TECHNICAL MEMORANDUM

LANDAU ASSOCIATES
ENVIRONMENTAL | GEOTECHNICAL | NATURAL RESOURCES

TO: Mark Nadler, Nadler Law Group

FROM: Larry Beard, P.E. and Erik Gerking, L.G.

DATE: May 5, 2008 (Re-issued January 13, 2010)

RE: GROUNDWATER MONITORING RESULTS
RIVERSIDE BUSINESS PARK
EVERETT, WASHINGTON

This technical memorandum presents the result of a groundwater quality monitoring event conducted at the Port of Everett's Riverside Business Park Property (Property) located in Everett, Washington (Figure 1). The purpose of the groundwater monitoring event was to obtain current arsenic groundwater quality data for the Property. Prior to this investigation, the most recent arsenic groundwater quality data for the Property were obtained in the late 1990's as part of the ASARCO Everett Smelter Lowland remedial investigation (Lowland RI; Hydrometrics 2000).

GROUNDWATER MONITORING ACTIVITIES

Landau Associates conducted groundwater monitoring field activities over a 2-day period on February 18 and 19, 2008. Groundwater quality monitoring was performed for both the shallow and deep groundwater systems present at the property. Field activities consisted of collecting 13 groundwater samples from the shallow groundwater system and 6 groundwater samples from the deep groundwater system, as shown on Figures 2 and 3, for the shallow and deep groundwater systems, respectively. The following sections describe the groundwater monitoring activities.

Sampling Methods

Groundwater monitoring borings were completed using direct-push drilling equipment operated by Cascade Drilling, Inc. of Woodinville, Washington. Continuous soil samples were collected and evaluated in the field for soil type classification. Soil classification was accomplished in the field using the Unified Soil Classification System (USCS). Soil was also field-screened for evidence of contamination using visual and olfactory methods (e.g., soil discoloration, presence of sheen, and odor).

Groundwater samples were collected directly from the borings using a decontaminated temporary well screen placed within the approximate upper 2 ft of the target groundwater system. Prior to sample collection, groundwater was purged from the boring using a peristaltic pump and new polyethylene tubing

until the turbidity dissipated. Each groundwater sample was field-filtered using a 0.45 micron filter and submitted to the laboratory for analysis of dissolved arsenic.

A layer of soil that appeared to be affected by petroleum hydrocarbons was encountered at boring location D-4 in the deep groundwater system at a depth of about 15.5 ft below ground surface (BGS). The soil and groundwater at this location exhibited a sheen and petroleum hydrocarbon-like odor. As a result, soil and groundwater samples were collected from the affected depth interval for characterization purposes. The soil and groundwater samples collected from boring D-4 were submitted to the laboratory for analysis of diesel- and oil-range total petroleum hydrocarbons (TPH-D and TPH-O), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and pentachlorophenol.

Geologic Conditions

Geologic conditions encountered during the investigation consisted of sand fill soil with varying percentages of silt and gravel from the ground surface to 6 to 10 ft BGS. Underlying the surface fill layer is a silt unit about 5 ft to 10 ft thick that functions as the aquitard separating the shallow and deep groundwater flow systems. Underlying the silt layer is a sand deposit with varying percentages of silt. Groundwater was encountered at depth ranging from about 2 to 6 ft BGS. The saturated portion of the shallow fill unit constitutes the shallow groundwater system and the deeper sand deposit constitutes the deep groundwater system. Boring logs are presented in Attachment 1 to this document.

LABORATORY TESTING

Laboratory analyses were performed by Analytical Resources, Inc., of Tukwila, Washington. Dissolved arsenic was analyzed for in groundwater samples using US Environmental Protection Agency (EPA) Method 200.8. Diesel- and oil-range petroleum hydrocarbons were analyzed for in soil and groundwater samples using northwest (NW) Method TPH-D-extended. SVOCs, VOCs, and pentachlorophenol, were analyzed in soil and groundwater samples using EPA Methods 8260B, 8270C, and SW8041, respectively.

Arsenic groundwater analytical results are presented in Table 1. Analytical results for the additional groundwater and soil characterization samples collected from Boring D-4 are presented in Tables 2 and 3, respectively. The laboratory analytical report is presented in Attachment 2.

Upper and lower aquifer dissolved arsenic concentrations are presented on Figures 2 and 3, respectively. Dissolved arsenic concentrations ranged from 0.6 to 70.6 µg/L in the shallow groundwater system and 2.3 to 1,350 µg/L in the deep groundwater system. Arsenic concentrations from previous investigations are presented on the figures for comparison purposes.

A number of petroleum hydrocarbon compounds were detected in the additional characterization soil sample collected from Boring D-4. However, no organic compounds were above the laboratory reporting limits in the additional characterization groundwater sample except for bis(2-ethylhexyl)phthalate, a common laboratory contaminant.

QUALITY ASSURANCE/ QUALITY CONTROL

The laboratory analytical report is presented in Attachment 2. A data quality evaluation was conducted for analytical results and laboratory test methods. The data quality evaluation consisted of reviewing data for holding times, method blank results, surrogate spike recovery results, matrix spike/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), laboratory duplicate samples, and reporting limits.

A blind field duplicate, RBP-DUP, was collected at location D-2 and was tested for dissolved arsenic. The analytical results for the primary and duplicate samples are presented in Table 1. As presented in the table, the primary and duplicate sample exhibit the same concentration of arsenic. Based on this comparison, and the results of the data validation process, no qualifiers were added to the reported data, and all results were determined acceptable without qualification.

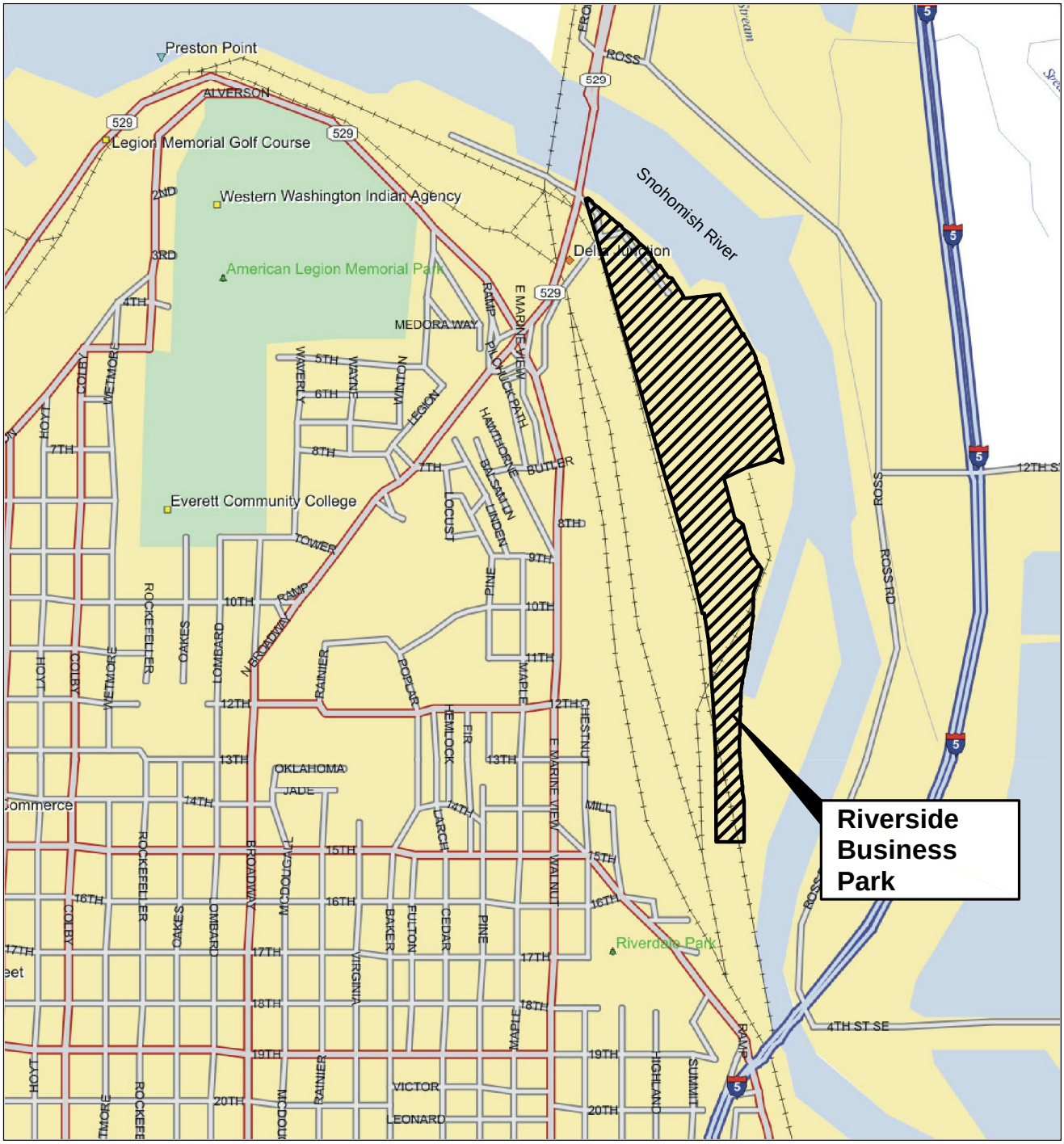
USES OF THIS REPORT

This technical memorandum has been prepared for the exclusive use of the Nadler Law Group for specific application to the Riverside Business Park Property. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

REFERENCES

Hart Crowser. 1989. *Site Characterization Report, Weyerhaeuser Old Machine Shop, Everett Mill Site, Everett, Washington, Volume I, Main Text and Appendices A through E.* October 27.

Hydrometrics. 2000. *Draft Comprehensive Lowland Area Remedial Investigation Report for the Everett Smelter Site, Everett, Washington*. January.



Map from DeLorme Street Atlas USA 2000

0 1500 3000

Scale in Feet

Reid Middleton/Riverside Industrial Park/Cleanup Action Report | V:\848\004\010\Fig1.dwg (A) "Figure 1" 5/2/2008

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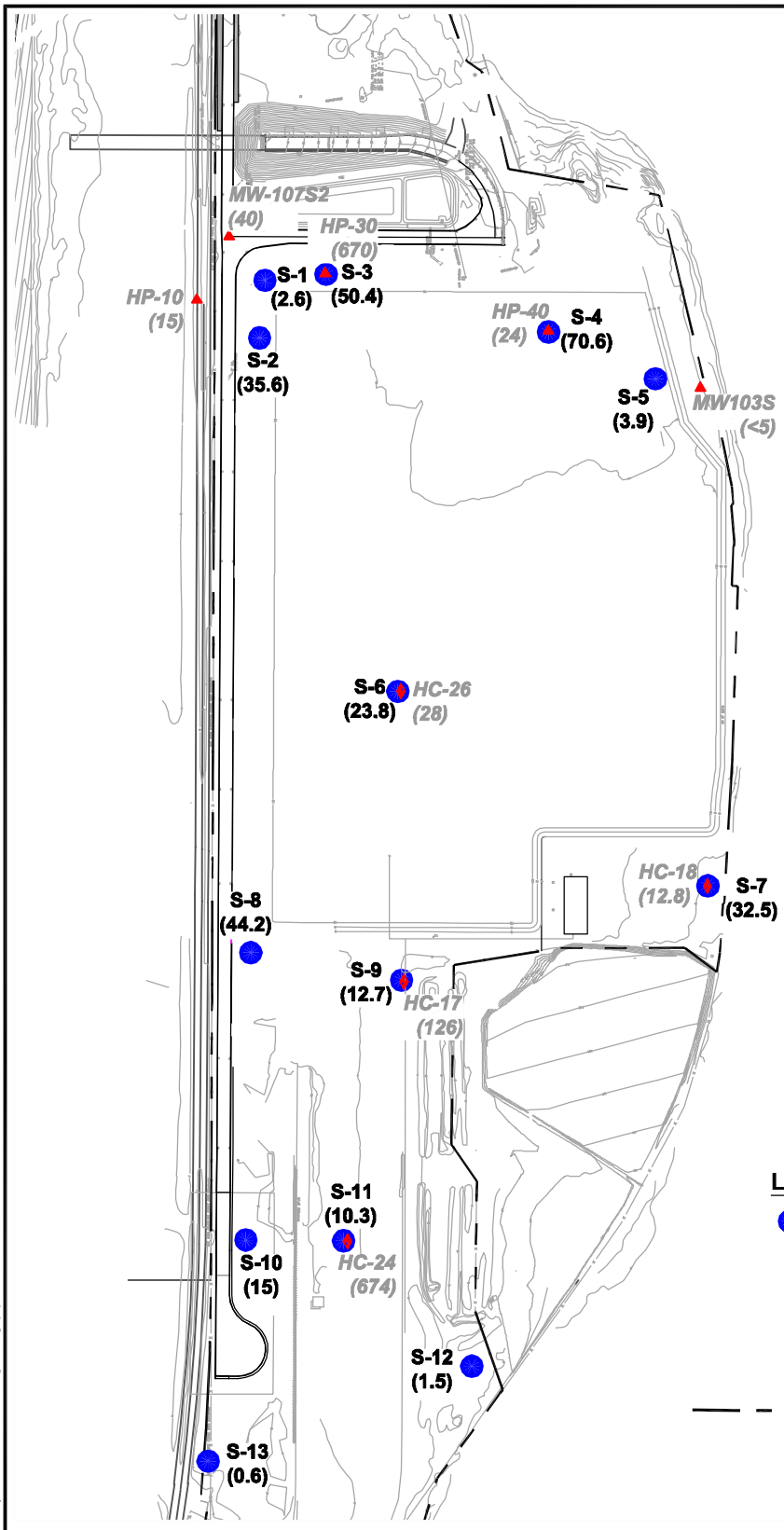
Riverside Business Park Everett, Washington	**Vicinity Map**	Figure 1



Notes

a. Arsenic concentrations presented in parentheses below sample ID and are reported in ug/L.

b. Sample locations are approximate.

c. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- S-5 (3.9) — 2008 Groundwater sample location
- HP-40 (24) — Approximate groundwater sample location (Hydrometrix 2000)
- HC-18 (12.8) — Approximate groundwater sample location (Hart Crowser 1989)
- Property Line

0 400 800

Scale in Feet

Base map source: Reid Middleton 2001

Riverside Business Park | V:\1848004\010\Fig1.dwg (A) "shallow" 5/2/2008

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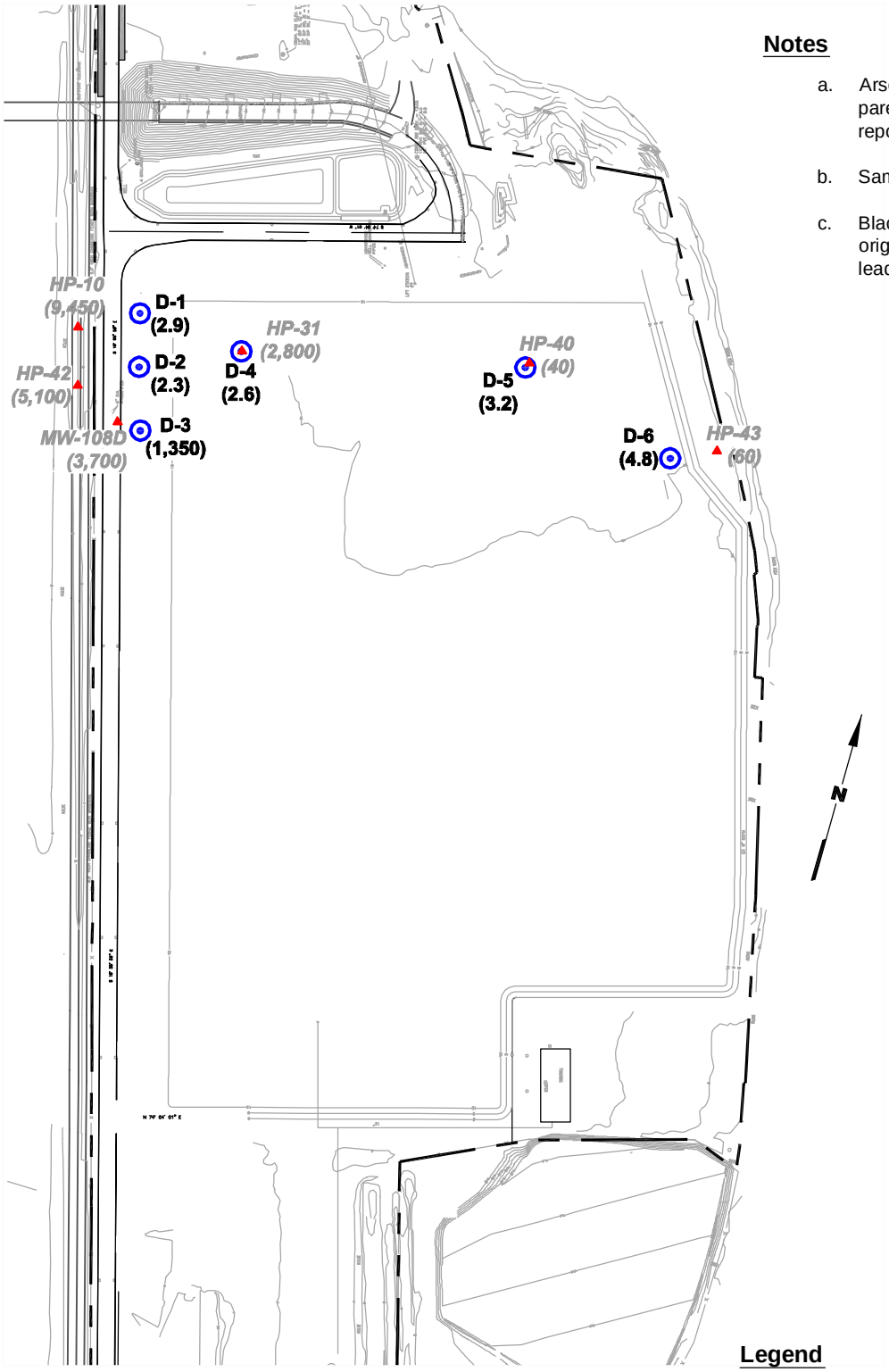
Riverside Business Park
Everett, Washington

Shallow Groundwater System Arsenic Results

Figure 2



Notes

a. Arsenic concentrations presented in parentheses below sample ID and are reported in ug/L.

b. Sample locations are approximate.

c. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

D-5 (3.2) — 2008 Groundwater sample location

HP-31 (2,800) — Approximate groundwater sample location (Hydrometrix 2000)

Property Line

Base map source: Reid Middleton 2001

LANDAU ASSOCIATES, INC. | V:\848\004010\Fig3.dwg (A) "deep" 5/2/2008

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Riverside Business Park
Everett, Washington

Deep Groundwater System Arsenic Results

Figure 3

TABLE 1
GROUNDWATER ANALYTICAL RESULTS - ARSENIC
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WA

	D-1	Dup of D-2 RBP-DUP	D-2	D-3	D-4	D-5	D-6	S-1	S-2	S-3	S-4
	MJ68Q	MJ68K	MJ68U	MJ68V	MJ68N/B	MJ68M	MJ68I	MJ68P	MJ68R	MJ68O	MJ68L
	2/19/2008	2/19/2008	2/19/2008	2/19/2008	2/19/2008	2/19/2008	2/18/2008	2/19/2008	2/19/2008	2/19/2008	2/19/2008
TOTAL METALS (µg/L)											
EPA 200.8											
Arsenic	2.9	2.3	2.3	1350	2.6	3.2	4.8	2.6	35.6	50.4	70.6

TABLE 1
GROUNDWATER ANALYTICAL RESULTS - ARSENIC
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WA

	S-5 MJ68J 2/18/2008	S-6 MJ68H 2/18/2008	S-7 MJ68D 2/18/2008	S-8 MJ68G 2/18/2008	S-9 MJ68E 2/18/2008	S-10 MJ68F 2/18/2008	S-11 MJ68C 2/18/2008	S-12 MJ68A 2/18/2008	S-13 MJ68B 2/18/2008
TOTAL METALS (µg/L)									
EPA 200.8									
Arsenic	3.9	23.8	32.5	44.2	12.7	15.0	10.3	1.5	0.6

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13B 2/19/2008	
PHENOLS (µg/L)		
SW8041		
Pentachlorophenol	0.25	UJ
NWTPH-DxSG (mg/kg)		
Diesel Range Hydrocarbons	0.25	UJ
Motor Oil	0.5	UJ
VOLATILE ORGANIC COMPOUNDS (VOCs)		
EPA Method 8260B (µg/L)		
Chloromethane	1	U
Bromomethane	1	U
Vinyl Chloride	1	U
Chloroethane	1	U
Methylene Chloride	2	U
Acetone	6.1	U
Carbon Disulfide	1	U
1,1-Dichloroethene	1	U
1,1-Dichloroethane	1	U
trans-1,2-Dichloroethene	1	U
cis-1,2-Dichloroethene	1	U
Chloroform	1	U
1,2-Dichloroethane	1	U
2-Butanone	5	U
1,1,1-Trichloroethane	1	U
Carbon Tetrachloride	1	U
Vinyl Acetate	5	U
Bromodichloromethane	1	U
1,2-Dichloropropane	1	U
cis-1,3-Dichloropropene	1	U
Trichloroethene	1	U
Dibromochloromethane	1	U
1,1,2-Trichloroethane	1	U
Benzene	1	U
trans-1,3-Dichloropropene	1	U
2-Chloroethylvinylether	5	U
Bromoform	1	U
4-Methyl-2-Pentanone (MIBK)	5	U
2-Hexanone	5	U
Tetrachloroethene	1	U
1,1,2,2-Tetrachloroethane	1	U
Toluene	1	U
Chlorobenzene	1	U
Ethylbenzene	1	U
Styrene	1	U
Trichlorofluoromethane	1	U
1,1,2-Trichloro-1,2,2-trifluoroethane	2	U
m,p-Xylene	1	U
o-Xylene	1	U
1,2-Dichlorobenzene	1	U
1,3-Dichlorobenzene	1	U
1,4-Dichlorobenzene	1	U
Acrolein	50	U
Methyl Iodide	1	U
Bromoethane	2	U
Acrylonitrile	5	U
1,1-Dichloropropene	1	U
Dibromomethane	1	U
1,1,1,2-Tetrachloroethane	1	U
1,2-Dibromo-3-chloropropane	5	U
1,2,3-Trichloropropane	2	U
trans-1,4-Dichloro-2-butene	5	U
1,3,5-Trimethylbenzene	1	U
1,2,4-Trimethylbenzene	1	U

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13B 2/19/2008	
Hexachlorobutadiene	5	U
Ethylene Dibromide	1	U
Bromochloromethane	1	U
2,2-Dichloropropane	1	U
1,3-Dichloropropane	1	U
Isopropylbenzene	1	U
n-Propylbenzene	1	U
Bromobenzene	1	U
2-Chlorotoluene	1	U
4-Chlorotoluene	1	U
tert-Butylbenzene	1	U
sec-Butylbenzene	1	U
4-Isopropyltoluene	1	U
n-Butylbenzene	1	U
1,2,4-Trichlorobenzene	5	U
Naphthalene	5	U
1,2,3-Trichlorobenzene	5	U
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)		
EPA Method 8270C (µg/L)		
Phenol	1	U
Bis-(2-Chloroethyl) Ether	1	U
2-Chlorophenol	1	U
1,3-Dichlorobenzene	1	U
1,4-Dichlorobenzene	1	U
Benzyl Alcohol	5	U
1,2-Dichlorobenzene	1	U
2-Methylphenol	1	U
2,2'-Oxybis(1-Chloropropane)	1	U
4-Methylphenol	1	U
N-Nitroso-Di-N-Propylamine	5	U
Hexachloroethane	1	U
Nitrobenzene	1	U
Isophorone	1	U
2-Nitrophenol	5	U
2,4-Dimethylphenol	1	U
Benzoic Acid	10	U
bis(2-Chloroethoxy) Methane	1	U
2,4-Dichlorophenol	5	U
1,2,4-Trichlorobenzene	1	U
Naphthalene	1	U
4-Chloroaniline	5	U
Hexachlorobutadiene	1	U
4-Chloro-3-methylphenol	5	U
2-Methylnaphthalene	1	U
Hexachlorocyclopentadiene	5	U
2,4,6-Trichlorophenol	5	U
2,4,5-Trichlorophenol	5	U
2-Chloronaphthalene	1	U
2-Nitroaniline	5	U
Dimethylphthalate	1	U
Acenaphthylene	1	U
3-Nitroaniline	5	U
Acenaphthene	1	U
2,4-Dinitrophenol	10	U
4-Nitrophenol	5	U
Dibenzofuran	1	U
2,6-Dinitrotoluene	5	U
2,4-Dinitrotoluene	5	U
Diethylphthalate	1	U
4-Chlorophenyl-phenylether	1	U
Fluorene	1	U
4-Nitroaniline	5	U
4,6-Dinitro-2-Methylphenol	10	U
N-Nitrosodiphenylamine	1	U
4-Bromophenyl-phenylether	1	U

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13B 2/19/2008	
Hexachlorobenzene	1	U
Pentachlorophenol	5	U
Phenanthrene	1	U
Carbazole	1	U
Anthracene	1	U
Di-n-Butylphthalate	1	U
Fluoranthene	1	U
Pyrene	1	U
Butylbenzylphthalate	1	U
3,3'-Dichlorobenzidine	5	U
Benzo(a)anthracene	1	U
bis(2-Ethylhexyl)phthalate	10	
Chrysene	1	U
Di-n-Octyl phthalate	1	U
Benzo(b)fluoranthene	1	U
Benzo(k)fluoranthene	1	U
Benzo(a)pyrene	1	U
Indeno(1,2,3-cd)pyrene	1	U
Dibenz(a,h)anthracene	1	U
Benzo(g,h,i)perylene	1	U
1-Methylnaphthalene	1	U

U = The analyte was not detected in the sample at the given reporting limit.

UJ = The analyte was not detected in the sample; the given reporting limit is an estimate.

TABLE 3
SOIL ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13A 2/19/2008	
NWTPH-DxSG (mg/kg)		
Diesel Range Hydrocarbons	1,900	
Motor Oil	130	U
PHENOLS (µg/kg)		
SW8041		
Pentachlorophenol	83	
VOLATILE ORGANIC COMPOUNDS (VOCs)		
EPA Method 8260B (µg/kg)		
Chloromethane	80	U
Bromomethane	80	U
Vinyl Chloride	80	U
Chloroethane	80	U
Methylene Chloride	160	U
Acetone	400	U
Carbon Disulfide	80	U
1,1-Dichloroethene	80	U
1,1-Dichloroethane	80	U
trans-1,2-Dichloroethene	80	U
cis-1,2-Dichloroethene	80	U
Chloroform	80	U
1,2-Dichloroethane	80	U
2-Butanone	400	U
1,1,1-Trichloroethane	80	U
Carbon Tetrachloride	80	U
Vinyl Acetate	400	U
Bromodichloromethane	80	U
1,2-Dichloropropane	80	U
cis-1,3-Dichloropropene	80	U
Trichloroethene	80	U
Dibromochloromethane	80	U
1,1,2-Trichloroethane	80	U
Benzene	80	U
trans-1,3-Dichloropropene	80	U
2-Chloroethylvinylether	400	U
Bromoform	80	U
4-Methyl-2-Pentanone (MIBK)	400	U
2-Hexanone	400	U
Tetrachloroethene	80	U
1,1,2,2-Tetrachloroethane	80	U
Toluene	80	U
Chlorobenzene	80	U
Ethylbenzene	80	U
Styrene	80	U
Trichlorofluoromethane	80	U
1,1,2-Trichloro-1,2,2-trifluoroethane	160	U
m,p-Xylene	220	
o-Xylene	100	
1,2-Dichlorobenzene	80	U
1,3-Dichlorobenzene	80	U
1,4-Dichlorobenzene	80	U
Acrolein	4,000	U
Methyl Iodide	80	U
Bromoethane	160	U
Acrylonitrile	400	U
1,1-Dichloropropene	80	U
Dibromomethane	80	U

TABLE 3
SOIL ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13A 2/19/2008	
1,1,1,2-Tetrachloroethane	80	U
1,2-Dibromo-3-chloropropane	400	U
1,2,3-Trichloropropane	160	U
trans-1,4-Dichloro-2-butene	400	U
1,3,5-Trimethylbenzene	550	
1,2,4-Trimethylbenzene	2,300	
Hexachlorobutadiene	400	U
Ethylene Dibromide	80	U
Bromochloromethane	80	U
2,2-Dichloropropane	80	U
1,3-Dichloropropane	80	U
Isopropylbenzene	83	
n-Propylbenzene	190	
Bromobenzene	80	U
2-Chlorotoluene	80	U
4-Chlorotoluene	80	U
tert-Butylbenzene	80	U
sec-Butylbenzene	130	
4-Isopropyltoluene	240	
n-Butylbenzene	640	M
1,2,4-Trichlorobenzene	400	U
Naphthalene	4,000	
1,2,3-Trichlorobenzene	400	U
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)		
EPA Method 8270C (µg/kg)		
Phenol	65	U
Bis-(2-Chloroethyl) Ether	65	U
2-Chlorophenol	65	U
1,3-Dichlorobenzene	65	U
1,4-Dichlorobenzene	65	U
Benzyl Alcohol	320	U
1,2-Dichlorobenzene	65	U
2-Methylphenol	65	U
2,2'-Oxybis(1-Chloropropane)	65	U
4-Methylphenol	65	U
N-Nitroso-Di-N-Propylamine	320	U
Hexachloroethane	65	U
Nitrobenzene	65	U
Isophorone	65	U
2-Nitrophenol	320	U
2,4-Dimethylphenol	65	U
Benzoic Acid	650	U
bis(2-Chloroethoxy) Methane	65	U
2,4-Dichlorophenol	320	U
1,2,4-Trichlorobenzene	65	U
Naphthalene	1,700	
4-Chloroaniline	320	U
Hexachlorobutadiene	65	U
4-Chloro-3-methylphenol	320	U
2-Methylnaphthalene	24,000	
Hexachlorocyclopentadiene	320	U
2,4,6-Trichlorophenol	320	U
2,4,5-Trichlorophenol	320	U
2-Chloronaphthalene	65	U
2-Nitroaniline	320	U
Dimethylphthalate	65	U
Acenaphthylene	65	U

TABLE 3
SOIL ANALYTICAL RESULTS
PHENOLS, TPH-DX, VOCS, AND SVOCS
RIVERSIDE BUSINESS PARK
PORT OF EVERETT, WASHINGTON

	D-4 MK13A 2/19/2008	
3-Nitroaniline	320	U
Acenaphthene	1,400	
2,4-Dinitrophenol	650	U
4-Nitrophenol	320	U
Dibenzofuran	570	
2,6-Dinitrotoluene	320	U
2,4-Dinitrotoluene	320	U
Diethylphthalate	65	U
4-Chlorophenyl-phenylether	65	U
Fluorene	2,100	
4-Nitroaniline	320	U
4,6-Dinitro-2-Methylphenol	650	U
N-Nitrosodiphenylamine	720	U
4-Bromophenyl-phenylether	65	U
Hexachlorobenzene	65	U
Pentachlorophenol	320	U
Phenanthrene	6,500	
Carbazole	65	U
Anthracene	240	
Di-n-Butylphthalate	65	U
Fluoranthene	350	
Pyrene	630	
Butylbenzylphthalate	65	U
3,3'-Dichlorobenzidine	320	U
Benzo(a)anthracene	65	U
bis(2-Ethylhexyl)phthalate	180	
Chrysene	65	U
Di-n-Octyl phthalate	65	U
Benzo(b)fluoranthene	65	U
Benzo(k)fluoranthene	65	U
Benzo(a)pyrene	65	U
Indeno(1,2,3-cd)pyrene	65	U
Dibenz(a,h)anthracene	65	U
Benzo(g,h,i)perylene	65	U
1-Methylnaphthalene	14,000	

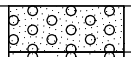
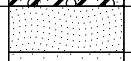
U = The analyte was not detected in the sample at the given reporting limit.

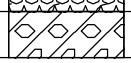
M = Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match.

ATTACHMENT 1

Boring Logs

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS [2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		**GW**	Well-graded gravel; gravel/sand mixture(s); little or no fines
				**GP**	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		**GM**	Silty gravel; gravel/sand/silt mixture(s)
				**GC**	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		**SW**	Well-graded sand; gravelly sand; little or no fines
				**SP**	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		**SM**	Silty sand; sand/silt mixture(s)
				**SC**	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			**ML**	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				**CL**	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				**OL**	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			**MH**	Inorganic silt; micaceous or diatomaceous fine sand
				**CH**	Inorganic clay of high plasticity; fat clay
				**OH**	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			**PT**	Peat; humus; swamp soil with high organic content

OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		**AC** or **PC**	Asphalt concrete pavement or Portland cement pavement
ROCK		**RK**	Rock (See Rock Classification)
WOOD		**WD**	Wood, lumber, wood chips
DEBRIS		**DB**	Construction debris, garbage

Notes:
1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

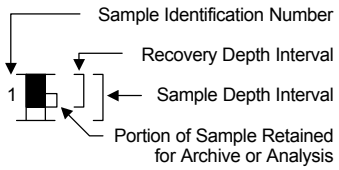
Primary Constituent:	> 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15% - "with gravel," "with sand," "with silt," etc.
	≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

Drilling and Sampling Key

SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Single-Tube Core Barrel
f	Double-Tube Core Barrel
g	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Rotosonic
5	Air Rotary (Rock)
6	Wash Rotary (Rock)
7	Other - See text if applicable

SAMPLE NUMBER & INTERVAL



Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
GT	Other Geotechnical Testing
CA	Chemical Analysis

Groundwater

▽ ATD — Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

5/2/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL CLASS SHEET

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Soil Classification System and Key

Figure 1-1

D-1

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Tan, fine to medium SAND with grass and roots (loose, moist)	
						SM	Brown, silty, fine to medium SAND (loose, moist)	
		b3					with gravel geotextile membrane	▽ ATD
						GP	no data Grey and white, crushed GRAVEL (dense, wet) (clean, no fines)	
5						SP	Grey, fine to medium SAND (loose, wet)	
		b3				ML	Grey, SILT with wood fibers and roots (soft, moist) (wood fibers decrease with depth)	
10		b3						
		b3						
15								
		b3				SM	Grey, silty, fine SAND with wood debris (loose, wet)	
20						SM	Dark grey, fine to medium SAND (loose, wet)	
		b3						
25								

Boring Completed 02/19/08
Total Depth of Boring = 23.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring D-1

Figure
1-2

D-2 / S-2

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND (loose, moist) (upper 0.5 ft has grass and roots)	
		b3				SP/ SM	Black, fine to medium SAND with silt and trace gravel (loose, moist)	
						SP	Grey, fine to medium SAND (loose, moist to wet)	ATD
5		b3						
						ML	Grey, SILT with wood fibers and roots (soft, moist)	
10		b3						
						SM	Dark grey to black, silty, fine to medium SAND (loose, wet)	
						SP	Grey, fine to medium SAND (very loose, wet)	
		b3						
15								
20								
25								

Boring Completed 02/19/08
Total Depth of Boring = 16.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

848004010011. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Everett, WA

Log of Boring D-2 / S-2

Figure
1-3

D-3

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND with wood fibers and roots (loose, moist)	
		b3						
						SP	Tan, fine to medium SAND with silt (loose, mosit)	
						SP	Black, fine to medium SAND with silt and gravel (medium dense, moist)	
5								ATD
						SP	Grey, fine to medium SAND with course sand (loose, wet)	
		b3						
10		b3						
						ML	Grey, SILT with wood fibers and roots (soft, moist)	
		b3						
15								
		b3						
						SP	Grey, fine to medium SAND (loose, wet)	
20								
25								

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

8480040100111. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Log of Boring D-3

Figure
1-4
(1 of 2)

D-3

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level

Boring Completed 02/19/08
Total Depth of Boring = 26.0 ft.

30
35
40
45
50

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

8480040100111. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Everett, WA

Log of Boring D-3

Figure
1-4
(2 of 2)

D-4

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Tan, fine to medium SAND (loose, moist) (top 0.5 ft has grass and roots)	
		b3				SP/ GP SP	Light tan with greenish mottles, gravelly, fine to medium SAND with silt (medium dense, moist) (odd concrete waste type appearance with strange texture and coloring)	
						SW	Light brown, fine to medium SAND with trace gravel and wood debris (medium dense, moist)	
5							Dark grey to black, fine to course SAND (loose, wet)	▽ ATD
		b3				ML	Grey, SILT with trace wood fibers (soft, moist)	
							color change to brown	
10		b3						
							color change to grey with increasing wood fibers	
		b3				SW	Grey, fine to course SAND with wood fibers and trace silt (loose, wet)	
15							Strong petroleum odor and sheen present in 15.5 - 17 ft interval	
		b3						
20								
25								

Boring Completed 02/19/08
Total Depth of Boring = 20.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring D-4

Figure
1-5

D-5 / S-4

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Brown, fine to medium SAND with grass and roots (loose, moist) (top 1.5 ft has grass and roots)	
		b3						
5								ATD
		b3						
						SW	Grey, fine to couse SAND (loose, wet)	
		b3						
10								
		b3				ML	Grey, SILT with trace wood fibers (soft, moist)	
						SM/ ML	Grey, fine sandy, SILT with trace medium SAND (soft, moist)	
		b3				SP	Grey, fine to medium SAND (loose, wet)	
15						WD	Wood debris	
						SP	Grey, fine to medium SAND (loose, wet)	
		b3						
20								
25								

Boring Completed 02/19/08
Total Depth of Boring = 18.5 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring D-5 / S-4

Figure
1-6

D-6

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Tan, fine to medium SAND (loose, moist) (top 5.0 ft has gass and roots)	
		b3						
5		b3						
								▽ ATD
10		b3					color change to light brown	
						ML	Grey, SILT with wood fibers and roots (soft, moist)	
						SP	Grey, fine to medium SAND with course sand (loose, wet)	
		b3						
15							1" thick layer of wood debris	
							1" thick layer of wood debris	

Boring Completed 02/18/08
Total Depth of Boring = 16.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring D-6

Figure
1-7

S-01

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND (loose, wet)	
2		b3						
						RK	Arsenic slag (shiny black color, similiar appearance to obsidian)	
4						SP	Tan, fine to medium SAND with trace silt (loose, moist) color change to grey	
6		b3				WD	Wood debris	▽ ATD
						SP	Grey, fine to medium SAND (loose, wet)	
8		b3				ML	Grey, SILT (soft, moist)	
10								
12								

Boring Completed 02/19/08
Total Depth of Boring = 10.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-01

Figure
1-8

S-03

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Light brown to tan, fine to medium SAND with silt (loose, moist) (upper 0.5 ft has grass and roots)	
2		b3				SP	Grey, fine to medium SAND with gravel (loose, wet)	▽ ATD
4						WD	Wood debris	
						SP	Grey, fine to medium SAND (loose, wet)	
6		b3						
8						ML	Grey, SILT (soft, moist)	
10								
12								

Boring Completed 02/19/08
Total Depth of Boring = 8.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-03

Figure
1-9

S-05

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Tan, fine to medium SAND with trace silt (loose, moist) (top 0.5 ft has organics)	
2		b3						
4								
6		b3				WD	Creosote treated wood debris (creosote sheen and odor)	
8		b3				SP	Grey, fine to medium SAND with trace silt (loose, wet)	▽ ATD
10						ML	Grey, SILT with wood debris (soft, moist)	
12								

Boring Completed 02/18/08
Total Depth of Boring = 10.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-05

Figure
1-10

S-06

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SP	Tan, fine to medium SAND (loose, moist) (upper 0.8 ft has grass and roots)	
2		b3						
4								▽ ATD
						SW	Grey, fine to course SAND (loose, moist to wet)	
6		b3						
						SP	Dark grey to black, fine SAND with silt (medium dense, wet)	
8						ML	Grey, SILT with trace wood debris (soft, moist)	
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 8.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

848004010011. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Log of Boring S-06

Figure
1-11

S-07

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Drilling Method: Geoprobe™

Ground Elevation (ft):

Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Soil Description	Water Level
0						SM	Brown, silty, fine to course SAND with gravel, grass, moss, and roots (medium dense, moist)	
						SP	Tan, fine to medium SAND (loose, moist)	
2		b3						
4								ATD
		b3				WD	Wood debris (solid log)	
						SP	Tan, fine to medium SAND (loose, moist)	
6						ML	Dark grey, SILT (soft, moist)	
						ML	Tan with orange mottles, fine sandy, SILT (soft, moist)	
						ML	Dark grey, SILT with fine sand (soft, moist)	
8								
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 7.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

8480040100 11. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Log of Boring S-07

Figure
1-12

S-08

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND with grass and roots (loose, moist)	
						SM/ SP	Tan, fine to medium SAND with silt and trace gravel (loose, moist)	
2		b3						
4								▽ ATD
						SP	Grey to black, silty, fine SAND (medium dense, wet)	
						SP	Grey, fine to medium SAND (loose, wet)	
6		b3						
8								
		b3				ML	Grey, SILT with wood fibers and roots (soft, moist)	
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 10.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

8480040100 11. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

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Log of Boring S-08

Figure
1-13

S-09

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND with gravel and small roots (medium dense, moist)	
						SM/ SP	Dark grey, fine to medium SAND with silt and trace gravel (loose, moist)	
						SM/ SP	Grey, fine to medium SAND with silt (loose, wet)	▽ ATD
2		b3						
4						SM/ ML	Grey, fine sandy, SILT (very soft, wet) ("slop")	
		b3				ML	Grey, SILT with wood fibers and roots (soft, moist)	
6								
8								
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 7.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-09

Figure
1-14

S-10

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Tan, silty, fine SAND with grass and roots with trace gravel (medium dense, moist)	
						SM	Tan to grey, silty, fine to medium SAND with gravel (loose, moist)	
2		b3				SM	Grey, silty, fine to medium SAND with trace gravel (loose, moist)	
4								▽ ATD
		b3				GP	Black, GRAVEL (dense, moist) (shiny, irridescent appearance) (Arsenic slag debris)	
6						SP	Grey, fine to medium SAND with course sand and very trace wood debris (loose, wet)	
8		b3						
						ML	Grey, SILT (soft, moist)	
10						PT	Black, PEAT (soft, wet)	
12								

Boring Completed 02/18/08
Total Depth of Boring = 10.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-10

Figure
1-15

S-11

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SM	Brown, silty, fine to medium SAND with grass and grass roots (loose, moist)	
						SP	Brown, fine to medium SAND with grass roots (loose, moist)	
						SW	Grey, fine to course SAND with trace silt (loose, moist to wet)	
2		b3						▽ ATD
4						ML	Grey, fine sandy, SILT (soft, moist)	
						ML	Grey, SILT with wood fibers (soft, moist)	
		b3						
6								
8								
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 7.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring S-11

Figure
1-16

S-12

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						AC	Asphalt	
						GM	Grey, gravelly, fine to medium SAND with silt (dense, damp)	
2		b3				SP	Dark grey to black, fine to medium SAND with crushed gravel and trace silt (dense, damp to moist)	
						SM	color change to black Grey, silty, fine to medium SAND with trace gravel (medium dense, moist)	
						PT	Dark black, fine to medium sandy, PEAT (soft, moist)	
4						SP	Dark grey, fine to medium SAND with trace silt (loose, wet)	▽ ATD
6		b3				ML	Brown, fine sandy, SILT (soft, moist)	
						ML	Grey, SILT with trace wood fibers and roots (soft, moist)	
8								
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 8.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

8480040100 11. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Riverside Business Park
Everett, WA

Log of Boring S-12

Figure
1-17

S-13

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						AC	Asphalt	
						SP/ GP	Brown, gravelly, fine to medium SAND (dense, damp)	
						PT	Black, PEAT with trace gravel (soft, moist)	
2		b3					decreasing gravel	
						SP	Grey, fine to medium SAND with course sand (very loose, moist to wet)	
4								▽ ATD
		b3						
6						ML	Grey, SILT with trace wood fibers and roots (soft, moist)	
8								
10								
12								

Boring Completed 02/18/08
Total Depth of Boring = 7.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

848004010011. 5/5/08 \\EDMDATA\GINT\GINT7\PROJECTS\848004.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Riverside Business Park
Everett, WA

Log of Boring S-13

Figure
1-18

ATTACHMENT 2

Laboratory Analytical Reports

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 27, 2008

Larry Beard
Landau Associates, Inc.
130 2nd Avenue S.
Edmonds, WA 98020

RE: Project No: 848004.010
Project Name: Riverside Business Park
ARI Job No: MK13

Dear Larry:

Please find enclosed the chain of custody (COC) documentation and the final results from the project referenced above. Analytical Resources, Inc. accepted one soil sample and twenty one water samples in good condition on February 20, 2008. Two samples were placed on hold pending further instructions.

The samples were analyzed for Dissolved Metals, as requested on the COC.

On February 25, 2008 select samples were removed from hold and analyzed for NWTPH-Dx, VOCs, SVOCs and Pentachlorophenol by method SW8041.

The sample **D-4** water was originally analyzed within method recommended holding time for NWTPH-Dx and re-analyzed outside of the method recommended holding time to confirm low surrogate recoveries. The surrogate recoveries were in control for the re-analysis and both sets of data were non-detect.

The surrogate TBP for sample **D-4** water is out of control low for the PCP analysis. All sample volume was consumed during the original analysis; therefore no further corrective action was taken. The compound PCP is reported for the 8270 analysis with an elevated RL.

The method blank for the 8260 water analysis contained Acetone at greater than 1/2/ the RL. All associated samples have been flagged with a "B" qualifier.

There were no other anomalies associated with the sample. A copy of this report and all corresponding raw data will remain on file electronically with ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com

LANDAU ASSOCIATES

☒ **Seattle (Edmonds)** (425) 778-0907
☐ **Tacoma** (253) 926-2493
☐ **Spokane** (509) 327-9737
☐ **Portland (Tigard)** (503) 443-6010
☐ _____

Chain-of-Custody Record

Date 2/19/08
Page 2 of 2

Project Name Riverside Business Park Project No. 848004.010
Project Location/Event Everett WA
Sampler's Name Nathan Moxley
Project Contact Erik Gerking
Send Results To Nathan Moxley / Anne Halverson

Turnaround Time
☐ Standard
☒ 5 day

Sample I.D.	Date	Time	Matrix	No. of Containers	Dissolved As	TPH-Dx	SVOCs	VOCs	* see comments	Archive	Observations/Comments
D-4	2/19/08	0950	Soil	1				@	*	X	
D-4		1430	Water	7		X	X	@		X	
D-2		1440		1	X						
D-3		1600		1	X						

Observations/Comments

___ Allow water samples to settle, collect aliquot from clear portion

NWTPH-Dx:
___ run acid wash/silica gel cleanup
___ run samples standardized to _____ product

___ Analyze for EPH if no specific product identified

VOC/BTEX/VPH (soil):
___ non-preserved
___ preserved w/methanol
___ preserved w/sodium bisulfate
___ Freeze upon receipt

___ Dissolved metal water samples field filtered

Other * Please contact Erik Gerking for complete list of analytes that sample will be tested for

Special Shipment/Handling or Storage Requirements

Method of Shipment ARI Pickup

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Nathan Moxley	Printed Name Emily Counts	Printed Name	Printed Name
Company Landau Assoc	Company ARI	Company	Company
Date 2/19/08 Time 1910	Date 2/20/08 Time 1144	Date Time	Date Time

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

Rev 4/01

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: LANDAU — Project Name: RIVERSIDE BUSINESS PARK

COC No: — — Delivered by: EC

Assigned ARI Job No: MJ608 — 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	3.5 °C	

Cooler Accepted by: EC Date: 2/20/08 Time: 1144

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: EC Date: 2/20/08 Time: 1306

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

Explain discrepancies or negative responses:

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: D-4**
Page 1 of 2 **SAMPLE**

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Instrument/Analyst: FINN1/PAB
Date Analyzed: 02/29/08 10:20

Sample Amount: 62.2 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: 23.3%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	80	< 80	U
74-83-9	Bromomethane	80	< 80	U
75-01-4	Vinyl Chloride	80	< 80	U
75-00-3	Chloroethane	80	< 80	U
75-09-2	Methylene Chloride	160	< 160	U
67-64-1	Acetone	400	< 400	U
75-15-0	Carbon Disulfide	80	< 80	U
75-35-4	1,1-Dichloroethene	80	< 80	U
75-34-3	1,1-Dichloroethane	80	< 80	U
156-60-5	trans-1,2-Dichloroethene	80	< 80	U
156-59-2	cis-1,2-Dichloroethene	80	< 80	U
67-66-3	Chloroform	80	< 80	U
107-06-2	1,2-Dichloroethane	80	< 80	U
78-93-3	2-Butanone	400	< 400	U
71-55-6	1,1,1-Trichloroethane	80	< 80	U
56-23-5	Carbon Tetrachloride	80	< 80	U
108-05-4	Vinyl Acetate	400	< 400	U
75-27-4	Bromodichloromethane	80	< 80	U
78-87-5	1,2-Dichloropropane	80	< 80	U
10061-01-5	cis-1,3-Dichloropropene	80	< 80	U
79-01-6	Trichloroethene	80	< 80	U
124-48-1	Dibromochloromethane	80	< 80	U
79-00-5	1,1,2-Trichloroethane	80	< 80	U
71-43-2	Benzene	80	< 80	U
10061-02-6	trans-1,3-Dichloropropene	80	< 80	U
110-75-8	2-Chloroethylvinylether	400	< 400	U
75-25-2	Bromoform	80	< 80	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	400	< 400	U
591-78-6	2-Hexanone	400	< 400	U
127-18-4	Tetrachloroethene	80	< 80	U
79-34-5	1,1,2,2-Tetrachloroethane	80	< 80	U
108-88-3	Toluene	80	< 80	U
108-90-7	Chlorobenzene	80	< 80	U
100-41-4	Ethylbenzene	80	< 80	U
100-42-5	Styrene	80	< 80	U
75-69-4	Trichlorofluoromethane	80	< 80	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	160	< 160	U
1330-20-7	**m,p-Xylene**	**80**	**220**	
95-47-6	**o-Xylene**	**80**	**100**	
95-50-1	1,2-Dichlorobenzene	80	< 80	U
541-73-1	1,3-Dichlorobenzene	80	< 80	U
106-46-7	1,4-Dichlorobenzene	80	< 80	U
107-02-8	Acrolein	4,000	< 4,000	U
74-88-4	Methyl Iodide	80	< 80	U
74-96-4	Bromoethane	160	< 160	U
107-13-1	Acrylonitrile	400	< 400	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: D-4**
 SAMPLE

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Date Analyzed: 02/29/08 10:20

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	80	< 80	U
74-95-3	Dibromomethane	80	< 80	U
630-20-6	1,1,1,2-Tetrachloroethane	80	< 80	U
96-12-8	1,2-Dibromo-3-chloropropane	400	< 400	U
96-18-4	1,2,3-Trichloropropane	160	< 160	U
110-57-6	trans-1,4-Dichloro-2-butene	400	< 400	U
108-67-8	**1,3,5-Trimethylbenzene**	**80**	**550**	
95-63-6	**1,2,4-Trimethylbenzene**	**80**	**2,300**	
87-68-3	Hexachlorobutadiene	400	< 400	U
106-93-4	Ethylene Dibromide	80	< 80	U
74-97-5	Bromochloromethane	80	< 80	U
594-20-7	2,2-Dichloropropane	80	< 80	U
142-28-9	1,3-Dichloropropane	80	< 80	U
98-82-8	**Isopropylbenzene**	**80**	**83**	
103-65-1	**n-Propylbenzene**	**80**	**190**	
108-86-1	Bromobenzene	80	< 80	U
95-49-8	2-Chlorotoluene	80	< 80	U
106-43-4	4-Chlorotoluene	80	< 80	U
98-06-6	tert-Butylbenzene	80	< 80	U
135-98-8	**sec-Butylbenzene**	**80**	**130**	
99-87-6	**4-Isopropyltoluene**	**80**	**240**	
104-51-8	**n-Butylbenzene**	**80**	**640**	**M**
120-82-1	1,2,4-Trichlorobenzene	400	< 400	U
91-20-3	**Naphthalene**	**400**	**4,000**	
87-61-6	1,2,3-Trichlorobenzene	400	< 400	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.9%
d8-Toluene	101%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	98.7%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: D-4**
 SAMPLE

Lab Sample ID: MK13B
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Instrument/Analyst: FINN1/PAB
Date Analyzed: 02/29/08 11:19

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	**Acetone**	**5.0**	**6.1**	**B**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0	U
1330-20-7	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: D-4**
 SAMPLE

Lab Sample ID: MK13B
LIMS ID: 08-3488
Matrix: Water
Date Analyzed: 02/29/08 11:19

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.5%
d8-Toluene	98.7%
Bromofluorobenzene	92.8%
d4-1,2-Dichlorobenzene	97.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-022908**
 METHOD BLANK

Lab Sample ID: MB-022908
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN1/PAB
Date Analyzed: 02/29/08 09:40

Sample Amount: 100 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	50	< 50	U
74-83-9	Bromomethane	50	< 50	U
75-01-4	Vinyl Chloride	50	< 50	U
75-00-3	Chloroethane	50	< 50	U
75-09-2	Methylene Chloride	100	< 100	U
67-64-1	Acetone	250	< 250	U
75-15-0	Carbon Disulfide	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
75-34-3	1,1-Dichloroethane	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
67-66-3	Chloroform	50	< 50	U
107-06-2	1,2-Dichloroethane	50	< 50	U
78-93-3	2-Butanone	250	< 250	U
71-55-6	1,1,1-Trichloroethane	50	< 50	U
56-23-5	Carbon Tetrachloride	50	< 50	U
108-05-4	Vinyl Acetate	250	< 250	U
75-27-4	Bromodichloromethane	50	< 50	U
78-87-5	1,2-Dichloropropane	50	< 50	U
10061-01-5	cis-1,3-Dichloropropene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
124-48-1	Dibromochloromethane	50	< 50	U
79-00-5	1,1,2-Trichloroethane	50	< 50	U
71-43-2	Benzene	50	< 50	U
10061-02-6	trans-1,3-Dichloropropene	50	< 50	U
110-75-8	2-Chloroethylvinylether	250	< 250	U
75-25-2	Bromoform	50	< 50	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250	< 250	U
591-78-6	2-Hexanone	250	< 250	U
127-18-4	Tetrachloroethene	50	< 50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	< 50	U
108-88-3	Toluene	50	< 50	U
108-90-7	Chlorobenzene	50	< 50	U
100-41-4	Ethylbenzene	50	< 50	U
100-42-5	Styrene	50	< 50	U
75-69-4	Trichlorofluoromethane	50	< 50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	100	< 100	U
1330-20-7	m,p-Xylene	50	< 50	U
95-47-6	o-Xylene	50	< 50	U
95-50-1	1,2-Dichlorobenzene	50	< 50	U
541-73-1	1,3-Dichlorobenzene	50	< 50	U
106-46-7	1,4-Dichlorobenzene	50	< 50	U
107-02-8	Acrolein	2,500	< 2,500	U
74-88-4	Methyl Iodide	50	< 50	U
74-96-4	Bromoethane	100	< 100	U
107-13-1	Acrylonitrile	250	< 250	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-022908**
 METHOD BLANK

Lab Sample ID: MB-022908 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3487 Project: Riverside Business Park
Matrix: Soil 848004.010
Date Analyzed: 02/29/08 09:40

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	50	< 50	U
74-95-3	Dibromomethane	50	< 50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	< 50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	< 250	U
96-18-4	1,2,3-Trichloropropane	100	< 100	U
110-57-6	trans-1,4-Dichloro-2-butene	250	< 250	U
108-67-8	1,3,5-Trimethylbenzene	50	< 50	U
95-63-6	1,2,4-Trimethylbenzene	50	< 50	U
87-68-3	Hexachlorobutadiene	250	< 250	U
106-93-4	Ethylene Dibromide	50	< 50	U
74-97-5	Bromochloromethane	50	< 50	U
594-20-7	2,2-Dichloropropane	50	< 50	U
142-28-9	1,3-Dichloropropane	50	< 50	U
98-82-8	Isopropylbenzene	50	< 50	U
103-65-1	n-Propylbenzene	50	< 50	U
108-86-1	Bromobenzene	50	< 50	U
95-49-8	2-Chlorotoluene	50	< 50	U
106-43-4	4-Chlorotoluene	50	< 50	U
98-06-6	tert-Butylbenzene	50	< 50	U
135-98-8	sec-Butylbenzene	50	< 50	U
99-87-6	4-Isopropyltoluene	50	< 50	U
104-51-8	n-Butylbenzene	50	< 50	U
120-82-1	1,2,4-Trichlorobenzene	250	< 250	U
91-20-3	Naphthalene	250	< 250	U
87-61-6	1,2,3-Trichlorobenzene	250	< 250	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	97.3%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	97.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-022908**
 METHOD BLANK

Lab Sample ID: MB-022908
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN1/PAB
Date Analyzed: 02/29/08 09:40

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	**Acetone**	**5.0**	**3.2**	**J**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0	U
1330-20-7	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-022908**
 METHOD BLANK

Lab Sample ID: MB-022908 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3488 Project: Riverside Business Park
Matrix: Water 848004.010
Date Analyzed: 02/29/08 09:40

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	97.3%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	97.9%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-022908	Method Blank	Med	100%	97.3%	93.7%	97.9%	0
LCS-022908	Lab Control	Med	98.7%	100%	101%	99.7%	0
LCSD-022908	Lab Control Dup	Med	98.5%	97.4%	103%	96.1%	0
MK13A	D-4	Med	99.9%	101%	96.8%	98.7%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	75-120	76-120	72-134	69-120
(TOL) = d8-Toluene	80-122	80-120	78-124	80-120
(BFB) = Bromofluorobenzene	79-120	80-120	66-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	79-120	80-120

Log Number Range: 08-3487 to 08-3487

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-022908	Method Blank	5	100%	97.3%	93.7%	97.9%	0
LCS-022908	Lab Control	5	98.7%	100%	101%	99.7%	0
LCSD-022908	Lab Control Dup	5	98.5%	97.4%	103%	96.1%	0
MK13B	D-4	5	95.5%	98.7%	92.8%	97.8%	0

	LCS/MB LIMITS	QC LIMITS
SW8260B		
(DCE) = d4-1,2-Dichloroethane	79-120	80-120
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	72-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-124

Prep Method: SW5030B
Log Number Range: 08-3488 to 08-3488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-022908**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-022908
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN1/PAB
LCSD: FINN1/PAB
Date Analyzed LCS: 02/29/08 08:37
LCSD: 02/29/08 09:18

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	1870	2500	74.8%	1970	2500	78.8%	5.2%
Bromomethane	2150	2500	86.0%	2200	2500	88.0%	2.3%
Vinyl Chloride	2240	2500	89.6%	2230	2500	89.2%	0.4%
Chloroethane	2370	2500	94.8%	2360	2500	94.4%	0.4%
Methylene Chloride	2320	2500	92.8%	2340	2500	93.6%	0.9%
Acetone	11900	12500	95.2%	11700	12500	93.6%	1.7%
Carbon Disulfide	2520	2500	101%	2430	2500	97.2%	3.6%
1,1-Dichloroethene	2390	2500	95.6%	2310	2500	92.4%	3.4%
1,1-Dichloroethane	2460	2500	98.4%	2470	2500	98.8%	0.4%
trans-1,2-Dichloroethene	2420	2500	96.8%	2400	2500	96.0%	0.8%
cis-1,2-Dichloroethene	2450	2500	98.0%	2450	2500	98.0%	0.0%
Chloroform	2450	2500	98.0%	2450	2500	98.0%	0.0%
1,2-Dichloroethane	2390	2500	95.6%	2450	2500	98.0%	2.5%
2-Butanone	11000	12500	88.0%	11100	12500	88.8%	0.9%
1,1,1-Trichloroethane	2520	2500	101%	2460	2500	98.4%	2.4%
Carbon Tetrachloride	2620	2500	105%	2590	2500	104%	1.2%
Vinyl Acetate	2440	2500	97.6%	2470	2500	98.8%	1.2%
Bromodichloromethane	2710	2500	108%	2700	2500	108%	0.4%
1,2-Dichloropropane	2410	2500	96.4%	2500	2500	100%	3.7%
cis-1,3-Dichloropropene	2200	2500	88.0%	2190	2500	87.6%	0.5%
Trichloroethene	2510	2500	100%	2510	2500	100%	0.0%
Dibromochloromethane	2070	2500	82.8%	2070	2500	82.8%	0.0%
1,1,2-Trichloroethane	2460	2500	98.4%	2470	2500	98.8%	0.4%
Benzene	2600	2500	104%	2630	2500	105%	1.1%
trans-1,3-Dichloropropene	2180	2500	87.2%	2190	2500	87.6%	0.5%
2-Chloroethylvinylether	1840	2500	73.6%	2050	2500	82.0%	10.8%
Bromoform	2060	2500	82.4%	2010	2500	80.4%	2.5%
4-Methyl-2-Pentanone (MIBK)	10300	12500	82.4%	10600	12500	84.8%	2.9%
2-Hexanone	12700	12500	102%	12900	12500	103%	1.6%
Tetrachloroethene	2500	2500	100%	2370	2500	94.8%	5.3%
1,1,2,2-Tetrachloroethane	2400	2500	96.0%	2370	2500	94.8%	1.3%
Toluene	2530	2500	101%	2490	2500	99.6%	1.6%
Chlorobenzene	2530	2500	101%	2440	2500	97.6%	3.6%
Ethylbenzene	2760	2500	110%	2750	2500	110%	0.4%
Styrene	2460	2500	98.4%	2440	2500	97.6%	0.8%
Trichlorofluoromethane	2260	2500	90.4%	2090	2500	83.6%	7.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	2420	2500	96.8%	2350	2500	94.0%	2.9%
m,p-Xylene	5520	5000	110%	5500	5000	110%	0.4%
o-Xylene	2160	2500	86.4%	2170	2500	86.8%	0.5%
1,2-Dichlorobenzene	2470	2500	98.8%	2410	2500	96.4%	2.5%
1,3-Dichlorobenzene	2610	2500	104%	2560	2500	102%	1.9%
1,4-Dichlorobenzene	2630	2500	105%	2500	2500	100%	5.1%
Acrolein	11300	12500	90.4%	11600	12500	92.8%	2.6%
Methyl Iodide	2540	2500	102%	2610	2500	104%	2.7%
Bromoethane	2370	2500	94.8%	2390	2500	95.6%	0.8%
Acrylonitrile	2260	2500	90.4%	2290	2500	91.6%	1.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-022908**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-022908 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3487 Project: Riverside Business Park
Matrix: Soil 848004.010

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	2560	2500	102%	2520	2500	101%	1.6%
Dibromomethane	2380	2500	95.2%	2400	2500	96.0%	0.8%
1,1,1,2-Tetrachloroethane	2090	2500	83.6%	2100	2500	84.0%	0.5%
1,2-Dibromo-3-chloropropane	2440	2500	97.6%	2380	2500	95.2%	2.5%
1,2,3-Trichloropropane	2290	2500	91.6%	2270	2500	90.8%	0.9%
trans-1,4-Dichloro-2-butene	2490	2500	99.6%	2400	2500	96.0%	3.7%
1,3,5-Trimethylbenzene	2810	2500	112%	2720	2500	109%	3.3%
1,2,4-Trimethylbenzene	2880	2500	115%	2710	2500	108%	6.1%
Hexachlorobutadiene	2630	2500	105%	2450	2500	98.0%	7.1%
Ethylene Dibromide	2120	2500	84.8%	2120	2500	84.8%	0.0%
Bromochloromethane	2330	2500	93.2%	2340	2500	93.6%	0.4%
2,2-Dichloropropane	2610	2500	104%	2560	2500	102%	1.9%
1,3-Dichloropropane	2390	2500	95.6%	2430	2500	97.2%	1.7%
Isopropylbenzene	2890	2500	116%	2750	2500	110%	5.0%
n-Propylbenzene	2970	2500	119%	2870	2500	115%	3.4%
Bromobenzene	2430	2500	97.2%	2400	2500	96.0%	1.2%
2-Chlorotoluene	3130	2500	125%	2630	2500	105%	17.4%
4-Chlorotoluene	2480	2500	99.2%	2670	2500	107%	7.4%
tert-Butylbenzene	2680	2500	107%	2650	2500	106%	1.1%
sec-Butylbenzene	3010	2500	120%	2890	2500	116%	4.1%
4-Isopropyltoluene	2980	2500	119%	2860	2500	114%	4.1%
n-Butylbenzene	3220	2500	129%	2940	2500	118%	9.1%
1,2,4-Trichlorobenzene	2580	2500	103%	2380	2500	95.2%	8.1%
Naphthalene	2170	2500	86.8%	2140	2500	85.6%	1.4%
1,2,3-Trichlorobenzene	2350	2500	94.0%	2210	2500	88.4%	6.1%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.7%	98.5%
d8-Toluene	100%	97.4%
Bromofluorobenzene	101%	103%
d4-1,2-Dichlorobenzene	99.7%	96.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-022908**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-022908
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN1/PAB
LCSD: FINN1/PAB
Date Analyzed LCS: 02/29/08 08:37
LCSD: 02/29/08 09:18

Sample Amount LCS: 5.00 mL
LCSD: 5.00 mL
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	37.5	50.0	75.0%	39.4	50.0	78.8%	4.9%
Bromomethane	42.9	50.0	85.8%	43.9	50.0	87.8%	2.3%
Vinyl Chloride	44.8	50.0	89.6%	44.6	50.0	89.2%	0.4%
Chloroethane	47.5	50.0	95.0%	47.1	50.0	94.2%	0.8%
Methylene Chloride	46.3	50.0	92.6%	46.8	50.0	93.6%	1.1%
Acetone	239	250	95.6%	234	250	93.6%	2.1%
Carbon Disulfide	50.5	50.0	101%	48.5	50.0	97.0%	4.0%
1,1-Dichloroethene	47.7	50.0	95.4%	46.2	50.0	92.4%	3.2%
1,1-Dichloroethane	49.2	50.0	98.4%	49.3	50.0	98.6%	0.2%
trans-1,2-Dichloroethene	48.4	50.0	96.8%	47.9	50.0	95.8%	1.0%
cis-1,2-Dichloroethene	49.0	50.0	98.0%	49.0	50.0	98.0%	0.0%
Chloroform	49.0	50.0	98.0%	49.0	50.0	98.0%	0.0%
1,2-Dichloroethane	47.7	50.0	95.4%	48.9	50.0	97.8%	2.5%
2-Butanone	219	250	87.6%	222	250	88.8%	1.4%
1,1,1-Trichloroethane	50.4	50.0	101%	49.1	50.0	98.2%	2.6%
Carbon Tetrachloride	52.4	50.0	105%	51.7	50.0	103%	1.3%
Vinyl Acetate	48.7	50.0	97.4%	49.4	50.0	98.8%	1.4%
Bromodichloromethane	54.2	50.0	108%	54.0	50.0	108%	0.4%
1,2-Dichloropropane	48.3	50.0	96.6%	49.9	50.0	99.8%	3.3%
cis-1,3-Dichloropropene	44.1	50.0	88.2%	43.9	50.0	87.8%	0.5%
Trichloroethene	50.3	50.0	101%	50.2	50.0	100%	0.2%
Dibromochloromethane	41.3	50.0	82.6%	41.3	50.0	82.6%	0.0%
1,1,2-Trichloroethane	49.3	50.0	98.6%	49.4	50.0	98.8%	0.2%
Benzene	52.0	50.0	104%	52.5	50.0	105%	1.0%
trans-1,3-Dichloropropene	43.6	50.0	87.2%	43.9	50.0	87.8%	0.7%
2-Chloroethylvinylether	36.8	50.0	73.6%	41.0	50.0	82.0%	10.8%
Bromoform	41.1	50.0	82.2%	40.2	50.0	80.4%	2.2%
4-Methyl-2-Pentanone (MIBK)	207	250	82.8%	212	250	84.8%	2.4%
2-Hexanone	254	250	102%	257	250	103%	1.2%
Tetrachloroethene	50.0	50.0	100%	47.4	50.0	94.8%	5.3%
1,1,2,2-Tetrachloroethane	48.1	50.0	96.2%	47.5	50.0	95.0%	1.3%
Toluene	50.6	50.0	101%	49.8	50.0	99.6%	1.6%
Chlorobenzene	50.6	50.0	101%	48.9	50.0	97.8%	3.4%
Ethylbenzene	55.3	50.0	111%	54.9	50.0	110%	0.7%
Styrene	49.1	50.0	98.2%	48.7	50.0	97.4%	0.8%
Trichlorofluoromethane	45.2	50.0	90.4%	41.8	50.0	83.6%	7.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	48.5	50.0	97.0%	47.1	50.0	94.2%	2.9%
m,p-Xylene	110	100	110%	110	100	110%	0.0%
o-Xylene	43.1	50.0	86.2%	43.3	50.0	86.6%	0.5%
1,2-Dichlorobenzene	49.3	50.0	98.6%	48.2	50.0	96.4%	2.3%
1,3-Dichlorobenzene	52.3	50.0	105%	51.2	50.0	102%	2.1%
1,4-Dichlorobenzene	52.6	50.0	105%	50.1	50.0	100%	4.9%
Acrolein	226	250	90.4%	232	250	92.8%	2.6%
Methyl Iodide	50.9	50.0	102%	52.2	50.0	104%	2.5%
Bromoethane	47.5	50.0	95.0%	47.9	50.0	95.8%	0.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-022908**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-022908 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3488 Project: Riverside Business Park
Matrix: Water 848004.010

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Acrylonitrile	45.1	50.0	90.2%	45.8	50.0	91.6%	1.5%
1,1-Dichloropropene	51.2	50.0	102%	50.4	50.0	101%	1.6%
Dibromomethane	47.6	50.0	95.2%	48.0	50.0	96.0%	0.8%
1,1,1,2-Tetrachloroethane	41.9	50.0	83.8%	42.0	50.0	84.0%	0.2%
1,2-Dibromo-3-chloropropane	48.8	50.0	97.6%	47.7	50.0	95.4%	2.3%
1,2,3-Trichloropropane	45.8	50.0	91.6%	45.4	50.0	90.8%	0.9%
trans-1,4-Dichloro-2-butene	49.7	50.0	99.4%	48.0	50.0	96.0%	3.5%
1,3,5-Trimethylbenzene	56.2	50.0	112%	54.4	50.0	109%	3.3%
1,2,4-Trimethylbenzene	57.5	50.0	115%	54.2	50.0	108%	5.9%
Hexachlorobutadiene	52.6	50.0	105%	49.1	50.0	98.2%	6.9%
Ethylene Dibromide	42.5	50.0	85.0%	42.4	50.0	84.8%	0.2%
Bromochloromethane	46.7	50.0	93.4%	46.9	50.0	93.8%	0.4%
2,2-Dichloropropane	52.2	50.0	104%	51.3	50.0	103%	1.7%
1,3-Dichloropropane	47.8	50.0	95.6%	48.6	50.0	97.2%	1.7%
Isopropylbenzene	57.8	50.0	116%	55.1	50.0	110%	4.8%
n-Propylbenzene	59.3	50.0	119%	57.4	50.0	115%	3.3%
Bromobenzene	48.6	50.0	97.2%	48.0	50.0	96.0%	1.2%
2-Chlorotoluene	62.7	50.0	125%	52.6	50.0	105%	17.5%
4-Chlorotoluene	49.7	50.0	99.4%	53.4	50.0	107%	7.2%
tert-Butylbenzene	53.6	50.0	107%	52.9	50.0	106%	1.3%
sec-Butylbenzene	60.2	50.0	120%	57.8	50.0	116%	4.1%
4-Isopropyltoluene	59.6	50.0	119%	57.2	50.0	114%	4.1%
n-Butylbenzene	64.4	50.0	129%	58.9	50.0	118%	8.9%
1,2,4-Trichlorobenzene	51.6	50.0	103%	47.5	50.0	95.0%	8.3%
Naphthalene	43.4	50.0	86.8%	42.7	50.0	85.4%	1.6%
1,2,3-Trichlorobenzene	47.0	50.0	94.0%	44.2	50.0	88.4%	6.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.7%	98.5%
d8-Toluene	100%	97.4%
Bromofluorobenzene	101%	103%
d4-1,2-Dichlorobenzene	99.7%	96.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: D-4
SAMPLE

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted: 02/26/08
Date Analyzed: 02/29/08 00:50
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.69 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 23.3%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	**8.1**	**83**

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	78.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-022608
METHOD BLANK

Lab Sample ID: MB-022608
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/26/08
Date Analyzed: 02/28/08 23:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.2	< 6.2 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	87.6%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	TBP	TOT OUT
MB-022608	87.6%	0
LCS-022608	91.2%	0
LCSD-022608	87.2%	0
D-4	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(42-139)	(10-155)

Prep Method: SW3550B
Log Number Range: 08-3487 to 08-3487

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-022608
LCS/LCSD

Lab Sample ID: LCS-022608
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted LCS/LCSD: 02/26/08

Date Analyzed LCS: 02/28/08 23:40
LCSD: 02/29/08 00:15
Instrument/Analyst LCS: ECD1/AAR
LCSD: ECD1/AAR

Sample Amount LCS: 10.0 g
LCSD: 10.0 g
Final Extract Volume LCS: 25 mL
LCSD: 25 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	38.0	62.5	60.8%	36.2	62.5	57.9%	4.9%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	91.2%	87.2%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041 **Sample ID: D-4**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MK13B
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted: 02/25/08
Date Analyzed: 02/29/08 03:10
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	0.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: MB-022508
METHOD BLANK

Lab Sample ID: MB-022508
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/25/08
Date Analyzed: 02/29/08 01:25
Instrument/Analyst: ECD1/AAR

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	0.25	< 0.25 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	90.4%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	TBP	TOT OUT
MB-022508	90.4%	0
LCS-022508	84.4%	0
LCSD-022508	86.4%	0
D-4	0.6%*	1

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(48-129)	(38-131)

Prep Method: SW3510C
Log Number Range: 08-3488 to 08-3488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-022508
LCS/LCSD

Lab Sample ID: LCS-022508
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted LCS/LCSD: 02/25/08

Date Analyzed LCS: 02/29/08 02:00
LCSD: 02/29/08 02:35
Instrument/Analyst LCS: ECD1/AAR
LCSD: ECD1/AAR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 50 mL
LCSD: 50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	1.52	2.50	60.8%	1.50	2.50	60.0%	1.3%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	84.4%	86.4%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Received: 02/20/08

Data Release Authorized:
Reported: 03/04/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-022508	Method Blank	02/25/08	02/27/08	1.00	Diesel	0.25	< 0.25 U
08-3488	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		65.1%
MK13B	D-4	02/25/08	02/27/08	1.00	Diesel	0.25	< 0.25 U
08-3488	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		NS
MB-022808	Method Blank	02/28/08	02/28/08	1.00	Diesel	0.25	< 0.25 U
08-4016	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		80.9%
MK13B	D-4	02/28/08	02/28/08	1.00	Diesel	0.25	< 0.25 U
08-4016	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		79.8%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	OTER	TOT OUT
MB-022508	65.1%	0
LCS-022508	70.4%	0
LCSD-022508	78.0%	0
D-4	NS	0
MB-022808	80.9%	0
LCS-022808	83.8%	0
D-4	79.8%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(58-114)	(45-121)

Prep Method: SW3510C
Log Number Range: 08-3488 to 08-4016

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID **Sample ID: LCS-022508**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-022508 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3488 Project: Riverside Business Park
Matrix: Water 848004.010
Data Release Authorized: Date Sampled: NA
Reported: 03/04/08 Date Received: NA

Date Extracted LCS/LCSD: 02/25/08 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 02/27/08 20:46 Final Extract Volume LCS: 1.0 mL
LCSD: 02/27/08 21:02 LCSD: 1.0 mL
Instrument/Analyst LCS: FID3A/MS Dilution Factor LCS: 1.00
LCSD: FID3A/MS LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	1.99	3.00	66.3%	2.25	3.00	75.0%	12.3%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	70.4%	78.0%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID

Sample ID: LCS-022808
LAB CONTROL

Lab Sample ID: LCS-022808
LIMS ID: 08-4016
Matrix: Water
Data Release Authorized:
Reported: 03/04/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/28/08
Date Analyzed: 02/28/08 16:24
Instrument/Analyst: FID3A/MS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.40	3.00	80.0%

TPHD Surrogate Recovery

o-Terphenyl	83.8%

Results reported in mg/L

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: MK13
Matrix: Water
Project: Riverside Business Park
Date Received: 02/20/08
848004.010

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
08-3488-022508MB1	Method Blank	500 mL	1.00 mL	02/25/08
08-3488-022508LCS1	Lab Control	500 mL	1.00 mL	02/25/08
08-3488-022508LCSD1	Lab Control Dup	500 mL	1.00 mL	02/25/08
08-3488-MK13B	D-4	500 mL	1.00 mL	02/25/08
08-4016-022808MB1	Method Blank	500 mL	1.00 mL	02/28/08
08-4016-022808LCS1	Lab Control	500 mL	1.00 mL	02/28/08
08-4016-MK13BRE	D-4	360 mL	1.00 mL	02/28/08

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Received: 02/20/08

Data Release Authorized:
Reported: 02/29/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-022608	Method Blank	02/26/08	02/27/08	1.00	Diesel	5.0	< 5.0 U
08-3487	HC ID: ---		FID3A	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		86.4%
MK13A	D-4	02/26/08	02/28/08	1.00	**Diesel**	**65**	**1,900**
08-3487	HC ID: **DIESEL**		FID3A	10	Motor Oil	130	< 130 U
					o-Terphenyl		NR

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	OTER	TOT OUT
022608MBS	86.4%	0
022608LCS	79.3%	0
D-4	NR	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(46-116)	(42-112)

Prep Method: SW3550B
Log Number Range: 08-3487 to 08-3487

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-022608
LAB CONTROL

Lab Sample ID: LCS-022608
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 02/29/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/26/08
Date Analyzed: 02/27/08 18:58
Instrument/Analyst: FID3A/MS

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	115	150	76.7%

TPHD Surrogate Recovery

o-Terphenyl	79.3%

Results reported in mg/kg

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Soil
Date Received: 02/20/08

ARI Job: MK13
Project: Riverside Business Park
848004.010

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
08-3487-022608MB1	Method Blank	10.0 g	1.00 mL	-	02/26/08
08-3487-022608LCS1	Lab Control	10.0 g	1.00 mL	-	02/26/08
08-3487-022608LCSD1	Lab Control Dup	10.0 g	1.00 mL	-	02/26/08
08-3487-MK13A	D-4	7.69 g	1.00 mL	D	02/26/08

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: D-4**
Page 1 of 2 **SAMPLE**

Lab Sample ID: MK13B
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/03/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted: 02/25/08
Date Analyzed: 02/27/08 21:03
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: D-4**
 SAMPLE

Lab Sample ID: MK13B
LIMS ID: 08-3488
Matrix: Water
Date Analyzed: 02/27/08 21:03

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**1.0**	**10**
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.4%	2-Fluorobiphenyl	50.8%
d14-p-Terphenyl	44.8%	d4-1,2-Dichlorobenzene	42.8%
d5-Phenol	59.2%	2-Fluorophenol	57.3%
2,4,6-Tribromophenol	64.0%	d4-2-Chlorophenol	60.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-022508
METHOD BLANK

Lab Sample ID: MB-022508
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/03/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/25/08
Date Analyzed: 02/27/08 16:25
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MB-022508**
 METHOD BLANK

Lab Sample ID: MB-022508 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3488 Project: Riverside Business Park
Matrix: Water 848004.010
Date Analyzed: 02/27/08 16:25

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.6%	2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	67.2%	d4-1,2-Dichlorobenzene	44.0%
d5-Phenol	68.0%	2-Fluorophenol	64.3%
2,4,6-Tribromophenol	74.7%	d4-2-Chlorophenol	68.8%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-022508	67.6%	56.8%	67.2%	44.0%	68.0%	64.3%	74.7%	68.8%	0
LCS-022508	74.0%	68.4%	66.8%	57.2%	63.7%	66.1%	85.3%	72.5%	0
LCSD-022508	73.6%	66.0%	67.6%	56.0%	70.7%	69.6%	78.1%	71.5%	0
D-4	60.4%	50.8%	44.8%	42.8%	59.2%	57.3%	64.0%	60.5%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(54-102)	(40-103)
(FBP) = 2-Fluorobiphenyl	(47-99)	(35-98)
(TPH) = d14-p-Terphenyl	(50-119)	(21-122)
(DCB) = d4-1,2-Dichlorobenzene	(39-86)	(28-85)
(PHL) = d5-Phenol	(45-100)	(32-99)
(2FP) = 2-Fluorophenol	(49-94)	(36-93)
(TBP) = 2,4,6-Tribromophenol	(49-117)	(37-120)
(2CP) = d4-2-Chlorophenol	(54-99)	(40-98)

Prep Method: SW3520C
Log Number Range: 08-3488 to 08-3488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: LCS-022508
LCS/LCSD

Lab Sample ID: LCS-022508
LIMS ID: 08-3488
Matrix: Water
Data Release Authorized:
Reported: 03/03/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted LCS/LCSD: 02/25/08

Date Analyzed LCS: 02/29/08 12:19
LCSD: 02/29/08 12:54
Instrument/Analyst LCS: NT6/LJR
LCSD: NT6/LJR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

GPC Cleanup: NO

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	15.1	25.0	60.4%	16.8	25.0	67.2%	10.7%
Bis-(2-Chloroethyl) Ether	17.8	25.0	71.2%	17.6	25.0	70.4%	1.1%
2-Chlorophenol	17.3	25.0	69.2%	17.4	25.0	69.6%	0.6%
1,3-Dichlorobenzene	7.2	25.0	28.8%	7.3	25.0	29.2%	2.1%
1,4-Dichlorobenzene	7.3	25.0	29.2%	7.6	25.0	30.4%	3.9%
Benzyl Alcohol	26.4	50.0	52.8%	28.8	50.0	57.6%	8.7%
1,2-Dichlorobenzene	8.1	25.0	32.4%	8.4	25.0	33.6%	4.7%
2-Methylphenol	17.4	25.0	69.6%	17.3	25.0	69.2%	0.6%
2,2'-Oxybis(1-Chloropropane)	17.6	25.0	70.4%	17.6	25.0	70.4%	0.0%
4-Methylphenol	35.1	50.0	70.2%	36.0	50.0	72.0%	2.5%
N-Nitroso-Di-N-Propylamine	18.8	25.0	75.2%	18.0	25.0	72.0%	4.3%
Hexachloroethane	5.6	25.0	22.4%	5.6	25.0	22.4%	0.7%
Nitrobenzene	16.9	25.0	67.6%	17.3	25.0	69.2%	2.3%
Isophorone	19.5	25.0	78.0%	19.2	25.0	76.8%	1.6%
2-Nitrophenol	17.0	25.0	68.0%	17.2	25.0	68.8%	1.2%
2,4-Dimethylphenol	14.9	25.0	59.6%	14.5	25.0	58.0%	2.7%
Benzoic Acid	42.1	75.0	56.1%	46.9	75.0	62.5%	10.8%
bis(2-Chloroethoxy) Methane	17.7	25.0	70.8%	17.5	25.0	70.0%	1.1%
2,4-Dichlorophenol	17.5	25.0	70.0%	17.6	25.0	70.4%	0.6%
1,2,4-Trichlorobenzene	7.4	25.0	29.6%	7.6	25.0	30.4%	2.8%
Naphthalene	11.4	25.0	45.6%	12.0	25.0	48.0%	5.1%
4-Chloroaniline	23.8	60.0	39.7%	32.2	60.0	53.7%	30.0%
Hexachlorobutadiene	5.1	25.0	20.4%	5.0	25.0	20.0%	0.8%
4-Chloro-3-methylphenol	17.6	25.0	70.4%	17.4	25.0	69.6%	1.1%
2-Methylnaphthalene	10.8	25.0	43.2%	11.2	25.0	44.8%	3.6%
Hexachlorocyclopentadiene	25.3	75.0	33.7%	24.2	75.0	32.3%	4.4%
2,4,6-Trichlorophenol	19.4	25.0	77.6%	18.5	25.0	74.0%	4.7%
2,4,5-Trichlorophenol	18.9	25.0	75.6%	17.9	25.0	71.6%	5.4%
2-Chloronaphthalene	11.9	25.0	47.6%	12.2	25.0	48.8%	2.5%
2-Nitroaniline	18.6	25.0	74.4%	17.8	25.0	71.2%	4.4%
Dimethylphthalate	18.0	25.0	72.0%	16.9	25.0	67.6%	6.3%
Acenaphthylene	15.7	25.0	62.8%	15.4	25.0	61.6%	1.9%
3-Nitroaniline	46.5	64.0	72.7%	47.3	64.0	73.9%	1.7%
Acenaphthene	14.5	25.0	58.0%	14.2	25.0	56.8%	2.1%
2,4-Dinitrophenol	61.4	75.0	81.9%	57.6	75.0	76.8%	6.4%
4-Nitrophenol	15.7	25.0	62.8%	17.0	25.0	68.0%	8.0%
Dibenzofuran	15.6	25.0	62.4%	15.5	25.0	62.0%	0.6%
2,6-Dinitrotoluene	18.6	25.0	74.4%	17.6	25.0	70.4%	5.5%
2,4-Dinitrotoluene	19.0	25.0	76.0%	18.0	25.0	72.0%	5.4%
Diethylphthalate	18.8	25.0	75.2%	17.6	25.0	70.4%	6.6%
4-Chlorophenyl-phenylether	15.9	25.0	63.6%	15.8	25.0	63.2%	0.6%
Fluorene	17.2	25.0	68.8%	16.7	25.0	66.8%	2.9%
4-Nitroaniline	18.3	25.0	73.2%	17.3	25.0	69.2%	5.6%
4,6-Dinitro-2-Methylphenol	58.7	75.0	78.3%	55.0	75.0	73.3%	6.5%
N-Nitrosodiphenylamine	21.4	25.0	85.6%	20.5	25.0	82.0%	4.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-022508**
 LCS/LCSD

Lab Sample ID: LCS-022508 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3488 Project: Riverside Business Park
Matrix: Water 848004.010
Date Analyzed: 02/29/08 12:19

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	17.6	25.0	70.4%	16.6	25.0	66.4%	5.8%
Hexachlorobenzene	17.6	25.0	70.4%	16.9	25.0	67.6%	4.1%
Pentachlorophenol	20.4	25.0	81.6%	19.0	25.0	76.0%	7.1%
Phenanthrene	18.3	25.0	73.2%	17.1	25.0	68.4%	6.8%
Carbazole	20.4	25.0	81.6%	19.0	25.0	76.0%	7.1%
Anthracene	18.5	25.0	74.0%	17.6	25.0	70.4%	5.0%
Di-n-Butylphthalate	20.7	25.0	82.8%	19.1	25.0	76.4%	8.0%
Fluoranthene	21.2	25.0	84.8%	19.6	25.0	78.4%	7.8%
Pyrene	16.0	25.0	64.0%	16.2	25.0	64.8%	1.2%
Butylbenzylphthalate	18.9	25.0	75.6%	17.9	25.0	71.6%	5.4%
3,3'-Dichlorobenzidine	41.4	64.0	64.7%	39.0	64.0	60.9%	6.0%
Benzo(a)anthracene	18.2	25.0	72.8%	17.3	25.0	69.2%	5.1%
bis(2-Ethylhexyl)phthalate	19.2	25.0	76.8%	18.8	25.0	75.2%	2.1%
Chrysene	17.8	25.0	71.2%	17.3	25.0	69.2%	2.8%
Di-n-Octyl phthalate	18.2	25.0	72.8%	17.8	25.0	71.2%	2.2%
Benzo(b)fluoranthene	18.2	25.0	72.8%	18.6	25.0	74.4%	2.2%
Benzo(k)fluoranthene	20.5	25.0	82.0%	18.3	25.0	73.2%	11.3%
Benzo(a)pyrene	18.5	25.0	74.0%	18.0	25.0	72.0%	2.7%
Indeno(1,2,3-cd)pyrene	18.2	25.0	72.8%	18.5	25.0	74.0%	1.6%
Dibenz(a,h)anthracene	18.5	25.0	74.0%	19.0	25.0	76.0%	2.7%
Benzo(g,h,i)perylene	17.8	25.0	71.2%	18.7	25.0	74.8%	4.9%
1-Methylnaphthalene	11.4	25.0	45.6%	11.9	25.0	47.6%	4.3%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	74.0%	73.6%
2-Fluorobiphenyl	68.4%	66.0%
d14-p-Terphenyl	66.8%	67.6%
d4-1,2-Dichlorobenzene	57.2%	56.0%
d5-Phenol	63.7%	70.7%
2-Fluorophenol	66.1%	69.6%
2,4,6-Tribromophenol	85.3%	78.1%
d4-2-Chlorophenol	72.5%	71.5%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: D-4
SAMPLE

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/05/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted: 02/28/08
Date Analyzed: 03/05/08 08:30
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.72 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 23.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	65	< 65 U
111-44-4	Bis-(2-Chloroethyl) Ether	65	< 65 U
95-57-8	2-Chlorophenol	65	< 65 U
541-73-1	1,3-Dichlorobenzene	65	< 65 U
106-46-7	1,4-Dichlorobenzene	65	< 65 U
100-51-6	Benzyl Alcohol	320	< 320 U
95-50-1	1,2-Dichlorobenzene	65	< 65 U
95-48-7	2-Methylphenol	65	< 65 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	65	< 65 U
106-44-5	4-Methylphenol	65	< 65 U
621-64-7	N-Nitroso-Di-N-Propylamine	320	< 320 U
67-72-1	Hexachloroethane	65	< 65 U
98-95-3	Nitrobenzene	65	< 65 U
78-59-1	Isophorone	65	< 65 U
88-75-5	2-Nitrophenol	320	< 320 U
105-67-9	2,4-Dimethylphenol	65	< 65 U
65-85-0	Benzoic Acid	650	< 650 U
111-91-1	bis(2-Chloroethoxy) Methane	65	< 65 U
120-83-2	2,4-Dichlorophenol	320	< 320 U
120-82-1	1,2,4-Trichlorobenzene	65	< 65 U
91-20-3	**Naphthalene**	**65**	**1,700**
106-47-8	4-Chloroaniline	320	< 320 U
87-68-3	Hexachlorobutadiene	65	< 65 U
59-50-7	4-Chloro-3-methylphenol	320	< 320 U
91-57-6	**2-Methylnaphthalene**	**65**	**19,000 E**
77-47-4	Hexachlorocyclopentadiene	320	< 320 U
88-06-2	2,4,6-Trichlorophenol	320	< 320 U
95-95-4	2,4,5-Trichlorophenol	320	< 320 U
91-58-7	2-Chloronaphthalene	65	< 65 U
88-74-4	2-Nitroaniline	320	< 320 U
131-11-3	Dimethylphthalate	65	< 65 U
208-96-8	Acenaphthylene	65	< 65 U
99-09-2	3-Nitroaniline	320	< 320 U
83-32-9	**Acenaphthene**	**65**	**1,400**
51-28-5	2,4-Dinitrophenol	650	< 650 U
100-02-7	4-Nitrophenol	320	< 320 U
132-64-9	**Dibenzofuran**	**65**	**570**
606-20-2	2,6-Dinitrotoluene	320	< 320 U
121-14-2	2,4-Dinitrotoluene	320	< 320 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: D-4**
 SAMPLE

Lab Sample ID: MK13A QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3487 Project: Riverside Business Park
Matrix: Soil 848004.010
Date Analyzed: 03/05/08 08:30

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	65	< 65 U
7005-72-3	4-Chlorophenyl-phenylether	65	< 65 U
86-73-7	**Fluorene**	**65**	**2,100**
100-01-6	4-Nitroaniline	320	< 320 U
534-52-1	4,6-Dinitro-2-Methylphenol	650	< 650 U
86-30-6	N-Nitrosodiphenylamine	720	< 720 Y
101-55-3	4-Bromophenyl-phenylether	65	< 65 U
118-74-1	Hexachlorobenzene	65	< 65 U
87-86-5	Pentachlorophenol	320	< 320 U
85-01-8	**Phenanthrene**	**65**	**5,400 E**
86-74-8	Carbazole	65	< 65 U
120-12-7	**Anthracene**	**65**	**240**
84-74-2	Di-n-Butylphthalate	65	< 65 U
206-44-0	**Fluoranthene**	**65**	**350**
129-00-0	**Pyrene**	**65**	**630**
85-68-7	Butylbenzylphthalate	65	< 65 U
91-94-1	3,3'-Dichlorobenzidine	320	< 320 U
56-55-3	Benzo(a)anthracene	65	< 65 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**65**	**180**
218-01-9	Chrysene	65	< 65 U
117-84-0	Di-n-Octyl phthalate	65	< 65 U
205-99-2	Benzo(b)fluoranthene	65	< 65 U
207-08-9	Benzo(k)fluoranthene	65	< 65 U
50-32-8	Benzo(a)pyrene	65	< 65 U
193-39-5	Indeno(1,2,3-cd)pyrene	65	< 65 U
53-70-3	Dibenz(a,h)anthracene	65	< 65 U
191-24-2	Benzo(g,h,i)perylene	65	< 65 U
90-12-0	**1-Methylnaphthalene**	**65**	**12,000 E**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.2%	2-Fluorobiphenyl	57.6%
d14-p-Terphenyl	60.8%	d4-1,2-Dichlorobenzene	60.0%
d5-Phenol	65.9%	2-Fluorophenol	46.4%
2,4,6-Tribromophenol	76.3%	d4-2-Chlorophenol	64.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: D-4**
Page 1 of 2 **DILUTION**

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/05/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted: 02/28/08
Date Analyzed: 03/05/08 12:00
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.72 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 5.00
Percent Moisture: 23.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	320	< 320 U
111-44-4	Bis-(2-Chloroethyl) Ether	320	< 320 U
95-57-8	2-Chlorophenol	320	< 320 U
541-73-1	1,3-Dichlorobenzene	320	< 320 U
106-46-7	1,4-Dichlorobenzene	320	< 320 U
100-51-6	Benzyl Alcohol	1,600	< 1,600 U
95-50-1	1,2-Dichlorobenzene	320	< 320 U
95-48-7	2-Methylphenol	320	< 320 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	320	< 320 U
106-44-5	4-Methylphenol	320	< 320 U
621-64-7	N-Nitroso-Di-N-Propylamine	1,600	< 1,600 U
67-72-1	Hexachloroethane	320	< 320 U
98-95-3	Nitrobenzene	320	< 320 U
78-59-1	Isophorone	320	< 320 U
88-75-5	2-Nitrophenol	1,600	< 1,600 U
105-67-9	2,4-Dimethylphenol	320	< 320 U
65-85-0	Benzoic Acid	3,200	< 3,200 U
111-91-1	bis(2-Chloroethoxy) Methane	320	< 320 U
120-83-2	2,4-Dichlorophenol	1,600	< 1,600 U
120-82-1	1,2,4-Trichlorobenzene	320	< 320 U
91-20-3	**Naphthalene**	**320**	**1,600**
106-47-8	4-Chloroaniline	1,600	< 1,600 U
87-68-3	Hexachlorobutadiene	320	< 320 U
59-50-7	4-Chloro-3-methylphenol	1,600	< 1,600 U
91-57-6	**2-Methylnaphthalene**	**320**	**24,000**
77-47-4	Hexachlorocyclopentadiene	1,600	< 1,600 U
88-06-2	2,4,6-Trichlorophenol	1,600	< 1,600 U
95-95-4	2,4,5-Trichlorophenol	1,600	< 1,600 U
91-58-7	2-Chloronaphthalene	320	< 320 U
88-74-4	2-Nitroaniline	1,600	< 1,600 U
131-11-3	Dimethylphthalate	320	< 320 U
208-96-8	Acenaphthylene	320	< 320 U
99-09-2	3-Nitroaniline	1,600	< 1,600 U
83-32-9	**Acenaphthene**	**320**	**1,400**
51-28-5	2,4-Dinitrophenol	3,200	< 3,200 U
100-02-7	4-Nitrophenol	1,600	< 1,600 U
132-64-9	**Dibenzofuran**	**320**	**520**
606-20-2	2,6-Dinitrotoluene	1,600	< 1,600 U
121-14-2	2,4-Dinitrotoluene	1,600	< 1,600 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: D-4
DILUTION

Lab Sample ID: MK13A
LIMS ID: 08-3487
Matrix: Soil
Date Analyzed: 03/05/08 12:00

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	320	< 320 U
7005-72-3	4-Chlorophenyl-phenylether	320	< 320 U
86-73-7	**Fluorene**	**320**	**2,000**
100-01-6	4-Nitroaniline	1,600	< 1,600 U
534-52-1	4,6-Dinitro-2-Methylphenol	3,200	< 3,200 U
86-30-6	N-Nitrosodiphenylamine	1,400	< 1,400 Y
101-55-3	4-Bromophenyl-phenylether	320	< 320 U
118-74-1	Hexachlorobenzene	320	< 320 U
87-86-5	Pentachlorophenol	1,600	< 1,600 U
85-01-8	**Phenanthrene**	**320**	**6,500**
86-74-8	Carbazole	320	< 320 U
120-12-7	**Anthracene**	**320**	**380**
84-74-2	Di-n-Butylphthalate	320	< 320 U
206-44-0	Fluoranthene	320	< 320 U
129-00-0	**Pyrene**	**320**	**610**
85-68-7	Butylbenzylphthalate	320	< 320 U
91-94-1	3,3'-Dichlorobenzidine	1,600	< 1,600 U
56-55-3	Benzo(a)anthracene	320	< 320 U
117-81-7	bis(2-Ethylhexyl)phthalate	320	< 320 U
218-01-9	Chrysene	320	< 320 U
117-84-0	Di-n-Octyl phthalate	320	< 320 U
205-99-2	Benzo(b)fluoranthene	320	< 320 U
207-08-9	Benzo(k)fluoranthene	320	< 320 U
50-32-8	Benzo(a)pyrene	320	< 320 U
193-39-5	Indeno(1,2,3-cd)pyrene	320	< 320 U
53-70-3	Dibenz(a,h)anthracene	320	< 320 U
191-24-2	Benzo(g,h,i)perylene	320	< 320 U
90-12-0	**1-Methylnaphthalene**	**320**	**14,000**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	54.4%	2-Fluorobiphenyl	56.6%
d14-p-Terphenyl	58.2%	d4-1,2-Dichlorobenzene	55.0%
d5-Phenol	56.0%	2-Fluorophenol	56.3%
2,4,6-Tribromophenol	66.7%	d4-2-Chlorophenol	57.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-022808
METHOD BLANK

Lab Sample ID: MB-022808
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/05/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Date Extracted: 02/28/08
Date Analyzed: 03/04/08 18:06
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.50 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	330	< 330 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	330	< 330 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	330	< 330 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-022808
METHOD BLANK

Lab Sample ID: MB-022808
LIMS ID: 08-3487
Matrix: Soil
Date Analyzed: 03/04/08 18:06

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	bis(2-Ethylhexyl)phthalate	67	< 67 U
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
205-99-2	Benzo(b)fluoranthene	67	< 67 U
207-08-9	Benzo(k)fluoranthene	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.4%	2-Fluorobiphenyl	64.8%
d14-p-Terphenyl	65.2%	d4-1,2-Dichlorobenzene	64.8%
d5-Phenol	69.6%	2-Fluorophenol	50.4%
2,4,6-Tribromophenol	69.3%	d4-2-Chlorophenol	68.8%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-022808	66.4%	64.8%	65.2%	64.8%	69.6%	50.4%	69.3%	68.8%	0
LCS-022808	68.0%	66.8%	63.6%	66.8%	76.8%	54.4%	74.1%	68.5%	0
LCSD-022808	66.8%	66.0%	64.8%	63.2%	72.3%	48.3%	76.3%	66.1%	0
D-4	61.2%	57.6%	60.8%	60.0%	65.9%	46.4%	76.3%	64.5%	0
D-4 DL	54.4%	56.6%	58.2%	55.0%	56.0%	56.3%	66.7%	57.9%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(45-87)	(34-91)
(FBP) = 2-Fluorobiphenyl	(44-91)	(37-94)
(TPH) = d14-p-Terphenyl	(50-111)	(33-106)
(DCB) = d4-1,2-Dichlorobenzene	(38-84)	(35-85)
(PHL) = d5-Phenol	(10-115)	(31-91)
(2FP) = 2-Fluorophenol	(45-111)	(11-106)
(TBP) = 2,4,6-Tribromophenol	(45-111)	(25-117)
(2CP) = d4-2-Chlorophenol	(46-88)	(32-91)

Prep Method: SW3550B
Log Number Range: 08-3487 to 08-3487

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-022808
LCS/LCSD

Lab Sample ID: LCS-022808
LIMS ID: 08-3487
Matrix: Soil
Data Release Authorized:
Reported: 03/05/08

QC Report No: MK13-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Date Extracted LCS/LCSD: 02/28/08

Date Analyzed LCS: 03/04/08 18:41
LCSD: 03/04/08 19:16
Instrument/Analyst LCS: NT6/LJR
LCSD: NT6/LJR
GPC Cleanup: NO

Sample Amount LCS: 7.50 g
LCSD: 7.50 g
Final Extract Volume LCS: 0.5 mL
LCSD: 0.5 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	1200	1670	71.9%	1130	1670	67.7%	6.0%
Bis-(2-Chloroethyl) Ether	1130	1670	67.7%	1060	1670	63.5%	6.4%
2-Chlorophenol	1120	1670	67.1%	1060	1670	63.5%	5.5%
1,3-Dichlorobenzene	1020	1670	61.1%	973	1670	58.3%	4.7%
1,4-Dichlorobenzene	1010	1670	60.5%	952	1670	57.0%	5.9%
Benzyl Alcohol	1360	3330	40.8%	767	3330	23.0%	55.8%
1,2-Dichlorobenzene	1060	1670	63.5%	1010	1670	60.5%	4.8%
2-Methylphenol	1150	1670	68.9%	1060	1670	63.5%	8.1%
2,2'-Oxybis(1-Chloropropane)	1150	1670	68.9%	1090	1670	65.3%	5.4%
4-Methylphenol	2280	3330	68.5%	2140	3330	64.3%	6.3%
N-Nitroso-Di-N-Propylamine	1150	1670	68.9%	1080	1670	64.7%	6.3%
Hexachloroethane	1030	1670	61.7%	972	1670	58.2%	5.8%
Nitrobenzene	1120	1670	67.1%	1080	1670	64.7%	3.6%
Isophorone	1200	1670	71.9%	1140	1670	68.3%	5.1%
2-Nitrophenol	1090	1670	65.3%	1060	1670	63.5%	2.8%
2,4-Dimethylphenol	1050	1670	62.9%	999	1670	59.8%	5.0%
Benzoic Acid	3940	5000	78.8%	4030	5000	80.6%	2.3%
bis(2-Chloroethoxy) Methane	1120	1670	67.1%	1080	1670	64.7%	3.6%
2,4-Dichlorophenol	1140	1670	68.3%	1080	1670	64.7%	5.4%
1,2,4-Trichlorobenzene	1030	1670	61.7%	1020	1670	61.1%	1.0%
Naphthalene	1060	1670	63.5%	1040	1670	62.3%	1.9%
4-Chloroaniline	2330	4000	58.2%	2240	4000	56.0%	3.9%
Hexachlorobutadiene	1050	1670	62.9%	1020	1670	61.1%	2.9%
4-Chloro-3-methylphenol	1150	1670	68.9%	1100	1670	65.9%	4.4%
2-Methylnaphthalene	1140	1670	68.3%	1120	1670	67.1%	1.8%
Hexachlorocyclopentadiene	3300	5000	66.0%	3260	5000	65.2%	1.2%
2,4,6-Trichlorophenol	1130	1670	67.7%	1060	1670	63.5%	6.4%
2,4,5-Trichlorophenol	1180	1670	70.7%	1240	1670	74.3%	5.0%
2-Chloronaphthalene	1060	1670	63.5%	1040	1670	62.3%	1.9%
2-Nitroaniline	1160	1670	69.5%	1150	1670	68.9%	0.9%
Dimethylphthalate	1090	1670	65.3%	1070	1670	64.1%	1.9%
Acenaphthylene	1130	1670	67.7%	1110	1670	66.5%	1.8%
3-Nitroaniline	2740	4270	64.2%	2780	4270	65.1%	1.4%
Acenaphthene	1050	1670	62.9%	1030	1670	61.7%	1.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCSD-022808**
 LCS/LCSD

Lab Sample ID: LCS-022808 QC Report No: MK13-Landau Associates, Inc.
LIMS ID: 08-3487 Project: Riverside Business Park
Matrix: Soil 848004.010
Date Analyzed LCS: 03/04/08 18:41
LCSD: 03/04/08 19:16

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
2,4-Dinitrophenol	3910	5000	78.2%	3780	5000	75.6%	3.4%
4-Nitrophenol	721	1670	43.2%	529	1670	31.7%	30.7%
Dibenzofuran	1100	1670	65.9%	1090	1670	65.3%	0.9%
2,6-Dinitrotoluene	1130	1670	67.7%	1120	1670	67.1%	0.9%
2,4-Dinitrotoluene	1190	1670	71.3%	1190	1670	71.3%	0.0%
Diethylphthalate	1130	1670	67.7%	1130	1670	67.7%	0.0%
4-Chlorophenyl-phenylether	1100	1670	65.9%	1090	1670	65.3%	0.9%
Fluorene	1130	1670	67.7%	1120	1670	67.1%	0.9%
4-Nitroaniline	1170	1670	70.1%	1190	1670	71.3%	1.7%
4,6-Dinitro-2-Methylphenol	3550	5000	71.0%	3540	5000	70.8%	0.3%
N-Nitrosodiphenylamine	1410	1670	84.4%	1410	1670	84.4%	0.0%
4-Bromophenyl-phenylether	1070	1670	64.1%	1060	1670	63.5%	0.9%
Hexachlorobenzene	1090	1670	65.3%	1070	1670	64.1%	1.9%
Pentachlorophenol	1110	1670	66.5%	1190	1670	71.3%	7.0%
Phenanthrene	1110	1670	66.5%	1110	1670	66.5%	0.0%
Carbazole	1260	1670	75.4%	1260	1670	75.4%	0.0%
Anthracene	1130	1670	67.7%	1120	1670	67.1%	0.9%
Di-n-Butylphthalate	1260	1670	75.4%	1260	1670	75.4%	0.0%
Fluoranthene	1330	1670	79.6%	1340	1670	80.2%	0.7%
Pyrene	977	1670	58.5%	979	1670	58.6%	0.2%
Butylbenzylphthalate	1110	1670	66.5%	1120	1670	67.1%	0.9%
3,3'-Dichlorobenzidine	2110	4270	49.4%	2140	4270	50.1%	1.4%
Benzo(a)anthracene	1090	1670	65.3%	1090	1670	65.3%	0.0%
bis(2-Ethylhexyl)phthalate	1290	1670	77.2%	1300	1670	77.8%	0.8%
Chrysene	1080	1670	64.7%	1090	1670	65.3%	0.9%
Di-n-Octyl phthalate	1130	1670	67.7%	1140	1670	68.3%	0.9%
Benzo(b)fluoranthene	1260	1670	75.4%	1200	1670	71.9%	4.9%
Benzo(k)fluoranthene	1180	1670	70.7%	1280	1670	76.6%	8.1%
Benzo(a)pyrene	1170	1670	70.1%	1200	1670	71.9%	2.5%
Indeno(1,2,3-cd)pyrene	1010	1670	60.5%	1020	1670	61.1%	1.0%
Dibenz(a,h)anthracene	1010	1670	60.5%	1020	1670	61.1%	1.0%
Benzo(g,h,i)perylene	923	1670	55.3%	941	1670	56.3%	1.9%
1-Methylnaphthalene	1110	1670	66.5%	1080	1670	64.7%	2.7%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	68.0%	66.8%
2-Fluorobiphenyl	66.8%	66.0%
d14-p-Terphenyl	63.6%	64.8%
d4-1,2-Dichlorobenzene	66.8%	63.2%
d5-Phenol	76.8%	72.3%
2-Fluorophenol	54.4%	48.3%
2,4,6-Tribromophenol	74.1%	76.3%
d4-2-Chlorophenol	68.5%	66.1%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 27, 2008

Larry Beard
Landau Associates, Inc.
130 2nd Avenue S.
Edmonds, WA 98020

FEB 29 2008

RE: Project No: 848004.010
Project Name: Riverside Business Park
ARI Job No: MJ68

Dear Larry:

Please find enclosed the chain of custody (COC) documentation and the final results from the project referenced above. Analytical Resources, Inc. accepted one soil sample and twenty one water samples in good condition on February 20, 2008. Two samples were placed on hold pending further instructions.

The samples were analyzed for Dissolved Metals, as requested on the COC.

There were no anomalies associated with the sample. A copy of this report and all corresponding raw data will remain on file electronically with ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Project Manager
(206) 695-6211
kellyb@arilabs.com

Enclosures

LANDAU ASSOCIATES

☒ Seattle (Edmonds) (425) 778-0907
☐ Tacoma (253) 926-2493
☐ Spokane (509) 327-9737
☐ Portland (Tigard) (503) 443-6010
☐ _____

MJ608

Chain-of-Custody Record

Date 2/18/08
Page 1 of 2

Project Name Riverside Business Park Project No. 848004.010
Project Location/Event Everett, WA
Sampler's Name Nathan Moxley
Project Contact Erik Gerking
Send Results To Erik Gerking / Nathan Moxley / Anne H.

Turnaround Time
☐ Standard
☒ 5 day

Sample I.D.	Date	Time	Matrix	No. of Containers	Testing Parameters: Dissolved As	Observations/Comments
S-12	2/18/08	0845	Water	1	X	
S-13		0925				
S-11		1005				
S-7		1050				
S-9		1120				
S-10		1210				
S-8		1255				
S-6		1325				
D-6		1415				
S-5		1535				
RBP-Dup	2/19/08	0800	Water	1	X	
S-4		0820				
D-5		0850				
D-4		1010				
S-3		1110				
S-1		1145				
D-1		1300				
S-2		1355				

Observations/Comments

___ Allow water samples to settle, collect aliquot from clear portion

NWTPH-Dx:
___ run acid wash/silica gel cleanup
___ run samples standardized to _____ product

___ Analyze for EPH if no specific product identified

VOC/BTEX/VPH (soil):
___ non-preserved
___ preserved w/methanol
___ preserved w/sodium bisulfate
___ Freeze upon receipt

___ Dissolved metal water samples field filtered

Other _____

Special Shipment/Handling or Storage Requirements

Method of Shipment ARI Pickup

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name: Nathan Moxley	Printed Name: Emily Cravens	Printed Name	Printed Name
Company: Landau Assoc.	Company: ARI	Company	Company
Date: 2/19/08 Time: 1910	Date: 2/20/08 Time: 1144	Date _____ Time _____	Date _____ Time _____

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

Rev 4/01

LANDAU ASSOCIATES

☒ Seattle (Edmonds) (425) 778-0907
☐ Tacoma (253) 926-2493
☐ Spokane (509) 327-9737
☐ Portland (Tigard) (503) 443-6010
☐ _____

Date 2/19/08
Page 2 of 2

Chain-of-Custody Record

Project Name Riverside Business Park Project No. 848604.010
Project Location/Event Everett, WA
Sampler's Name Nathan Moxley
Project Contact Erik Gerking
Send Results To ↓ / Nathan Moxley / Anne Halverson

Turnaround Time
☐ Standard
☐ Accelerated
☒ 5 day

Sample I.D.	Date	Time	Matrix	No. of Containers	Dissolved As	TPH-Dx	SVOCs	VOCs	* See comments	Archive	Observations/Comments
D-4	2/19/08	0950	Soil	1				(2)	*	X	
D-4	↓	1430	Water	7		X	X	X (2)		X	
D-2		1440	↓	1	X						
D-3		1600		1	X						

___ Allow water samples to settle, collect aliquot from clear portion

NWTPH-Dx:
___ run acid wash/silica gel cleanup
___ run samples standardized to _____ product

___ Analyze for EPH if no specific product identified

VOC/BTEX/VPH (soil):
___ non-preserved
___ preserved w/methanol
___ preserved w/sodium bisulfate
___ Freeze upon receipt

___ Dissolved metal water samples field filtered

Other * Please contact Erik Gerking for complete list of analytes that should be run with

Special Shipment/Handling or Storage Requirements

Method of Shipment ARI Pickup

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name: Nathan Moxley	Printed Name: Emily Counts	Printed Name	Printed Name
Company: Landau Assoc	Company: ARI	Company	Company
Date: 2/19/08 Time: 1910	Date: 2/20/08 Time: 1144	Date: Time:	Date: Time:

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

Rev 4/01

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: LANDAU
Project Name: RIVERSIDE BUSINESS PARK
COC No: —
Delivered by: EC
Assigned ARI Job No: MJ608
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	3.5 °C	

Cooler Accepted by: EC Date: 2/20/08 Time: 1144

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: EC Date: 2/20/08 Time: 1306

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

Explain discrepancies or negative responses:

By: Date:

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: MJ68MB
LIMS ID: 08-3196
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-12
DUPLICATE

Lab Sample ID: MJ68A
LIMS ID: 08-3195
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	1.5	1.6	6.5%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-12
MATRIX SPIKE

Lab Sample ID: MJ68A
LIMS ID: 08-3195
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	1.5	28.8	25.0	109%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: LAB CONTROL

Lab Sample ID: MJ68LCS
LIMS ID: 08-3196
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	27.0	25.0	108%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-12
SAMPLE

Lab Sample ID: MJ68A
LIMS ID: 08-3195
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	**7440-38-2**	**Arsenic**	0.2	1.5	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-13
SAMPLE

Lab Sample ID: MJ68B
LIMS ID: 08-3196
Matrix: Water
Data Release Authorized: MJK
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	0.6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-11
SAMPLE

Lab Sample ID: MJ68C
LIMS ID: 08-3197
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	10.3	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-7
SAMPLE

Lab Sample ID: MJ68D
LIMS ID: 08-3198
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	32.5	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-9
SAMPLE

Lab Sample ID: MJ68E
LIMS ID: 08-3199
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	12.7	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-10
SAMPLE

Lab Sample ID: MJ68F
LIMS ID: 08-3200
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	15.0	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-8
SAMPLE

Lab Sample ID: MJ68G
LIMS ID: 08-3201
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	44.2	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: S-6
SAMPLE

Lab Sample ID: MJ68H
LIMS ID: 08-3202
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	23.8	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-6
SAMPLE

Lab Sample ID: MJ68I
LIMS ID: 08-3203
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	4.8	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-5
SAMPLE

Lab Sample ID: MJ68J
LIMS ID: 08-3204
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/18/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	3.9	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: RBP-DUP
SAMPLE

Lab Sample ID: MJ68K
LIMS ID: 08-3205
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	2.3	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-4
SAMPLE

Lab Sample ID: MJ68L
LIMS ID: 08-3206
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	70.6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-5
SAMPLE

Lab Sample ID: MJ68M
LIMS ID: 08-3207
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	3.2	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-4
SAMPLE

Lab Sample ID: MJ68N
LIMS ID: 08-3208
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	2.6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-3
SAMPLE

Lab Sample ID: MJ680
LIMS ID: 08-3209
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	50.4	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-1
SAMPLE

Lab Sample ID: MJ68P
LIMS ID: 08-3210
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	2.6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-1
SAMPLE

Lab Sample ID: MJ68Q
LIMS ID: 08-3211
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	**7440-38-2**	**Arsenic**	0.2	**2.9**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: S-2
SAMPLE

Lab Sample ID: MJ68R
LIMS ID: 08-3212
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	35.6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-2
SAMPLE

Lab Sample ID: MJ68U
LIMS ID: 08-3215
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/25/08	7440-38-2	Arsenic	0.2	2.3	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: D-3
SAMPLE

Lab Sample ID: MJ68V
LIMS ID: 08-3216
Matrix: Water
Data Release Authorized:
Reported: 02/26/08

QC Report No: MJ68-Landau Associates, Inc.
Project: Riverside Business Park
848004.010
Date Sampled: 02/19/08
Date Received: 02/20/08

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	02/21/08	200.8	02/26/08	7440-38-2	Arsenic	2	1,350	

U-Analyte undetected at given RL
RL-Reporting Limit