C16-C21 Aromatics	115000	141000	35900	72.4%	127000	35900	33.4%	10.4%
C21-C34 Aromatics	23900	59800	35900	99.9%	49300	35900	70.7%	19.2%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.