Memo

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Date:	February 17, 2010		

Subject: **Investigation Report—Ramp Construction Project, South Dock Area**
MJB Properties
Anacortes, Washington

1.0 BACKGROUND

On behalf of MJB Properties, LLC (MJB), AMEC Geomatrix, Inc. (AMEC), prepared this investigation report for the ramp construction project area on the southern portion of the MJB Properties, located on Fidalgo Bay in Anacortes, Washington (Figure 1). MJB plans to construct a boat ramp in the southern portion of the South Dock Area of the properties (Figure 2). This document summarizes results of a subsurface investigation conducted to characterize soils within the project area that will be excavated during construction of the proposed boat ramp, supporting structures, and utility corridors.

The impetus for the current study is that historical operations on the property (shingle mills) as well as the placement of hydraulic fill in the mid-1970s had the potential to impact soils with chemicals, including petroleum hydrocarbons, metals, polycyclic aromatic hydrocarbons (PAHs), and dioxins and furans. This report describes the findings of the chemical analysis of the soils in the context of their locations within the construction footprint. Although the offshore sediments within the footprint of the planned ramp structure had been characterized previously, upland soils within the footprint had not previously been chemically characterized prior to this study.

Approximately 4,200 cubic yards (cy) of soil above the mean higher high water (MHHW) mark will be excavated as part of the construction project. Analytical results from the investigation reported here will provide the basis for a management plan that will be developed for soils that are to be excavated. Soils deeper than the planned excavation and left in place after construction, were also characterized for potential hazardous substances. Construction of the proposed boat ramp is scheduled to begin in June 2010 under the Joint Aquatic Resources Permit Application reference number NWS-2008-604-NO.

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According to historical Sanborn maps, a shingle mill (J.H. Cavanaugh's Shingle Mill) operated on the MJB Properties as early as 1907. Later Sanborn maps show the area being used for shingle mill operations from 1925 (Burke's Shingle Co., Inc., east of 26th Street and T Avenue, Gold Metal Shingle Co. east of 27th Street and T Avenue) and 1950 (Pioneer Shingle Co.).

No Sanborn maps are available for the time frame from 1950 to present; however a 1953 aerial photograph shows large buildings between the shoreline and T Avenue, and between 26th Street and 27th Street. An aerial photograph from June 1974 shows what appears to be an operational mill with in-water areas of floating log storage. By April 1975, another aerial photograph appears to show the facility in the process of being dismantled. The current area of the proposed ramp was modified when the former mill buildings were demolished, with subsequent placement of fill to improve the grade of the area.

During the urban renewal process in the late 1960s and early 1970s, land use in much of the eastern waterfront area of Anacortes was transformed from wood products manufacturing, with residential support areas adjacent to the west, to vacant land. One such area is the Hydraulic Fill Area (HFA) on the MJB Properties (Figure 2). The HFA abuts the South Dock Area (including the planned boat ramp construction area) to the north. The HFA was largely formed in 1974 when the U.S. Army Corps of Engineers (USACE) created land from sediments obtained from dredging the navigation channel in Fidalgo Bay (USACE, 1974). The dredged sediments were placed in two cells (the northern cell and the southern cell), that cover 31.5 acres.

2.0 RAMP AREA INVESTIGATION

AMEC staff conducted the ramp area investigation on January 7, 2010, within the area of the planned boat ramp construction area on the MJB Properties South Dock parcel. The work was conducted inn accordance with the Ramp Area Investigation Work Plan (AMEC, 2009) (Work Plan). Seven test pits (identified as Test Pits Ramp-1 through Ramp-7) were excavated, and soil samples were collected for chemical analysis at two depth intervals within each test pit (Figure 3). The excavator and operator were provided by MJB, and they worked under the direction of AMEC. The test pit logs are included in Attachment A.

All test pits were logged in the field by a geologist licensed to practice in the state of Washington. In test pits Ramp-4 and Ramp-5, excavated in the western part of the study area, approximately 2 feet of silty sand was overlying a stiff silt to silty clay. In both Ramp-1 and Ramp-7, a fine-grained sandy silt layer was encountered, potentially indicating the presence of hydraulic fill in those areas. One indication that this sandy silt layer represents hydraulic fill was the presence of about 30 percent by volume of scattered and broken shells. The stiff silt to silty clay unit was also encountered at Ramp-7 below the sandy silt unit.

A fill unit was encountered at depths ranging from 0 to 5 feet at Ramp-1, Ramp-2, Ramp-3, and Ramp-6. This fill unit consisted of up to 30 percent building debris, including red brick fragments, rebar, wire, and some plastic material. In addition, large concrete chunks (> 4 inches in diameter) were found in the excavations at Ramp-1 and Ramp-6. The fill unit was not fully penetrated in Ramp-1, Ramp-2, Ramp-3, and Ramp-6. Excavation at these locations

was stopped at the excavation depths proposed in the Work Plan. A silty sand unit (resembling top soil) was found above the fill unit at Ramp-1, Ramp-2, and Ramp-3.

Two samples were collected from each of the test pits: one sample from the shallower material to be excavated (identified by S) and one sample from deeper soil just below the planned depth of excavation (identified by D). All samples were collected in accordance with AMEC standard field procedures (included as Attachment A in the Work Plan). Projected depths of excavation during future construction at the test pit locations are approximately:

- Ramp-1: 3 feet below ground surface (bgs),
- Ramp-2: 5 feet bgs,
- Ramp-3: 8 feet bgs,
- Ramp-4: 4 feet bgs,
- Ramp-5: 4 feet bgs,
- Ramp-6: 3 feet bgs,
- Ramp-7: 0 feet bgs.

Samples were analyzed for the Resource Conservation and Recovery Act (RCRA) list of eight metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), as generally required by disposal facilities, plus copper, nickel, and zinc. The shallow soil sample collected at Ramp-6 (sample Ramp-6S) was also tested using the Toxicity Characteristic Leaching Procedure (TCLP) for barium, lead, and mercury. This sample was selected for testing by TCLP because that sample contained the highest concentrations of those three inorganic elements of any of the samples in the study. Barium, lead, and mercury were selected for TCLP analyses because the highest total concentrations of these metals measured in any of the samples exceeded the allowable leachable concentrations.

To address the potential for petroleum products related to the former shingle mill, samples were tested for PAHs and for total petroleum hydrocarbons (TPH) in the diesel (TPH-D) and oil (TPH-Oil) ranges. Soil samples were screened in the field with a photoionization detector (PID), but no detectable levels of volatile constituents over ambient levels were found. Thus, no soil samples were collected for analysis of volatile organic compounds. One soil sample (Ramp-7S) was collected from what appeared to be the layer of hydraulic fill. This sample was analyzed for dioxins and furans to assess whether the hydraulic fill had detectable levels of dioxins and furans above regulatory screening levels.

One duplicate sample was collected at a randomly chosen sampling location for data quality purposes. This sample (Ramp-10S) was analyzed for metals (as outlined above), TPH-D, and TPH-Oil.

Each sample jar was labeled with sample location, sample time, and sample date and then placed into a cooler filled with ice. Samples were kept in AMEC's custody, on ice, until custody was transferred to the analytical laboratory. Samples were delivered to OnSite Environmental, Inc. (OnSite), in Redmond, Washington, for analysis. All analyses, except dioxin and furans, were conducted at OnSite. Samples for dioxin and furan analysis were forwarded by OnSite to Pace Analytical, in Minneapolis, Minnesota, for analysis under subcontract to OnSite.

3.0 DISCUSSION OF SELECTED SCREENING LEVELS

Selected screening levels used to evaluate the soil analytical results are presented on Table 1. The screening levels chosen were selected based on the lowest of the Model Toxics Control Act (MTCA) Method B cleanup levels, assuming the most conservative interpretation of exposure pathways. The Method B cleanup levels are generally based on three possible pathways for exposure: protection of terrestrial ecological receptors, protection of groundwater as marine surface water, or protection of human health via direct soil contact. In some cases the screening levels are based on regional background levels developed by Ecology (Ecology, 1994) or on laboratory reporting limits where those levels were higher than the Method B cleanup levels established under MTCA.

4.0 ANALYTICAL RESULTS

This section summarizes and discusses the analytical results from the samples collected from the ramp area. A total of 15 samples, including one duplicate sample, were collected. Analytical results are presented in Table 2. Complete analytical reports and a data quality assessment are included in Attachment B. All analytical data were received in hard copy form as well as electronic data delivery (EDD) format. The EDDs will be formatted in accordance with Ecology requirements for subsequent upload into the Ecology Environmental Information Management (EIM) database.

4.1 Metals

All samples were analyzed for the RCRA eight metals and other selected metals using U.S. Environmental Protection Agency (EPA) Methods 6010B, 6020, and 7471A. Results are presented in Table 2.

Barium, chromium, lead, mercury, and nickel were detected above the laboratory reporting limit in one or more samples; however none of the detected concentrations exceeded the respective screening level.

Copper was detected in all samples, and two of those detected concentrations (65 milligrams per kilogram [mg/kg] at Ramp-6S and 54 mg/kg at Ramp-7D) exceeded the screening level (52.9 mg/kg), which is based on regional background concentrations of copper (Ecology, 1994). Zinc was also detected in all samples above laboratory reporting limits. Four of these detected concentrations (Ramp-1D, Ramp-3D, Ramp-6S, and Ramp-6D), ranging from 140 to 260 mg/kg, exceeded the screening level (101 mg/kg), which is based on MTCA Method B for protection of groundwater as marine surface water.

Four metals (arsenic, cadmium, selenium, and silver) were not detected at their respective laboratory reporting limit in any soil sample collected.

Based on the initial soil analytical data, TCLP analyses for barium, lead, and mercury were requested on sample Ramp-6S in the event disposal options need to be considered for this soil. This sample was analyzed using EPA Methods 1311, 6010B, and 7470A. Based on TCLP analyses, lead and mercury were not detected at their respective laboratory reporting limits. Barium was detected at a concentration of 0.36 milligrams per liter (mg/L), which is two orders of magnitude less than the TCLP screening level for barium (100 mg/L).

In addition, following review of the initial soil analytical data, sample Ramp-4S was analyzed for hexavalent chromium (Cr^{6+}) using EPA Method 7196A in order to quantify how much of the total chromium concentration can be attributed to the Cr^{6+} species. Hexavalent chromium was not detected at the laboratory reporting limit (1 mg/kg). Because chromium exists in the environment primarily as either Cr^{3+} or Cr^{6+}, it is assumed that all chromium in the total chromium concentration is the Cr^{3+} species of chromium, which has lower toxicity and a higher cleanup level than Cr^{6+}.

4.2 Total Petroleum Hydrocarbons (TPH)

All soil samples were analyzed for total petroleum hydrocarbons in the diesel range (diesel and lube oil) using the NWTPH-Dx method. Lube oil was detected above the laboratory reporting limit in six samples (Ramp-1S, Ramp-1D, Ramp-2D, Ramp-3D, Ramp-6S, and Ramp-6D) at concentrations ranging from 130 mg/kg to 1,700 mg/kg. None of the detected concentrations of lube oil exceeded the screening level for lube oil (2,000 mg/kg) based on MTCA Method A (Soil Cleanup Levels for Unrestricted Land Use).

Diesel range hydrocarbons were not detected at the laboratory reporting limit in any soil sample collected.

4.3 Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

All soil samples collected were analyzed for the full suite of semivolatile organic compounds (SVOCs) using EPA Method 8270/SIM. Few individual SVOCs (non-PAH) were detected (including naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) in soil samples Ramp-1D, Ramp-3D, and Ramp-6D. None of these non-PAH SVOCs were detected at concentrations exceeding their individual screening level.

One or more individual PAHs were detected in 9 out of the 14 samples analyzed for PAHs. These samples were collected from Ramp-1 (S and D), Ramp-2 (S and D), Ramp-3 (S and D), Ramp-6 (S and D), and Ramp-7 (S). Total carcinogenic PAHs (cPAHs) were calculated as the toxicity equivalent quotient (TEQ) based on Washington Administrative Code (WAC) 173-340-900, and the resulting concentrations were compared with the MTCA Method B (direct contact pathway) soil cleanup level. One-half the reporting limit was used to calculated total cPAHs for samples where no individual PAHs were detected at the reporting limit.

Total TEQ concentrations of cPAHs in samples Ramp-1D, Ramp-3D, and Ramp-6D all exceeded the screening level of 0.14 mg/kg, with concentrations ranging from 0.21 mg/kg to 0.63 mg/kg. No other sample had concentrations of total cPAHs exceeding the screening level. Samples Ramp-1D, Ramp-3D, and Ramp-6D were all collected from the fill unit containing the building material debris described in Section 2.0.

4.4 Dioxins and Furans

One soil sample, collected from hydraulic fill material at location Ramp-7, was analyzed for dioxins and furans using EPA Method 8290. The resulting dioxin and furan congener concentrations were used to calculate the TEQ for both dioxins and furans, in accordance with Ecology guidelines (Ecology, 2007, Table 749-2).

The dioxin TEQ was 0.86 nanograms per kilogram (ng/kg) and the furan was TEQ 0.31 ng/kg, both below their screening levels of 5 ng/kg and 3 ng/kg, respectively, based on protection of terrestrial ecological receptors.

5.0 POTENTIAL IMPACT ON RAMP CONSTRUCTION PLANS

This section presents a brief discussion of the results from the investigations with an analysis if implications for the ramp construction project.

5.1 Shallow Zone Soils

The analytical findings of the ramp area investigation indicate that the shallow zone soils that make up the 4,200 cubic yards of soil to be excavated during the ramp construction have either non-detectable or low concentrations of the tested analytes and could be suitable for reuse. The potential exception is the material from 1-3 feet in depth in the vicinity of test pit Ramp-6 (Sample Ramp-6S), which has slightly elevated concentrations of copper and zinc above the respective screening levels. The concentration of copper in sample Ramp-6S was 65 mg/kg, which is slightly above the background concentration of 52.9 mg/kg. The zinc concentration in sample Ramp-6S was 260 mg/kg, which is above the Method B cleanup level for protection of groundwater as marine surface water (101 mg/kg) but below the Method B concentration based on protection of terrestrial ecological organisms (270 mg/kg) that qualify under the simplified terrestrial ecological evaluation procedure.

5.2 Deep Zone Soils

The “deep” zone soils are defined as those that are anticipated to lie below the excavation elevation necessary for the ramp construction. There is a small area outlined by the Ramp-1, Ramp-3, and Ramp-6 sampling locations where soil impacted by PAHs, copper, and zinc is found at depths below the targeted excavation level for the ramp construction. Only one sample contained PAHs at more that two times the screening level concentrations.

We conservatively estimate this area of affected soil to be approximately 50 feet by 50 feet. The thickness of the impacted zone is likely to be no more than 7 feet as estimated by the extrapolated depth of the native clay layer, which is assumed to be unimpacted. Based on

these assumptions, the estimated total volume of impacted material is 650 cubic yards. This material was observed during the field investigation to be the fill layer containing construction debris.

Prior to construction of the ramp, MJB will consider the options of leaving the deep zone soils in place, or excavating and disposing the soil. If the soil is excavated during the ramp area construction, it would require disposal at an approved waste facility. In addition, soil confirmation samples would need to be collected after the soil is removed to ensure that all impacted material has been removed.

A soil management plan will be developed prior to the initiation of the ramp area construction. This plan will clearly define:

- criteria for determining whether and where shallow soils can be reused on another portion of the site;
- criteria to determine whether and where the deep soils impacted by PAHs and low concentrations of metals can be left in place or will require excavation and disposal;
- the disposal facility (for any impacted soils that require off-site disposal);
- stockpile locations where soils acceptable for reuse will be retained during excavation;
- how stockpiled soil will be managed so as not to impact surface water;
- the procedure for collecting soil confirmation samples (to confirm complete removal of impacted soil); and
- any other issues related to the soil excavation, management, and disposal.

We proposed to have this plan drafted within 3 weeks of receiving Ecology approval of this report. The draft soil management plan will be submitted to Ecology for review.

6.0 SUMMARY

On January 7, 2010, AMEC staff oversaw the excavation of seven test pits within the footprint of the planned boat ramp at the MJB South Dock Area. A total of 15 soil samples were collected and submitted for chemical analyses, including metals, petroleum hydrocarbons, SVOCs, and dioxins and furans.

Analytical results indicated a limited area of impacted soil in the vicinity of sampling locations Ramp-1, Ramp-3, and Ramp-6 which was estimated to contain approximately 650 cubic yards of impacted soil at depths below the level of the planned excavation. MJB will consider the options of whether to remove this affected soil during the ramp excavation or manage it in place. Soil confirmation samples would be collected as part of any removal action to verify complete removal of all impacted soil.

Within the volume of soil that is planned to be excavated during ramp construction, only sporadic and slightly elevated concentrations (by comparison to preliminary screening levels) of copper and zinc were found. MJB will consult with Ecology regarding the options for reuse of this material on the property.

Please do not hesitate to contact me, either via phone or email, if you have questions or comments regarding the investigation results.

7.0 REFERENCES

AMEC (AMEC Geomatrix, Inc.), 2009, Ramp Area Investigation Work Plan, MJB Properties facility: Prepared for MJB Properties, December.

Ecology (Washington State Department of Ecology), 2007, Model Toxics Control Act Statute and Regulation, Publication No. 94-06, Table 749-2.

Ecology, 1994, Natural Background Soil Metals Concentrations in Washington State, Publication 94-115, October.

USACE (U.S. Army Corps of Engineers), 1974, Section 107 Detailed Project Report Anacortes Harbor Washington, February.

Sincerely yours,
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Attachments: Table 1 – Soil Screening Levels, Uplands Area
Table 2 – Soil Analytical Summary – MJB Ramp Area Investigation
Figure 1 – Vicinity Map
Figure 2 – Proposed MJB Areas
Figure 3 – Ramp Area Analytical Results
Attachment A – Test Pit Boring Logs
Attachment B – Analytical Reports

TABLES

TABLE 1

SOIL SCREENING LEVELS, UPLANDS AREA
South Dock Ramp Area Investigation
Anacortes, Washington

Analyte	MTCA Method B Soil-Direct Contact Unrestricted Land Use Carcinogen (mg/kg)	MTCA Method B Soil-Direct Contact Unrestricted Land Use Noncarcinogen (mg/kg)	MTCA Method B Protective of Groundwater as Marine Surface Water[1] (mg/kg)	Area Background (mg/kg)	MTCA Method B Protective of Terrestrial Ecological Receptors [2] (mg/kg)	Laboratory Reporting Limit (mg/kg)	Selected Screening Level (mg/kg)	Henrys Law Constant (unitless) (H_{cc}) (unitless)	K_d (Distribution Coefficient for Metals) (L/kg)	K_{oc} (Soil Organic Carbon-Water Partitioning Coefficient) (L/kg)
Metals										
Arsenic	0.67 [3]	24	0.08	8.47	20	13	**13**	0E+00	2.90E+01	--
Barium compounds	--	16,000		--	1,250		**1,250**	0E+00	4.10E+01	--
Cadmium	2 [5]	80	1.21	1.2	25	0.66	**1.21**	0E+00	--	--
Chromium (total)	2,000 [5]	--	--	117	42		**117** [4]	--	--	--
Copper	--	3,000	1.07	52.9	100		**52.9** [4]	0E+00	2.20E+01	--
Lead	250 [5]	--	1,620	--	220	6.4	**220**	0E+00	1.00E+04	--
Mercury	2 [5]	24	0.03	0.13	9	0.031	**0.13** [4]	4.70E-01	5.20E+01	--
Nickel	--	1,600	10.7	54.2	100		**54.2** [4]	0E+00	6.50E+01	--
Selenium	--	400	7.38	--	0.8	0.7	**0.8**	0E+00	5.00E+00	--
Silver	--	400	0.32	--	--	0.6	**0.6** [4]	0E+00	8.30E+00	--
Zinc	--	24,000	101	85.6	270		**101**	0E+00	6.20E+01	--
Dioxins and Furans										
Total ecological TEQ dioxin	--	--	--		5.00E-06		**0.000005**	--	--	--
Total ecological TEQ furan	--	--	--		3.00E-06		**0.000003**	--	--	--
TPH										
Diesel range hydrocarbons	460 [2]	--	--		460		**460**	--	--	--
Lube oil	2,000 [5]	--	--		--		**2,000**	--	--	--
SVOCs										
1,2-Dichlorobenzene	--	7,200	15.26		--		**15.26**	7.80E-02	--	3.80E+02
1,2-Dinitrobenzene	--	32	--		--		**32**	--	--	--
1,2-Diphenylhydrazine	1.3	--	--		--		**1.3**	--	--	--
1,3-Dichlorobenzene	--	--	13.04		--		**13.04**	--	--	--
1,3-Dinitrobenzene	--	8	--		--		**8**	--	--	--
1,4-Dichlorobenzene	42	--	3.15		--		**3.15**	1.00E-01	--	6.20E+02
1,4-Dinitrobenzene	--	32	--		--		**32**	**--**	**--**	**--**
1-Methylnaphthalene	--	--	--		--		**--**	--	--	--
2,3,4,6-Tetrachlorophenol	--	2,400	--		--		**2,400**	--	--	2.80E+02
2,3,5,6-Tetrachlorophenol	--	--	--		--		**--**	**--**	**--**	**--**
2,3-Dichloroaniline	--	--	--		--		**--**	**--**	**--**	**--**
2,4,5-Trichlorophenol	--	8,000	129.6		--		**129.6**	1.80E-04	--	1.60E+03
2,4,6-Trichlorophenol	91	--	0.03		--		**0.03**	3.20E-04	--	3.80E+02
2,4-Dichlorophenol	--	240	2.03		--		**2.03**	1.30E-04	--	1.50E+02
2,4-Dimethylphenol	--	1,600	6.97		--		**6.97**	8.20E-05	--	2.10E+02
2,4-Dinitrophenol	--	160	21.2		--		**21.2**	1.80E-05	--	1.00E-02
2,4-Dinitrotoluene	--	160	0.02		--		**0.02**	3.80E-06	--	9.60E+01
2,6-Dinitrotoluene	--	80	--		--		**80**	3.10E-05	--	6.90E+01
2-Chloronaphthalene	--	6,400	42.56		--		**42.56**	1.27E-07	--	1130
2-Chlorophenol	--	400	1.15		--		**1.15**	1.60E-02	--	3.90E+02
2-Methyl-4,6-dinitrophenol	--	--	--		--		**--**	--	--	--
2-Methylnaphthalene	--	320	--		--		**320**	--	--	--
2-Methylphenol	--	4,000	--		--		**4,000**	--	--	--
2-Nitroaniline	--	--	--		--		**--**	--	--	--
2-Nitrophenol	--	--	--		--		**--**	--	--	--

TABLE 1

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South Dock Ramp Area Investigation
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Analyte	MTCA Method B Soil-Direct Contact Unrestricted Land Use Carcinogen (mg/kg)	MTCA Method B Soil-Direct Contact Unrestricted Land Use Noncarcinogen (mg/kg)	MTCA Method B Protective of Groundwater as Marine Surface Water[1] (mg/kg)	Area Background (mg/kg)	MTCA Method B Protective of Terrestrial Ecological Receptors [2] (mg/kg)	Laboratory Reporting Limit (mg/kg)	Selected Screening Level (mg/kg)	Henrys Law Constant (unitless) (H_{cc}) (unitless)	K_d (Distribution Coefficient for Metals) (L/kg)	K_{oc} (Soil Organic Carbon-Water Partitioning Coefficient) (L/kg)
SVOCs (Continued)										
3-Methylphenol	--	4,000	--		--		**4,000**	--	--	--
4-Methylphenol	--	400	--		--		**400**	--	--	--
3,3'-Dichlorobenzidine	2.2	--	0.001		--		**0.001**	1.60E-07	--	7.20E+02
3-Nitroaniline	--	--	--		--		**--**	--	--	--
4-Bromophenyl phenyl ether	--	--	--		--		**--**	--	--	--
4-Chloro-3-methyl phenol	--	--	--		--		**--**	--	--	--
4-Chloroaniline	--	320	--		--		**320**	1.40E-05	--	6.60E+01
4-Chlorophenyl phenyl ether	--	--	--		--		**--**	--	--	--
4-Nitroaniline	--	--	--		--		**--**	--	--	--
4-Nitrophenol	--	--	--		--		**--**	--	--	--
Acenaphthene	--	4,800	100.99		--		**100.99**	6.40E-03	--	4.90E+03
Acenaphthylene	--	--	--		--		**--**	--	--	--
Aniline	180	--	--		--		**180**	--	--	--
Anthracene	--	24,000	18,560		--		**18,560**	2.70E-03	--	2.30E+04
Benzidine	0.0043	240	0.0007		--		**0.0007**	--	--	--
Benzo[a]anthracene	--	--	0.13		--		**0.13**	1.40E-04	--	3.60E+05
Benzo[a]pyrene	0.14	--	0.35		30		**0.14**	4.60E-05	--	9.70E+05
Benzo[b]fluoranthene	--	--	0.43		--		**0.43**	4.60E-03	--	1.20E+06
Benzo(g,h,i)perylene	--	--	--		--		**--**	--	--	--
Benzo[k]fluoranthene	--	--	0.43		--		**0.43**	3.40E-05	--	1.20E+06
Benzyl alcohol	--	24,000	--		--		**24,000**	--	--	--
bis(2-Chloroethoxy) methane	--	--	--		--		**--**	--	--	--
bis(2-Chloroethyl) ether	0.91	--	0.003		--		**0.003**	7.40E-04	--	7.60E+01
bis(2-Chloroisopropyl) ether	--	3,200	--		--		**3200**	--	--	--
bis(2-Ethylhexyl) phthalate	71	1,600	4.85		--		**4.85**	4.20E-06	--	1.10E+05
bis(2-Ethylhexyl adipate	830	48,000	--		--		**830**	--	--	--
Butyl benzyl phthalate	--	16,000	539.6		--		**539.6**	5.20E-05	--	1.40E+04
Carbazole	50	--	--		--		**50**	6.30E-07	--	3.40E+03
Chrysene	--	--	0.14		--		**0.14**	3.90E-03	--	4.00E+05
Dibenzo[a,h]anthracene	--	--	0.65		--		**0.65**	6.00E-07	--	1.80E+06
Dibenzofuran	--	160	--		--		**160**	--	--	--
Diethyl phthalate	--	64,000	248		--		**248**	1.90E-05	--	8.20E+01
Dimethyl phthalate	--	80,000	5,280		--		**5,280**	--	--	--
Dibutyl phthalate	--	8,000	162		200		**162**	3.90E-08	--	1.60E+03
Di-n-octyl phthalate	--	1,600	--		--		**1600**	2.70E-03	--	8.30E+07
Fluoranthene	--	3,200	137.8		--		**137.8**	6.60E-04	--	4.90E+04
Fluorene	--	3,200	837.4		--		**837.4**	2.60E-03	--	7.70E+03
Hexachlorobenzene	0.63	64	0.0005		31		**0.0005**	5.40E-02	--	8.00E+04
Hexachlorobutadiene	13	16	19.52		--		**13**	3.30E-01	--	5.40E+04
Hexachlorocyclopentadiene	--	480	4,407		--		**480**	1.10E+00	--	2.00E+05
Hexachloroethane	71	80	0.13		--		**0.13**	1.60E-01	--	1.80E+03
Indeno[1,2,3-cd]pyrene	--	--	1.26		--		**1.26**	6.60E-05	--	3.50E+06
Isophorone	1,100	16,000	2.96		--		**2.96**	2.70E-04	--	4.70E+01
Naphthalene	--	1,600	137.4		--		**137.4**	2.00E-02	--	1.20E+03
Nitrobenzene	--	40	4.42		--		**4.42**	9.80E-04	--	1.20E+02

TABLE 1

SOIL SCREENING LEVELS, UPLANDS AREA
South Dock Ramp Area Investigation
Anacortes, Washington

Analyte	MTCA Method B Soil-Direct Contact Unrestricted Land Use Carcinogen (mg/kg)	MTCA Method B Soil-Direct Contact Unrestricted Land Use Noncarcinogen (mg/kg)	MTCA Method B Protective of Groundwater as Marine Surface Water[1] (mg/kg)	Area Background (mg/kg)	MTCA Method B Protective of Terrestrial Ecological Receptors [2] (mg/kg)	Laboratory Reporting Limit (mg/kg)	Selected Screening Level (mg/kg)	Henrys Law Constant (unitless) (H_{cc}) (unitless)	K_d (Distribution Coefficient for Metals) (L/kg)	K_{oc} (Soil Organic Carbon-Water Partitioning Coefficient) (L/kg)
SVOCs (Continued)										
N-Nitrosodimethylamine	0.02	--	--		--		**0.02**	--	--	--
N-Nitroso-di-n-propylamine	0.14	--	0.002		--		**0.002**	9.20E-05	--	2.40E+01
N-Nitrosodiphenylamine	200	--	0.48		--		**0.48**	2.10E-04	--	1.30E+03
Pentachlorophenol	8.3	2,400	0.05		11		**0.05**	1.00E-06	--	5.90E+02
Phenanthrene	--	--	--		--		**--**	--	--	--
Phenol	--	48,000	7,786		--		**7,786**	1.60E-05	--	2.90E+01
Pyrene	--	2,400	5,456		--		**2,400**	4.50E-04	--	6.80E+04
Pyridine	--	80	--		--		**80**	--	--	--
Total cPAHs - benzo(a)pyrene TEQ [6]	0.14	--	0.35		30		**0.14**	--	--	--

Notes
1. Calculated using fixed-parameter three-phase partitioning model WAC 173-340-747(4).
2. Based on simplified terrestrial evaluation in WAC 173-340-7492, criteria listed in Table 749-2.
3. -- = value not available.
4. The screening level for some metals is adjusted for regional background concentrations within Skagit/Whatcom counties or Western Washington as reported by Ecology (1994).
5. Method A value if no Method B available.
6. TEQ methodology in WAC 173-340-708(8).

Abbreviations
L/kg = liters per kilogram
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
SVOC = semivolatile organic compounds
TEQ = toxicity equivalent concentration
TPH = total petroleum hydrocarbons
WAC =Washington Administrative Code

TABLE 2

SOIL ANALYTICAL SUMMARY - MJB RAMP AREA INVESTIGATION[1,2]
MJB Properties
Anacortes, Washington

Analyte	Preliminary Screening Level (mg/kg)	Ramp-1S 1-3 ft bgs	Ramp-10S 1-3 ft bgs	Ramp-1D 3-5 ft bgs	Ramp-2S 2-4 ft bgs	Ramp-2D 6-8 ft bgs	Ramp-3S 4-6 ft bgs	Ramp-3D 8-10 ft bgs	Ramp-4S 2-4 ft bgs	Ramp-4D 4-6 ft bgs	Ramp-5S 2-4 ft bgs	Ramp-5D 4-6 ft bgs	Ramp-6S 1-3 ft bgs	Ramp-6D 3-5 ft bgs	Ramp-7S 1-3 ft bgs	Ramp-7D 3-4 ft bgs
Total Metals (6010B/6020/7471A) in mg/kg																
Arsenic	13 [3]	< 11	< 11	< 13	< 11	< 12	< 12	< 13	< 12	< 12	< 12	< 12	< 13	< 12	< 11	< 13
Barium	1,250 [4]	**74**	**87**	**150**	**45**	**99**	**70**	**150**	**120**	**88**	**100**	**80**	**200**	**110**	**29**	**89**
Barium (by toxicity characteristic leaching procedure in mg/L)	100 [11]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36	NA	NA	NA
Cadmium	1.2 [5]	< 0.56	< 0.56	< 0.65	< 0.54	< 0.62	< 0.62	< 0.64	< 0.61	< 0.59	< 0.60	< 0.60	< 0.66	< 0.62	< 0.55	< 0.64
Chromium (total)	117 [6]	**23**	**27**	**32**	**19**	**26**	**31**	**29**	**48**	**41**	**45**	**35**	**29**	**29**	**17**	**36**
Chromium VI	19 [7]	NA	NA	NA	NA	NA	NA	NA	<1.2	NA	NA	NA	NA	NA	NA	NA
Copper	52.9 [6]	**28**	**30**	**38**	**21**	**44**	**35**	**52**	**22**	**41**	**36**	**33**	**65**	**34**	**14**	**54**
Lead (total)	220 [4]	**11**	**35**	**44**	**13**	**59**	**17**	**130**	< 6.1	< 5.9	< 6	< 6	**130**	**76**	< 5.5	< 6.4
Lead (by toxicity characteristic leaching procedure in mg/L)	5 [11]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA
Mercury	0.13 [6]	**0.035**	**0.041**	**0.058**	< 0.027	< 0.031	**0.048**	**0.042**	**0.036**	**0.039**	**0.04**	**0.041**	**0.084**	**0.073**	< 0.027	**0.043**
Mercury (by toxicity characteristic leaching procedure in mg/L)	0.2 [11]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA
Nickel	54.2 [6]	**32**	**38**	**35**	**29**	**33**	**39**	**37**	**32**	**42**	**39**	**37**	**31**	**32**	**21**	**38**
Selenium	0.8 [4]	< 0.56	< 0.56	< 0.65	< 0.54	< 0.62	< 0.62	< 0.70	< 0.61	< 0.59	< 0.60	< 0.60	< 0.66	< 0.62	< 0.55	< 0.64
Silver	0.6 [3]	< 0.56	< 0.56	< 0.65	< 0.54	< 0.62	< 0.62	< 0.64	< 0.61	< 0.59	< 0.60	< 0.60	< 0.66	< 0.62	< 0.55	< 0.64
Zinc	270 [4], 101 [5]	**51**	**74**	**150**	**44**	**97**	**69**	**240**	**42**	**59**	**49**	**47**	**260**	**140**	**30**	**74**
Petroleum Hydrocarbons (NWTPH-Dx) in mg/kg																
Diesel	460 [4]	< 28	< 28	< 33	< 27	< 160	< 31	< 32	< 30	< 30	< 30	< 30	< 33	< 31	< 27	< 32
Lube Oil	2,000 [7]	**140**	< 56	**170**	< 54	**1,700**	**140**	**230**	< 61	< 59	< 60	< 60	**130**	**140**	< 55	< 64
SVOCs (8270D/SIM) in mg/kg																
(3+4)-Methylphenol (m,p-cresol)		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,2,4-Trichlorobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,2-Dichlorobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,2-Dinitrobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,2-diphenylhydrazine		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,3-Dichlorobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,3-Dinitrobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,4-Dichlorobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1,4-Dinitrobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
1-Methylnaphthalene	24 [8]	< 0.0075	NA	**0.032**	< 0.0072	< 0.0082	< 0.0082	**0.016**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	< 0.0089	< 0.0082	< 0.0072	< 0.0085
2,3,4,6-Tetrachlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,3,5,6-Tetrachlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,3-Dichloroaniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,4,5-Trichlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,4,6-Trichlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,4-Dichlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,4-Dimethylphenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2,4-Dinitrophenol		< 0.19	NA	< 0.22	< 0.18	< 0.21	< 0.21	< 0.21	< 0.20	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	< 0.18	< 0.21
2,4-Dinitrotoluene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043

TABLE 2

SOIL ANALYTICAL SUMMARY - MJB RAMP AREA INVESTIGATION[1,2]
MJB Properties
Anacortes, Washington

Analyte	Preliminary Screening Level (mg/kg)	Ramp-1S 1-3 ft bgs	Ramp-10S 1-3 ft bgs	Ramp-1D 3-5 ft bgs	Ramp-2S 2-4 ft bgs	Ramp-2D 6-8 ft bgs	Ramp-3S 4-6 ft bgs	Ramp-3D 8-10 ft bgs	Ramp-4S 2-4 ft bgs	Ramp-4D 4-6 ft bgs	Ramp-5S 2-4 ft bgs	Ramp-5D 4-6 ft bgs	Ramp-6S 1-3 ft bgs	Ramp-6D 3-5 ft bgs	Ramp-7S 1-3 ft bgs	Ramp-7D 3-4 ft bgs
SVOCs (8270D/SIM) in mg/kg																
2,6-Dinitrotoluene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2-Chloronaphthalene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2-Chlorophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2-Methylnaphthalene	320 [8]	< 0.0075	NA	**0.02**	< 0.0072	< 0.0082	< 0.0082	**0.02**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	< 0.0089	< 0.0082	< 0.0072	< 0.0085
2-Methylpheol (o-cresol)		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2-Nitroaniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
2-Nitrophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
3,3-Dichlorobenzidine		< 0.37	NA	< 0.43	< 0.36	< 0.41	< 0.41	< 0.42	< 0.40	< 0.40	< 0.40	< 0.40	< 0.44	< 0.41	< 0.36	< 0.43
3-Nitroaniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4,6-Dinitro-2-methylphenol		< 0.19	NA	< 0.22	< 0.18	< 0.21	< 0.21	< 0.21	< 0.20	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	< 0.18	< 0.21
4-Bromophenylphenyl ether		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4-Chloro-3-methylphenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4-Chloroaniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4-Chlorophenyl-phenylether		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4-Nitroaniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
4-Nitrophenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Acenaphthene	100.99 [5]	< 0.0075	NA	**0.023**	< 0.0072	< 0.0082	< 0.0082	**0.039**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	< 0.0089	< 0.0082	< 0.0072	< 0.0085
Acenaphthylene	Not Avail	**0.016**	NA	**0.21**	< 0.0072	**0.012**	< 0.0082	**0.04**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.027**	**0.06**	< 0.0072	< 0.0085
Aniline		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Anthracene	18,560 [5]	**0.014**	NA	**0.14**	**0.0086**	< 0.0082	< 0.0082	**0.067**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.017**	**0.06**	< 0.0072	< 0.0085
Benzidine		< 0.37	NA	< 0.43	<0.36	< 0.41	< 0.41	< 0.42	< 0.40	< 0.40	< 0.40	< 0.40	< 0.44	< 0.41	< 0.36	< 0.43
Benzo(a)anthracene	see note 9	**0.039**	NA	**0.36**	**0.029**	**0.045**	**0.0084**	**0.14**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.032**	**0.17**	< 0.0072	< 0.0085
Benzo(a)pyrene	see note 9	**0.058**	NA	**0.48**	**0.039**	**0.067**	**0.011**	**0.16**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.044**	**0.17**	< 0.0072	< 0.0085
Benzo(b)fluoranthene	see note 9	**0.041**	NA	**0.36**	**0.037**	**0.061**	**0.015**	**0.12**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.055**	**0.13**	**0.0082**	< 0.0085
Benzo(g,h,i)perylene	Not Avail	**0.071**	NA	**0.33**	**0.034**	**0.049**	**0.011**	**0.1**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.05**	**0.13**	< 0.0072	< 0.0085
Benzo(k)fluoranthene	see note 9	**0.013**	NA	**0.35**	**0.018**	**0.022**	< 0.0082	**0.12**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.018**	**0.17**	< 0.0072	< 0.0085
Benzyl alcohol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Bis(2-chloroethoxy)methane		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Bis(2-chloroethyl) ether		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Bis(2-chloroisopropyl) ether		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Bis(2-ethylhexyl) phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.36	< 0.043
Bis-2-ethylhexyl adipate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Butyl benzyl phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Carbazole	50 [8]	< 0.037	NA	**0.056**	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Chrysene	see note 9	**0.057**	NA	**0.52**	**0.047**	**0.085**	**0.012**	**0.16**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.047**	**0.21**	< 0.0072	< 0.0085
Dibenz(a,h)anthracene	see note 9	**0.012**	NA	**0.088**	**0.0077**	< 0.0082	< 0.0082	**0.023**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.011**	**0.031**	< 0.0072	< 0.0085
Dibenzofuran		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Diethyl phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043

TABLE 2

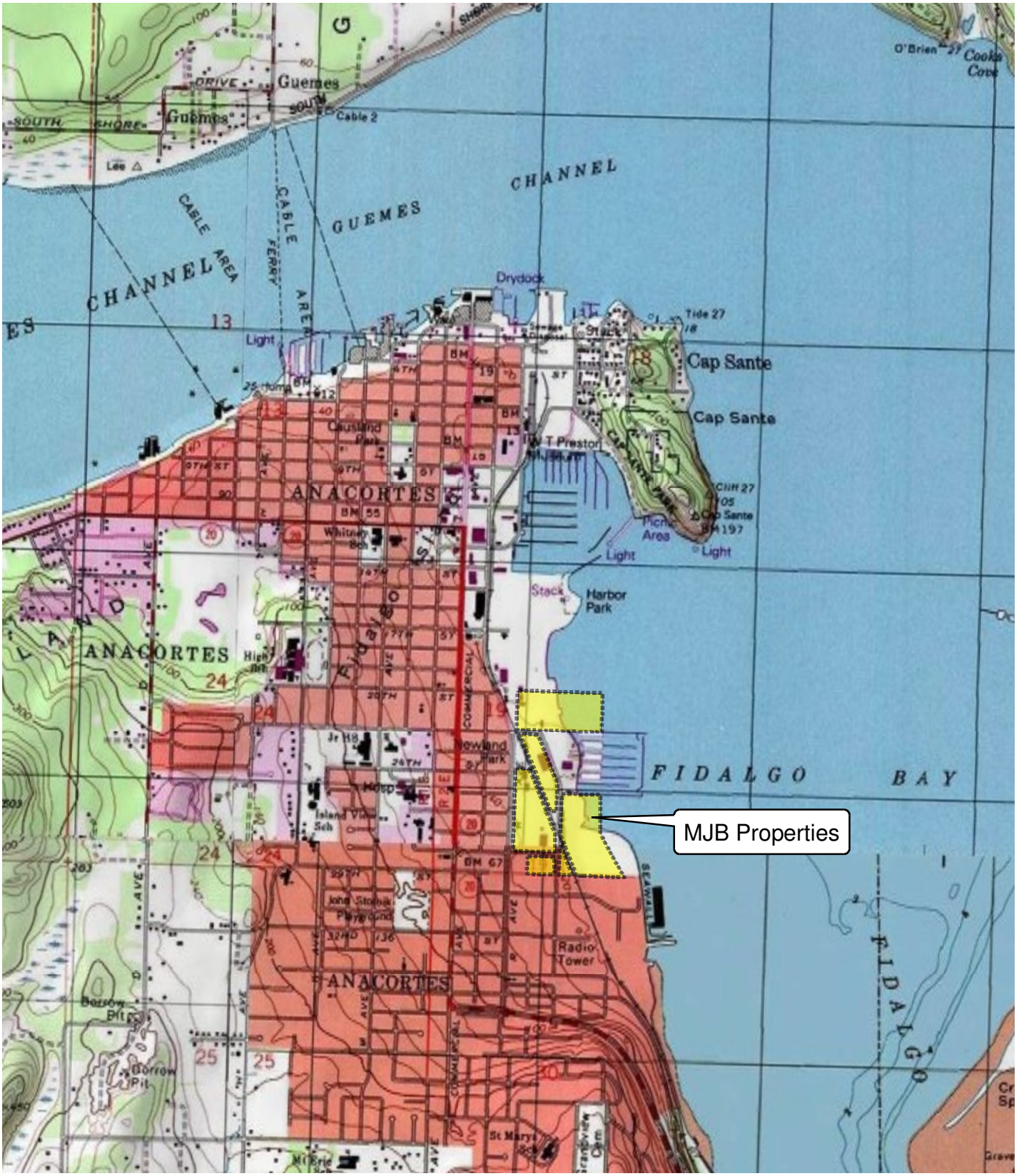
SOIL ANALYTICAL SUMMARY - MJB RAMP AREA INVESTIGATION[1,2]
MJB Properties
Anacortes, Washington

Analyte	Preliminary Screening Level (mg/kg)	Ramp-1S 1-3 ft bgs	Ramp-10S 1-3 ft bgs	Ramp-1D 3-5 ft bgs	Ramp-2S 2-4 ft bgs	Ramp-2D 6-8 ft bgs	Ramp-3S 4-6 ft bgs	Ramp-3D 8-10 ft bgs	Ramp-4S 2-4 ft bgs	Ramp-4D 4-6 ft bgs	Ramp-5S 2-4 ft bgs	Ramp-5D 4-6 ft bgs	Ramp-6S 1-3 ft bgs	Ramp-6D 3-5 ft bgs	Ramp-7S 1-3 ft bgs	Ramp-7D 3-4 ft bgs
SVOCs (8270D/SIM) in mg/kg																
Dimethyl phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Di-n-butyl phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Di-n-octyl phthalate		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.36	< 0.043
Fluoranthene	137.8 [5]	**0.05**	NA	**0.78**	**0.064**	**0.062**	**0.017**	**0.32**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.051**	**0.37**	**0.012**	< 0.0085
Fluorene	87.4 [5]	< 0.0075	NA	**0.074**	< 0.0072	< 0.0082	< 0.0082	**0.038**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	< 0.0089	**0.026**	< 0.0072	< 0.0085
Hexachlorobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Hexachlorobutadiene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Hexachlorocyclopentadiene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Hexachloroethane		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Indeno(1,2,3-cd)pyrene	see note 9	**0.032**	NA	**0.29**	**0.024**	**0.026**	< 0.0082	**0.088**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.036**	**0.11**	< 0.0072	< 0.0085
Isophorone		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Naphthalene	137.4 [5]	< 0.0075	NA	**0.021**	< 0.0072	< 0.082	< 0.082	**0.032**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	< 0.0089	**0.01**	< 0.0072	< 0.0085
Nitrobenzene		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
N-Nitrosodimethylamine		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
N-Nitroso-di-n-propylamine		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
N-Nitrosodiphenylamine		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Pentachlorophenol		< 0.19	NA	< 0.22	< 0.18	< 0.21	< 0.21	< 0.21	< 0.20	< 0.20	< 0.20	< 0.20	< 0.22	< 0.21	< 0.18	< 0.21
Phenanthrene	Not Avail	**0.03**	NA	**0.86**	**0.038**	**0.051**	**0.009**	**0.33**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.037**	**0.3**	< 0.0072	< 0.0085
Phenol		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Pyrene	2,400 [8]	**0.068**	NA	**1.2**	**0.06**	**0.088**	**0.017**	**0.38**	< 0.0080	< 0.0079	< 0.0079	< 0.0080	**0.067**	**0.43**	**0.011**	< 0.0085
Pyridine		< 0.037	NA	< 0.043	< 0.036	< 0.041	< 0.041	< 0.042	< 0.040	< 0.040	< 0.040	< 0.040	< 0.044	< 0.041	< 0.036	< 0.043
Total cPAHs as TEQ [9]	0.14 [6]	**0.07227**	NA	**0.63**	**0.05104**	**0.08366**	**0.01469**	**0.2107**	0.00604	0.0059645	0.0059645	0.00604	**0.05967**	**0.2332**	0.005896	0.0064175
Dioxins/Furans																
TCDD as TEQ [8]	5.0 E-6														**5.359E-07**	
TCDF as TEQ [8]	3.0 E-6														**3.075E-07**	

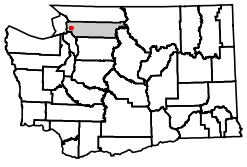
Notes
1. Data qualifers are as follows:
< = analyte not detected at reporting limit indicated
2. **Bold** indicates a detected concentration.
Yellow highlight indicates a concentration exceeding the preliminary screening level.
3. Preliminary screening level based on Laboratory PQL.
4. Preliminary screening level based on protection of terrestrial ecological receptors.
5. Preliminary screening level based on MTCA Method B, protection of groundwater as marine surface water.
6. Preliminary screening level selected based on background concentrations (Ecology 1994).
7. Preliminary screening level based on MTCA Method A for unrestricted land use.
8. Preliminary screening level based on MTCA Method B, soil direct contact pathway.
9. One-half the reporting limit was used to calculate total cPAHs concentrations where individual cPAHs were not detected. TEQ methodology in WAC 173-340-900 was used to calculate total.
10. One-half the reporting limit was used to calculate total dioxin or furan concentrations where individual dioxin or furan congeners were not detected. TEQ methodology in WAC 173-340-900 was used to calculate total.
11. Cleanup levels based on WAC Chapter 173-303-90, Dangerous Waste Regulations, November 2004.

Abbreviations
bgs = below ground surface
cPAH = carcinogenic polycyclic aromatic hydrocarbons
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
MTCA = Model Toxics Control Act
NA = Not Analyzed
Not Avail = Method B not available
SVOCs = semivolatile organic compounds
TEQ = toxicity equivalent quotient
WAC = Washington Administrative Code

FIGURES



Note: Base map from U.S.G.S. 24k



Washington

N

0 1,000 2,000

Feet

VICINITY MAP
MJB Properties
Anacortes, Washington

By: APS	Date: 02/02/10	Project No. 10131
AMEC Geomatrix		Figure 1

S:\10131\006_SouthDockRamp\MJB-VicinityMap

Plot Date: 02/02/10 - 11:57am, Plotted by: adam.stenberg
Drawing Path: S:\10131\006_SouthDockRamp\, Drawing Name: MJB-SouthDockRamp_ProposedMJBareas_011310.dwg

IMAGE COURTESY OF CITY OF ANACORTES 2003.

LEGEND

- PARCEL LINE
- PARCELS OWNED BY MJB
- PROPOSED BOAT RAMP PROJECT BOUNDARY

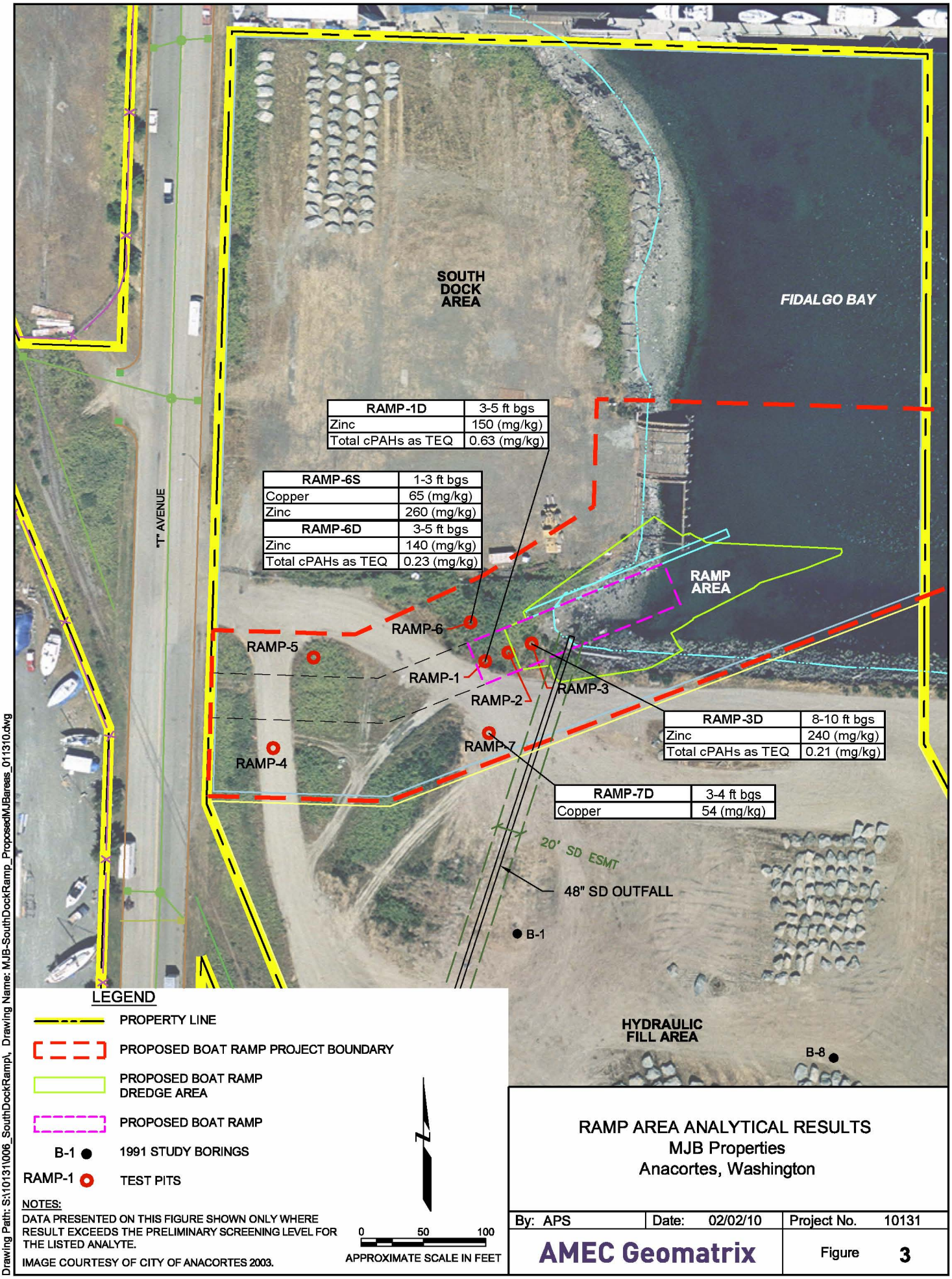
N

0 120 240

APPROXIMATE SCALE IN FEET

PROPOSED MJB AREAS
MJB Properties
Anacortes, Washington

By: APS	Date: 02/02/10	Project No. 10131
AMEC Geomatrix		Figure 2



NOTES:

DATA PRESENTED ON THIS FIGURE SHOWN ONLY WHERE RESULT EXCEEDS THE PRELIMINARY SCREENING LEVEL FOR THE LISTED ANALYTE.

IMAGE COURTESY OF CITY OF ANACORTES 2003.

RAMP AREA ANALYTICAL RESULTS
MJB Properties
Anacortes, Washington

By: APS	Date: 02/02/10	Project No. 10131
AMEC Geomatrix		Figure 3

Plot Date: 02/02/10 - 11:54am, Plotted by: adam.stenberg
Drawing Path: S:\10131\006_SouthDockRamp\, Drawing Name: MJB-SouthDockRamp_ProposedMJBareas_011310.dwg

ATTACHMENT A

Test Pit Logs

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-1**
TEST PIT LOCATION: Ramp-1	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 5.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO WATER: FIRST NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
0					
1	RAMP-1S RAMP-10S		0	SILTY SAND (SM): olive gray, moist, 70% fine to medium sand, 30% fines, roots	
2				40% fine to medium sand, 30% fines, 30% crushed shells (to 2.0' bgs.)	
3				brownish black, large concrete chunks (less than 1'x3'), 10% red-orange bricks, rebar pieces, braided wire	
4	RAMP-1D		0		
5				Bottom of test pit at 5.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-2**
TEST PIT LOCATION: Ramp-2	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 8.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO FIRST WATER: NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
0				SILTY SAND with GRAVEL (SM): brown, moist, 50% fine to medium sand, 30% fines, 20% gravel, scattered roots	
1			0		
2	RAMP-2S			no roots	
3			0		
4				dark brown, 15% red-orange and yellowish-brown bricks	
5			0		
6			0		
7	RAMP-2D		0		
8				Bottom of test pit at 8.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
9					
10					
11					
12					
13					
14					
15					

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-3**
TEST PIT LOCATION: Ramp-3	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 10.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO WATER: FIRST 10
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
1	RAMP-3S		0	SILTY SAND with GRAVEL (SM): brown, moist, 45% fine to medium sand, 30% fines, 25% subrounded gravel to 1.5", scattered roots	
2				no roots	
3			0		
4			0		
5				dark brown, moist, 40% fine to medium sand, 30% fines, 20% gravel, 10% red-orange and yellowish-brown bricks, scattered metal pieces	
6			0		
7			0		
8	RAMP-3D				
9			0		
10				Bottom of test pit at 10.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
11					
12					
13					
14					
15					

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-4**
TEST PIT LOCATION: Ramp-4	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 6.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO FIRST WATER: NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
1	RAMP-4S		0	SILTY SAND with GRAVEL (SM): brown, dry, 50% fine to medium sand, 30% rounded gravel to 1.5", 20% fines	
2					
3			0	SILT (ML): gray, dry, 85% fines, 10% fine sand, 5% rounded gravel, low plasticity, firm, orange mottling	
4					
5	RAMP-4D		0		
6			0	Bottom of test pit at 6.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
7					
8					
9					
10					
11					
12					
13					
14					
15					

OAKTESTPIT (REV. 6/03)

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-5**
TEST PIT LOCATION: Ramp-5	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 6.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO FIRST WATER: NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
0					
1			0	SILTY SAND (SM): dark brown, moist, 70% fine to medium sand, 20% fines, 10% rounded gravel, scattered roots	
2	RAMP-5S				
3			0	SILT (ML): olive gray, moist, 95% fines, 5% rounded gravel, low plasticity, firm, orange mottling	
4					
5	RAMP-5D		0		
6			0	Bottom of test pit at 6.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
7					
8					
9					
10					
11					
12					
13					
14					
15					

OAKTESTPIT (REV. 6/03)

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-6**
TEST PIT LOCATION: Ramp-6	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 5.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO WATER: FIRST NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
1	RAMP-6S		0	SILTY SAND (SM): dark brown, moist, 40% fine to medium sand, 25% fines, 25% concrete slabs (up to 4' x 4'),10% bricks, scattered roots	
2					
3			0		
4	RAMP-6D				
5			0	Bottom of test pit at 5.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

OAKTESTPIT (REV. 6/03)

PROJECT: MJB South Dock (Ramp Area Only) Anacortes, Washington	**Test Pit Log No. RAMP-7**
TEST PIT LOCATION: Ramp-7	ELEVATION AND DATUM: NA
EXCAVATION CONTRACTOR: MJB	DATE STARTED: 1/7/10 / DATE FINISHED: 1/7/10
OPERATOR: Roger	TOTAL DEPTH (ft): 4.0 / MEASURING POINT: Gound surface
EXCAVATION EQUIPMENT: CASE 580 L	DEPTH TO WATER: FIRST NA
EXCAVATION BUCKET DIMENSIONS: 2' x 2'	LOGGED BY: N. Bacher
SAMPLING METHOD: Grab sample from bucket	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: NA	REMARKS
0	RAMP-7S		0	SILTY SAND (SM): brownish gray, dry, 40% fine sand, 30% fines, 30% crushed shells	
1					
2					
3	RAMP-7D		0	LEAN CLAY (CL): gray, moist, 100% fines, trace shells, trace rounded gravel, medium plasticity, stiff	
4				Bottom of test pit at 4.0 feet. Test pit backfilled by placing and compacting excavated soil and material in the test pit excavation.	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

ATTACHMENT B

Analytical Reports

Memo

To:	Kathleen Goodman	Project:	10131
From:	Crystal Neirby	cc:	Project File
Tel:	(206) 342-1760		
Fax:	(206) 342-1761		
Date:	February 3, 2010		

Subject: January 2010 MJB South Dock Soil Sampling
Summary Data Quality Review
SDG 1001-034

This memorandum presents a summary data quality review for analyses of 15 primary soil samples collected on January 7, 2010. The samples were submitted to OnSite Environmental Inc. (OnSite), a Washington State Department of Ecology (Ecology)-accredited laboratory, located in Redmond, Washington. The dioxin and furan analysis was performed by Pace Analytical under a subcontract with OnSite Environmental. The dioxin and furan data quality review was performed by EcoChem, Inc., of Seattle, Washington and is discussed in a separate memorandum. The analyses were performed in general accordance with methods specified in the U.S. Environmental Protection Agency's (EPA's) Test Methods for Evaluating Solid Waste (SW-846) (EPA, 2008a). The samples were analyzed for the following analytes:

- Total petroleum hydrocarbons (TPH) as diesel extended by Ecology Method NWTPH-Dx, with silica-gel and acid clean-up;
- Semivolatile organic compounds (SVOCs) by EPA Method 8270 with polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270 with selective ion monitoring (SIM); and
- Total metals (arsenic, barium, cadmium, chromium, copper, lead, nickel, silver, and zinc) by EPA Method 6010B, selenium by EPA Method 6020, and mercury by EPA Method 7471A.

Selected samples were also analyzed for:

- Soluble hexavalent chromium by EPA Method 7196A;
- Toxicity characteristic leaching procedure (TCLP) metals (barium, lead, and mercury) by EPA Methods 1311/6010B/7471A; and
- Dioxin (TCDD) and furan (TCDF) congeners by EPA Method 8290 (discussed in separate data quality review memorandum).

The samples associated with this sample delivery group (SDG) and a summary of the data quality review are presented in Table 1 (attached).

AMEC Geomatrix, Inc.
600 University Street, Suite 1020
Seattle, Washington
USA 98101-4107
Tel (206) 342-1760
Fax (206) 342-1761
www.amecgeomatrixinc.com

The samples were received within the acceptable temperature range of 4 ± 2°C, and there were no sample discrepancies noted by the laboratory upon receipt.

Data were reviewed in accordance with the appropriate method procedures. The most current control limits provided by the laboratory were used to evaluate the quality control data.

The following elements were reviewed to assess compliance with applicable methods and the laboratory procedures: hold times; method blanks, blank spike (BS), and blank spike duplicate (BSD) results; matrix spike/matrix spike duplicate (MS/MSD) results; surrogate recoveries; laboratory duplicate results; and reporting limits. If data qualification was required, data were qualified in general accordance with the definitions and use of qualifying flags outlined in EPA guidance (EPA, 2004 and 2008b).

Soil samples were analyzed by the methods identified in the introduction to this report and were evaluated for the following criteria.

1. Holding Times – Acceptable
2. Blanks – Acceptable
3. BS/BSD – Acceptable:

   The laboratory did not report blank spike results if acceptable MS/MSD or laboratory duplicate results were reported, following its standard operating procedure. Since MS/MSD (laboratory duplicates for TPH-D) results were reported for each analysis, BS/BSD data were not presented and were not reviewed.
4. MS/MSD – Acceptable
5. Surrogates – Acceptable
6. Laboratory Duplicates – Acceptable
7. Reporting Limits and Laboratory Qualifiers – Acceptable

OVERALL ASSESSMENT OF DATA

The OnSite SDG 1001-034 is 100 percent complete. The data usability is based on EPA's guidance documents. Few problems were identified, and the analytical performance was generally within specified limits. The data are acceptable and meet the project's data quality objectives.

REFERENCES

EPA (U.S. Environmental Protection Agency), 2008a, Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846), Third Edition, September 1986; Final Update I, July 1992; Final Update IIA, August 1993; Final Update II, September 1994; Final Update IIB, January 1995; Final Update III, December 1996; Final Update IIIA, April 1998; Final Update IV, January 2008.

EPA, 2008b, U.S. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-08-001, June.

EPA, 2004, U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review: EPA 540-R-04-004, October.

TABLE 1

SUBMITTED SAMPLES AND ASSIGNED DATA QUALIFIERS FOR ANALYZED SAMPLES

Sample ID	Laboratory Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
Ramp-1D	01-034-11	none			
Ramp-1S	01-034-09	none			
Ramp-2D	01-034-15	none			
Ramp-2S	01-034-14	none			
Ramp-3D	01-034-13	none			
Ramp-3S	01-034-12	none			
Ramp-4D	01-034-02	none			
Ramp-4S	01-034-01	none			
Ramp-5D	01-034-04	none			
Ramp-5S	01-034-03	none			
Ramp-6D	01-034-08	none			
Ramp-6S	01-034-07	none			
Ramp-7D	01-034-06	none			
Ramp-7S	01-034-05	none			
Ramp-10S	01-034-10	none			

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

January 27, 2010

Kathleen Goodman
AMEC Geomatrix Consultants, Inc.
One Union Square
600 University Street, Suite 1020
Seattle, WA 98101

Re: Analytical Data for Project 10131
Laboratory Reference No. 1001-034

Dear Kathleen:

Enclosed are the analytical results and associated quality control data for samples submitted on January 7, 2010.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

Case Narrative

Samples were collected on January 7, 2010, and received by the laboratory on January 7, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

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

Total Metals EPA 6010B/6020/7471A Analysis

The practical quantitation limit for Selenium is elevated for sample Ramp-3D due to interferences present in the sample.

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

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

NWTPH-Dx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-01				
Client ID:	**Ramp-4S**				
Diesel Range	**ND**	30	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	61	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	67%	50-150			
Lab ID:	01-034-02				
Client ID:	**Ramp-4D**				
Diesel Range	**ND**	30	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	59	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	80%	50-150			
Lab ID:	01-034-03				
Client ID:	**Ramp-5S**				
Diesel Range	**ND**	30	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	60	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	75%	50-150			
Lab ID:	01-034-04				
Client ID:	**Ramp-5D**				
Diesel Range	**ND**	30	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	60	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	74%	50-150			
Lab ID:	01-034-05				
Client ID:	**Ramp-7S**				
Diesel Range	**ND**	27	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	55	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	75%	50-150			

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

NWTPH-Dx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-06				
Client ID:	**Ramp-7D**				
Diesel Range	**ND**	32	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	64	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	74%	50-150			
Lab ID:	01-034-07				
Client ID:	**Ramp-6S**				
Diesel Range	**ND**	33	1-8-10	1-8-10	Y
Lube Oil	**130**	66	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	74%	50-150			
Lab ID:	01-034-08				
Client ID:	**Ramp-6D**				
Diesel Range	**ND**	31	1-8-10	1-8-10	Y
Lube Oil	**140**	62	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	86%	50-150			
Lab ID:	01-034-09				
Client ID:	**Ramp-1S**				
Diesel Range	**ND**	28	1-8-10	1-8-10	Y
Lube Oil	**140**	56	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	79%	50-150			
Lab ID:	01-034-10				
Client ID:	**Ramp-10S**				
Diesel Range	**ND**	28	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	56	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	78%	50-150			

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
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Project: 10131

NWTPH-Dx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-11				
Client ID:	**Ramp-1D**				
Diesel Range	**ND**	33	1-8-10	1-8-10	Y
Lube Oil	**170**	65	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	73%	50-150			
Lab ID:	01-034-12				
Client ID:	**Ramp-3S**				
Diesel Range	**ND**	31	1-8-10	1-8-10	Y
Lube Oil	**140**	62	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	78%	50-150			
Lab ID:	01-034-13				
Client ID:	**Ramp-3D**				
Diesel Range	**ND**	32	1-8-10	1-8-10	Y
Lube Oil	**230**	64	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	67%	50-150			
Lab ID:	01-034-14				
Client ID:	**Ramp-2S**				
Diesel Range	**ND**	27	1-8-10	1-8-10	Y
Lube Oil Range	**ND**	54	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	79%	50-150			
Lab ID:	01-034-15				
Client ID:	**Ramp-2D**				
Diesel Range	**ND**	160	1-8-10	1-8-10	Y,U1
Lube Oil	**1700**	62	1-8-10	1-8-10	Y
Surrogate: o-terphenyl	73%	50-150			

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	1-8-10
Date Analyzed:	1-8-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0108S1
Diesel Range:	**ND**
PQL:	25
Identification:	---
Lube Oil Range:	**ND**
PQL:	50
Identification:	---
Surrogate Recovery	
o-Terphenyl:	84%
Flags:	Y

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	1-8-10
Date Analyzed:	1-8-10
Matrix:	Soil
Units:	mg/kg (ppm)

Lab ID:	01-009-03	01-009-03 DUP
Diesel Range:	**121**	**105**
PQL:	25	25
RPD:	14	
Surrogate Recovery		
o-Terphenyl:	82%	82%
Flags:	Y	Y

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	1-8-10
Date Analyzed:	1-8-10
Matrix:	Soil
Units:	mg/kg (ppm)

Lab ID:	01-034-07	01-034-07 DUP
Diesel Range:	**ND**	**ND**
PQL:	25	25
RPD:	N/A	
Surrogate Recovery		
o-Terphenyl:	74%	79%
Flags:	Y	Y

Date of Report: January 27, 2010
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Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-4S**					
Laboratory ID:	01-034-01					
N-Nitrosodimethylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-4S**					
Laboratory ID:	01-034-01					
2,4-Dinitrophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*82*	*19 - 97*				
Phenol-d6	*86*	*22 - 108*				
Nitrobenzene-d5	*76*	*21 - 106*				
2-Fluorobiphenyl	*69*	*29 - 107*				
2,4,6-Tribromophenol	*68*	*44 - 121*				
Terphenyl-d14	*75*	*37 - 120*				

Date of Report: January 27, 2010
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-4D**					
Laboratory ID:	01-034-02					
N-Nitrosodimethylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-4D**					
Laboratory ID:	01-034-02					
2,4-Dinitrophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*74*	*19 - 97*				
Phenol-d6	*78*	*22 - 108*				
Nitrobenzene-d5	*69*	*21 - 106*				
2-Fluorobiphenyl	*67*	*29 - 107*				
2,4,6-Tribromophenol	*62*	*44 - 121*				
Terphenyl-d14	*68*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-5S**					
Laboratory ID:	01-034-03					
N-Nitrosodimethylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-5S**					
Laboratory ID:	01-034-03					
2,4-Dinitrophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0079	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*73*	*19 - 97*				
Phenol-d6	*80*	*22 - 108*				
Nitrobenzene-d5	*71*	*21 - 106*				
2-Fluorobiphenyl	*69*	*29 - 107*				
2,4,6-Tribromophenol	*72*	*44 - 121*				
Terphenyl-d14	*77*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-5D**					
Laboratory ID:	01-034-04					
N-Nitrosodimethylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-5D**					
Laboratory ID:	01-034-04					
2,4-Dinitrophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.20	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.40	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.040	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0080	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*57*	*19 - 97*				
Phenol-d6	*64*	*22 - 108*				
Nitrobenzene-d5	*53*	*21 - 106*				
2-Fluorobiphenyl	*54*	*29 - 107*				
2,4,6-Tribromophenol	*70*	*44 - 121*				
Terphenyl-d14	*80*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-7S**					
Laboratory ID:	01-034-05					
N-Nitrosodimethylamine	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-7S**					
Laboratory ID:	01-034-05					
2,4-Dinitrophenol	**ND**	0.18	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.18	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.18	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**0.012**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.36	EPA 8270	1-13-10	1-13-10	
Pyrene	**0.011**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.36	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.036	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**0.0082**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0072	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*66*	*19 - 97*				
Phenol-d6	*72*	*22 - 108*				
Nitrobenzene-d5	*62*	*21 - 106*				
2-Fluorobiphenyl	*65*	*29 - 107*				
2,4,6-Tribromophenol	*80*	*44 - 121*				
Terphenyl-d14	*89*	*37 - 120*				

Date of Report: January 27, 2010
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Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-7D**					
Laboratory ID:	01-034-06					
N-Nitrosodimethylamine	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-7D**					
Laboratory ID:	01-034-06					
2,4-Dinitrophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.43	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.43	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0085	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*45*	*19 - 97*				
Phenol-d6	*52*	*22 - 108*				
Nitrobenzene-d5	*43*	*21 - 106*				
2-Fluorobiphenyl	*46*	*29 - 107*				
2,4,6-Tribromophenol	*63*	*44 - 121*				
Terphenyl-d14	*69*	*37 - 120*				

Date of Report: January 27, 2010
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Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-6S**					
Laboratory ID:	01-034-07					
N-Nitrosodimethylamine	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**0.027**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-6S**					
Laboratory ID:	01-034-07					
2,4-Dinitrophenol	**ND**	0.22	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.22	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.22	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**0.037**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**0.017**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**0.051**	0.044	EPA 8270	1-13-10	1-13-10	
Benzidine	**ND**	0.44	EPA 8270	1-13-10	1-13-10	
Pyrene	**0.067**	0.044	EPA 8270	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.44	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**0.032**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**0.047**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.044	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**0.055**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**0.018**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**0.044**	0.044	EPA 8270	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**0.036**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**0.011**	0.0089	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**0.050**	0.044	EPA 8270	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*43*	*19 - 97*				
Phenol-d6	*61*	*22 - 108*				
Nitrobenzene-d5	*44*	*21 - 106*				
2-Fluorobiphenyl	*59*	*29 - 107*				
2,4,6-Tribromophenol	*60*	*44 - 121*				
Terphenyl-d14	*70*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-6D**					
Laboratory ID:	01-034-08					
N-Nitrosodimethylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Naphthalene	**0.010**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**0.060**	0.041	EPA 8270	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	

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Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-6D**					
Laboratory ID:	01-034-08					
2,4-Dinitrophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Fluorene	**0.026**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**0.30**	0.041	EPA 8270	1-13-10	1-13-10	
Anthracene	**0.060**	0.041	EPA 8270	1-13-10	1-13-10	
Carbazole	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**0.37**	0.041	EPA 8270	1-13-10	1-13-10	
Benzidine	**ND**	0.41	EPA 8270	1-13-10	1-13-10	
Pyrene	**0.43**	0.041	EPA 8270	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.41	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**0.17**	0.041	EPA 8270	1-13-10	1-13-10	
Chrysene	**0.21**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**0.13**	0.041	EPA 8270	1-13-10	1-13-10	
Benzo[k]fluoranthene	**0.17**	0.041	EPA 8270	1-13-10	1-13-10	
Benzo[a]pyrene	**0.17**	0.041	EPA 8270	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**0.11**	0.041	EPA 8270	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**0.031**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**0.13**	0.041	EPA 8270	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*72*	*19 - 97*				
Phenol-d6	*83*	*22 - 108*				
Nitrobenzene-d5	*70*	*21 - 106*				
2-Fluorobiphenyl	*75*	*29 - 107*				
2,4,6-Tribromophenol	*70*	*44 - 121*				
Terphenyl-d14	*90*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-1S**					
Laboratory ID:	01-034-09					
N-Nitrosodimethylamine	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Pyridine	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Phenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Aniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroethyl)ether	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Chlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,3-Dichlorobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,4-Dichlorobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Benzyl alcohol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,2-Dichlorobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Methylphenol (o-Cresol)	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroisopropyl)ether	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
N-Nitroso-di-n-propylamine	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Hexachloroethane	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Nitrobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Isophorone	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Nitrophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,4-Dimethylphenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroethoxy)methane	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,4-Dichlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,2,4-Trichlorobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Naphthalene	**ND**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Hexachlorobutadiene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
4-Chloro-3-methylphenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Methylnaphthalene	**ND**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,4,6-Trichlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,3-Dichloroaniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,4,5-Trichlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Chloronaphthalene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2-Nitroaniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,4-Dinitrobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Dimethylphthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,3-Dinitrobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,6-Dinitrotoluene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,2-Dinitrobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Acenaphthylene	**0.016**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	

Date of Report: January 27, 2010
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-1S**					
Laboratory ID:	01-034-09					
2,4-Dinitrophenol	**ND**	0.19	EPA 8270	1-13-10	1-14-10	
Acenaphthene	**ND**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,4-Dinitrotoluene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Dibenzofuran	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Diethylphthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
4-Chlorophenyl-phenylether	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
4-Nitroaniline	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Fluorene	**ND**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.19	EPA 8270	1-13-10	1-14-10	
N-Nitrosodiphenylamine	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
1,2-Diphenylhydrazine	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
4-Bromophenyl-phenylether	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Hexachlorobenzene	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Pentachlorophenol	**ND**	0.19	EPA 8270	1-13-10	1-14-10	
Phenanthrene	**0.030**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**0.014**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Di-n-butylphthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Fluoranthene	**0.050**	0.037	EPA 8270	1-13-10	1-14-10	
Benzidine	**ND**	0.37	EPA 8270	1-13-10	1-14-10	
Pyrene	**0.068**	0.037	EPA 8270	1-13-10	1-14-10	
Butylbenzylphthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
bis-2-Ethylhexyladipate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
3,3'-Dichlorobenzidine	**ND**	0.37	EPA 8270	1-13-10	1-14-10	
Benzo[a]anthracene	**0.039**	0.037	EPA 8270	1-13-10	1-14-10	
Chrysene	**0.057**	0.037	EPA 8270	1-13-10	1-14-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Di-n-octylphthalate	**ND**	0.037	EPA 8270	1-13-10	1-14-10	
Benzo[b]fluoranthene	**0.041**	0.037	EPA 8270	1-13-10	1-14-10	
Benzo[k]fluoranthene	**0.013**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**0.058**	0.037	EPA 8270	1-13-10	1-14-10	
Indeno[1,2,3-cd]pyrene	**0.032**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**0.012**	0.0075	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**0.071**	0.037	EPA 8270	1-13-10	1-14-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*81*	*19 - 97*				
Phenol-d6	*90*	*22 - 108*				
Nitrobenzene-d5	*79*	*21 - 106*				
2-Fluorobiphenyl	*85*	*29 - 107*				
2,4,6-Tribromophenol	*79*	*44 - 121*				
Terphenyl-d14	*102*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-1D**					
Laboratory ID:	01-034-11					
N-Nitrosodimethylamine	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Pyridine	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Phenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Aniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroethyl)ether	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Chlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,3-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,4-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Benzyl alcohol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,2-Dichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Methylphenol (o-Cresol)	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroisopropyl)ether	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
N-Nitroso-di-n-propylamine	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Hexachloroethane	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Nitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Isophorone	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Nitrophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,4-Dimethylphenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
bis(2-Chloroethoxy)methane	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,4-Dichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,2,4-Trichlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Naphthalene	**0.021**	0.0087	EPA 8270/SIM	1-13-10	1-14-10	
4-Chloroaniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Hexachlorobutadiene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
4-Chloro-3-methylphenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Methylnaphthalene	**0.020**	0.0087	EPA 8270/SIM	1-13-10	1-14-10	
1-Methylnaphthalene	**0.032**	0.0087	EPA 8270/SIM	1-13-10	1-14-10	
Hexachlorocyclopentadiene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,4,6-Trichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,3-Dichloroaniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,4,5-Trichlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Chloronaphthalene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,4-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Dimethylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,3-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,6-Dinitrotoluene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,2-Dinitrobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Acenaphthylene	**0.21**	0.043	EPA 8270	1-13-10	1-14-10	
3-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	

Date of Report: January 27, 2010
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Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-1D**					
Laboratory ID:	01-034-11					
2,4-Dinitrophenol	**ND**	0.22	EPA 8270	1-13-10	1-14-10	
Acenaphthene	**0.023**	0.0087	EPA 8270/SIM	1-13-10	1-14-10	
4-Nitrophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,4-Dinitrotoluene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Dibenzofuran	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Diethylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
4-Chlorophenyl-phenylether	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
4-Nitroaniline	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Fluorene	**0.074**	0.043	EPA 8270	1-13-10	1-14-10	
4,6-Dinitro-2-methylphenol	**ND**	0.22	EPA 8270	1-13-10	1-14-10	
N-Nitrosodiphenylamine	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
1,2-Diphenylhydrazine	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
4-Bromophenyl-phenylether	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Hexachlorobenzene	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Pentachlorophenol	**ND**	0.22	EPA 8270	1-13-10	1-14-10	
Phenanthrene	**0.86**	0.043	EPA 8270	1-13-10	1-14-10	
Anthracene	**0.14**	0.043	EPA 8270	1-13-10	1-14-10	
Carbazole	**0.056**	0.043	EPA 8270	1-13-10	1-14-10	
Di-n-butylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Fluoranthene	**0.78**	0.043	EPA 8270	1-13-10	1-14-10	
Benzidine	**ND**	0.43	EPA 8270	1-13-10	1-14-10	
Pyrene	**1.2**	0.043	EPA 8270	1-13-10	1-14-10	
Butylbenzylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
bis-2-Ethylhexyladipate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
3,3'-Dichlorobenzidine	**ND**	0.43	EPA 8270	1-13-10	1-14-10	
Benzo[a]anthracene	**0.36**	0.043	EPA 8270	1-13-10	1-14-10	
Chrysene	**0.52**	0.043	EPA 8270	1-13-10	1-14-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Di-n-octylphthalate	**ND**	0.043	EPA 8270	1-13-10	1-14-10	
Benzo[b]fluoranthene	**0.36**	0.043	EPA 8270	1-13-10	1-14-10	
Benzo[k]fluoranthene	**0.35**	0.043	EPA 8270	1-13-10	1-14-10	
Benzo[a]pyrene	**0.48**	0.043	EPA 8270	1-13-10	1-14-10	
Indeno[1,2,3-cd]pyrene	**0.29**	0.043	EPA 8270	1-13-10	1-14-10	
Dibenz[a,h]anthracene	**0.088**	0.043	EPA 8270	1-13-10	1-14-10	
Benzo[g,h,i]perylene	**0.33**	0.043	EPA 8270	1-13-10	1-14-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*77*	*19 - 97*				
Phenol-d6	*89*	*22 - 108*				
Nitrobenzene-d5	*77*	*21 - 106*				
2-Fluorobiphenyl	*71*	*29 - 107*				
2,4,6-Tribromophenol	*74*	*44 - 121*				
Terphenyl-d14	*98*	*37 - 120*				

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Project: 10131

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-3S**					
Laboratory ID:	01-034-12					
N-Nitrosodimethylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-3S**					
Laboratory ID:	01-034-12					
2,4-Dinitrophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**0.0090**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**0.017**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.41	EPA 8270	1-13-10	1-13-10	
Pyrene	**0.017**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.41	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**0.0084**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**0.012**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.041	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**0.015**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**0.011**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**0.011**	0.0082	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*79*	*19 - 97*				
Phenol-d6	*86*	*22 - 108*				
Nitrobenzene-d5	*73*	*21 - 106*				
2-Fluorobiphenyl	*71*	*29 - 107*				
2,4,6-Tribromophenol	*75*	*44 - 121*				
Terphenyl-d14	*83*	*37 - 120*				

Date of Report: January 27, 2010
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-3D**					
Laboratory ID:	01-034-13					
N-Nitrosodimethylamine	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Naphthalene	**0.032**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**0.020**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**0.016**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**0.040**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-3D**					
Laboratory ID:	01-034-13					
2,4-Dinitrophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**0.039**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Fluorene	**0.038**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.21	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**0.33**	0.042	EPA 8270	1-13-10	1-13-10	
Anthracene	**0.067**	0.042	EPA 8270	1-13-10	1-13-10	
Carbazole	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**0.32**	0.042	EPA 8270	1-13-10	1-13-10	
Benzidine	**ND**	0.42	EPA 8270	1-13-10	1-13-10	
Pyrene	**0.38**	0.042	EPA 8270	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.42	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**0.14**	0.042	EPA 8270	1-13-10	1-13-10	
Chrysene	**0.16**	0.042	EPA 8270	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.042	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**0.12**	0.042	EPA 8270	1-13-10	1-13-10	
Benzo[k]fluoranthene	**0.12**	0.042	EPA 8270	1-13-10	1-13-10	
Benzo[a]pyrene	**0.16**	0.042	EPA 8270	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**0.088**	0.042	EPA 8270	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**0.023**	0.0084	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**0.10**	0.042	EPA 8270	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*73*	*19 - 97*				
Phenol-d6	*82*	*22 - 108*				
Nitrobenzene-d5	*73*	*21 - 106*				
2-Fluorobiphenyl	*73*	*29 - 107*				
2,4,6-Tribromophenol	*72*	*44 - 121*				
Terphenyl-d14	*86*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-2S**					
Laboratory ID:	01-034-14					
N-Nitrosodimethylamine	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Pyridine	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Phenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Aniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethyl)ether	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Chlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,3-Dichlorobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,4-Dichlorobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Benzyl alcohol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,2-Dichlorobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Methylphenol (o-Cresol)	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroisopropyl)ether	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
N-Nitroso-di-n-propylamine	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Hexachloroethane	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Nitrobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Isophorone	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Nitrophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,4-Dimethylphenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethoxy)methane	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,4-Dichlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,2,4-Trichlorobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Naphthalene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
4-Chloroaniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Hexachlorobutadiene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
4-Chloro-3-methylphenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Methylnaphthalene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
1-Methylnaphthalene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Hexachlorocyclopentadiene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,4,6-Trichlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,3-Dichloroaniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,4,5-Trichlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Chloronaphthalene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2-Nitroaniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,4-Dinitrobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Dimethylphthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,3-Dinitrobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,6-Dinitrotoluene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,2-Dinitrobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Acenaphthylene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
3-Nitroaniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-2S**					
Laboratory ID:	01-034-14					
2,4-Dinitrophenol	**ND**	0.18	EPA 8270	1-12-10	1-12-10	
Acenaphthene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
4-Nitrophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,4-Dinitrotoluene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Dibenzofuran	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Diethylphthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
4-Chlorophenyl-phenylether	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
4-Nitroaniline	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Fluorene	**ND**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
4,6-Dinitro-2-methylphenol	**ND**	0.18	EPA 8270	1-12-10	1-12-10	
N-Nitrosodiphenylamine	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
1,2-Diphenylhydrazine	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
4-Bromophenyl-phenylether	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Hexachlorobenzene	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Pentachlorophenol	**ND**	0.18	EPA 8270	1-12-10	1-12-10	
Phenanthrene	**0.038**	0.036	EPA 8270	1-12-10	1-12-10	
Anthracene	**0.0086**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Carbazole	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Di-n-butylphthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Fluoranthene	**0.064**	0.036	EPA 8270	1-12-10	1-12-10	
Benzidine	**ND**	0.36	EPA 8270	1-12-10	1-12-10	
Pyrene	**0.060**	0.036	EPA 8270	1-12-10	1-12-10	
Butylbenzylphthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
bis-2-Ethylhexyladipate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
3,3'-Dichlorobenzidine	**ND**	0.36	EPA 8270	1-12-10	1-12-10	
Benzo[a]anthracene	**0.029**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Chrysene	**0.047**	0.036	EPA 8270	1-12-10	1-12-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Di-n-octylphthalate	**ND**	0.036	EPA 8270	1-12-10	1-12-10	
Benzo[b]fluoranthene	**0.037**	0.036	EPA 8270	1-12-10	1-12-10	
Benzo[k]fluoranthene	**0.018**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[a]pyrene	**0.039**	0.036	EPA 8270	1-12-10	1-12-10	
Indeno[1,2,3-cd]pyrene	**0.024**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Dibenz[a,h]anthracene	**0.0077**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[g,h,i]perylene	**0.034**	0.0072	EPA 8270/SIM	1-12-10	1-12-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*78*	*19 - 97*				
Phenol-d6	*83*	*22 - 108*				
Nitrobenzene-d5	*79*	*21 - 106*				
2-Fluorobiphenyl	*80*	*29 - 107*				
2,4,6-Tribromophenol	*79*	*44 - 121*				
Terphenyl-d14	*84*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-2D**					
Laboratory ID:	01-034-15					
N-Nitrosodimethylamine	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Pyridine	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Phenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Aniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethyl)ether	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Chlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,3-Dichlorobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,4-Dichlorobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Benzyl alcohol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,2-Dichlorobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Methylphenol (o-Cresol)	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroisopropyl)ether	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
N-Nitroso-di-n-propylamine	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Hexachloroethane	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Nitrobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Isophorone	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Nitrophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,4-Dimethylphenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethoxy)methane	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,4-Dichlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,2,4-Trichlorobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Naphthalene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
4-Chloroaniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Hexachlorobutadiene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
4-Chloro-3-methylphenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
1-Methylnaphthalene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Hexachlorocyclopentadiene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,4,6-Trichlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,3-Dichloroaniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,4,5-Trichlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Chloronaphthalene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2-Nitroaniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,4-Dinitrobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Dimethylphthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,3-Dinitrobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,6-Dinitrotoluene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,2-Dinitrobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Acenaphthylene	**0.012**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
3-Nitroaniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Ramp-2D**					
Laboratory ID:	01-034-15					
2,4-Dinitrophenol	**ND**	0.21	EPA 8270	1-12-10	1-12-10	
Acenaphthene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
4-Nitrophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,4-Dinitrotoluene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Dibenzofuran	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Diethylphthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
4-Chlorophenyl-phenylether	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
4-Nitroaniline	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Fluorene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
4,6-Dinitro-2-methylphenol	**ND**	0.21	EPA 8270	1-12-10	1-12-10	
N-Nitrosodiphenylamine	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
1,2-Diphenylhydrazine	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
4-Bromophenyl-phenylether	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Hexachlorobenzene	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Pentachlorophenol	**ND**	0.21	EPA 8270	1-12-10	1-12-10	
Phenanthrene	**0.051**	0.041	EPA 8270	1-12-10	1-12-10	
Anthracene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Carbazole	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Di-n-butylphthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Fluoranthene	**0.062**	0.041	EPA 8270	1-12-10	1-12-10	
Benzidine	**ND**	0.41	EPA 8270	1-12-10	1-12-10	
Pyrene	**0.088**	0.041	EPA 8270	1-12-10	1-12-10	
Butylbenzylphthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
bis-2-Ethylhexyladipate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
3,3'-Dichlorobenzidine	**ND**	0.41	EPA 8270	1-12-10	1-12-10	
Benzo[a]anthracene	**0.045**	0.041	EPA 8270	1-12-10	1-12-10	
Chrysene	**0.085**	0.041	EPA 8270	1-12-10	1-12-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Di-n-octylphthalate	**ND**	0.041	EPA 8270	1-12-10	1-12-10	
Benzo[b]fluoranthene	**0.061**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[k]fluoranthene	**0.022**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[a]pyrene	**0.067**	0.041	EPA 8270	1-12-10	1-12-10	
Indeno[1,2,3-cd]pyrene	**0.026**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Dibenz[a,h]anthracene	**ND**	0.0082	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[g,h,i]perylene	**0.049**	0.041	EPA 8270	1-12-10	1-12-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*75*	*19 - 97*				
Phenol-d6	*82*	*22 - 108*				
Nitrobenzene-d5	*80*	*21 - 106*				
2-Fluorobiphenyl	*84*	*29 - 107*				
2,4,6-Tribromophenol	*75*	*44 - 121*				
Terphenyl-d14	*84*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0112S1					
N-Nitrosodimethylamine	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Pyridine	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Phenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Aniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethyl)ether	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Chlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,3-Dichlorobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,4-Dichlorobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Benzyl alcohol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,2-Dichlorobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Methylphenol (o-Cresol)	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroisopropyl)ether	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
N-Nitroso-di-n-propylamine	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Hexachloroethane	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Nitrobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Isophorone	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Nitrophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,4-Dimethylphenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
bis(2-Chloroethoxy)methane	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,4-Dichlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,2,4-Trichlorobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Naphthalene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
4-Chloroaniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Hexachlorobutadiene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
4-Chloro-3-methylphenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Hexachlorocyclopentadiene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,4,6-Trichlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,3-Dichloroaniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,4,5-Trichlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Chloronaphthalene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2-Nitroaniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,4-Dinitrobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Dimethylphthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,3-Dinitrobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,6-Dinitrotoluene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,2-Dinitrobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Acenaphthylene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
3-Nitroaniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	

Date of Report: January 27, 2010
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0112S1					
2,4-Dinitrophenol	**ND**	0.17	EPA 8270	1-12-10	1-12-10	
Acenaphthene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
4-Nitrophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,4-Dinitrotoluene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Dibenzofuran	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Diethylphthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
4-Chlorophenyl-phenylether	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
4-Nitroaniline	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Fluorene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
4,6-Dinitro-2-methylphenol	**ND**	0.17	EPA 8270	1-12-10	1-12-10	
N-Nitrosodiphenylamine	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
1,2-Diphenylhydrazine	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
4-Bromophenyl-phenylether	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Hexachlorobenzene	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Pentachlorophenol	**ND**	0.17	EPA 8270	1-12-10	1-12-10	
Phenanthrene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Anthracene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Carbazole	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Di-n-butylphthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Benzidine	**ND**	0.33	EPA 8270	1-12-10	1-12-10	
Pyrene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Butylbenzylphthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
bis-2-Ethylhexyladipate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
3,3'-Dichlorobenzidine	**ND**	0.33	EPA 8270	1-12-10	1-12-10	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Chrysene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Di-n-octylphthalate	**ND**	0.033	EPA 8270	1-12-10	1-12-10	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[k]fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270/SIM	1-12-10	1-12-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*63*	*19 - 97*				
Phenol-d6	*67*	*22 - 108*				
Nitrobenzene-d5	*63*	*21 - 106*				
2-Fluorobiphenyl	*63*	*29 - 107*				
2,4,6-Tribromophenol	*66*	*44 - 121*				
Terphenyl-d14	*72*	*37 - 120*				

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Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0113S1					
N-Nitrosodimethylamine	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Pyridine	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Phenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Aniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethyl)ether	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Chlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,3-Dichlorobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,4-Dichlorobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Benzyl alcohol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,2-Dichlorobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Methylphenol (o-Cresol)	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroisopropyl)ether	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
(3+4)-Methylphenol (m,p-Cresol)	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
N-Nitroso-di-n-propylamine	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Hexachloroethane	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Nitrobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Isophorone	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Nitrophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,4-Dimethylphenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
bis(2-Chloroethoxy)methane	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,4-Dichlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,2,4-Trichlorobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Naphthalene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
4-Chloroaniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Hexachlorobutadiene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
4-Chloro-3-methylphenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Hexachlorocyclopentadiene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,4,6-Trichlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,3-Dichloroaniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,4,5-Trichlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Chloronaphthalene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2-Nitroaniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,4-Dinitrobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Dimethylphthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,3-Dinitrobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,6-Dinitrotoluene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,2-Dinitrobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Acenaphthylene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
3-Nitroaniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0113S1					
2,4-Dinitrophenol	**ND**	0.17	EPA 8270	1-13-10	1-13-10	
Acenaphthene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
4-Nitrophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,4-Dinitrotoluene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Dibenzofuran	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,3,5,6-Tetrachlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
2,3,4,6-Tetrachlorophenol	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Diethylphthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
4-Chlorophenyl-phenylether	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
4-Nitroaniline	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Fluorene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
4,6-Dinitro-2-methylphenol	**ND**	0.17	EPA 8270	1-13-10	1-13-10	
N-Nitrosodiphenylamine	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
1,2-Diphenylhydrazine	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
4-Bromophenyl-phenylether	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Hexachlorobenzene	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Pentachlorophenol	**ND**	0.17	EPA 8270	1-13-10	1-13-10	
Phenanthrene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Anthracene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Carbazole	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Di-n-butylphthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Benzidine	**ND**	0.33	EPA 8270	1-13-10	1-13-10	
Pyrene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Butylbenzylphthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
bis-2-Ethylhexyladipate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
3,3'-Dichlorobenzidine	**ND**	0.33	EPA 8270	1-13-10	1-13-10	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Chrysene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
bis(2-Ethylhexyl)phthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Di-n-octylphthalate	**ND**	0.033	EPA 8270	1-13-10	1-13-10	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[k]fluoranthene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Indeno[1,2,3-cd]pyrene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270/SIM	1-13-10	1-13-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*87*	*19 - 97*				
Phenol-d6	*92*	*22 - 108*				
Nitrobenzene-d5	*82*	*21 - 106*				
2-Fluorobiphenyl	*84*	*29 - 107*				
2,4,6-Tribromophenol	*82*	*44 - 121*				
Terphenyl-d14	*88*	*37 - 120*				

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
MS/MSD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	01-049-03										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	**1.28**	**1.17**	1.33	1.33	ND	96	88	38 - 97	9	30	
2-Chlorophenol	**1.23**	**1.12**	1.33	1.33	ND	92	84	28 - 102	9	38	
1,4-Dichlorobenzene	**0.518**	**0.449**	0.667	0.667	ND	78	67	14 - 84	14	41	
N-Nitroso-di-n-propylamine	**0.578**	**0.530**	0.667	0.667	ND	87	79	25 - 104	9	39	
1,2,4-Trichlorobenzene	**0.495**	**0.438**	0.667	0.667	ND	74	66	23 - 93	12	37	
4-Chloro-3-methylphenol	**1.19**	**1.18**	1.33	1.33	ND	89	89	49 - 113	1	31	
Acenaphthene	**0.505**	**0.488**	0.667	0.667	ND	76	73	37 - 101	3	40	
4-Nitrophenol	**1.25**	**1.31**	1.33	1.33	ND	94	98	30 - 136	5	31	
2,4-Dinitrotoluene	**0.548**	**0.540**	0.667	0.667	ND	82	81	36 - 122	1	32	
Pentachlorophenol	**1.11**	**1.15**	1.33	1.33	ND	83	86	15 - 143	4	34	
Pyrene	**0.588**	**0.559**	0.667	0.667	ND	88	84	24 - 138	5	39	
Surrogate:											
2-Fluorophenol						*81*	*72*	*19 - 97*			
Phenol-d6						*82*	*76*	*22 - 108*			
Nitrobenzene-d5						*78*	*72*	*21 - 106*			
2-Fluorobiphenyl						*73*	*71*	*29 - 107*			
2,4,6-Tribromophenol						*75*	*75*	*44 - 121*			
Terphenyl-d14						*80*	*78*	*37 - 120*			

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SEMIVOLATILES by EPA 8270D/SIM
MS/MSD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	01-034-03										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	**1.21**	**1.26**	1.33	1.33	ND	91	95	38 - 97	4	30	
2-Chlorophenol	**1.16**	**1.20**	1.33	1.33	ND	87	90	28 - 102	3	38	
1,4-Dichlorobenzene	**0.451**	**0.481**	0.667	0.667	ND	68	72	14 - 84	6	41	
N-Nitroso-di-n-propylamine	**0.561**	**0.588**	0.667	0.667	ND	84	88	25 - 104	5	39	
1,2,4-Trichlorobenzene	**0.417**	**0.436**	0.667	0.667	ND	63	65	23 - 93	4	37	
4-Chloro-3-methylphenol	**1.18**	**1.16**	1.33	1.33	ND	89	87	49 - 113	2	31	
Acenaphthene	**0.466**	**0.477**	0.667	0.667	ND	70	72	37 - 101	2	40	
4-Nitrophenol	**1.34**	**1.38**	1.33	1.33	ND	101	104	30 - 136	3	31	
2,4-Dinitrotoluene	**0.512**	**0.530**	0.667	0.667	ND	77	79	36 - 122	3	32	
Pentachlorophenol	**1.13**	**1.18**	1.33	1.33	ND	85	89	15 - 143	4	34	
Pyrene	**0.501**	**0.515**	0.667	0.667	ND	75	77	24 - 138	3	39	
Surrogate:											
2-Fluorophenol						*81*	*84*	*19 - 97*			
Phenol-d6						*85*	*87*	*22 - 108*			
Nitrobenzene-d5						*75*	*79*	*21 - 106*			
2-Fluorobiphenyl						*74*	*73*	*29 - 107*			
2,4,6-Tribromophenol						*74*	*74*	*44 - 121*			
Terphenyl-d14						*79*	*81*	*37 - 120*			

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-01					
Client ID:	**Ramp-4S**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**120**	3.0	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.61	6010B	1-15-10	1-15-10	
Chromium	**48**	0.61	6010B	1-15-10	1-15-10	
Copper	**22**	1.5	6010B	1-15-10	1-15-10	
Lead	**ND**	6.1	6010B	1-15-10	1-15-10	
Mercury	**0.036**	0.030	7471A	1-14-10	1-14-10	
Nickel	**32**	3.0	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.61	6020	1-15-10	1-15-10	
Silver	**ND**	0.61	6010B	1-15-10	1-15-10	
Zinc	**42**	3.0	6010B	1-15-10	1-15-10	
Lab ID:	01-034-02					
Client ID:	**Ramp-4D**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**88**	3.0	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.59	6010B	1-15-10	1-15-10	
Chromium	**41**	0.59	6010B	1-15-10	1-15-10	
Copper	**41**	1.4	6010B	1-15-10	1-15-10	
Lead	**ND**	5.9	6010B	1-15-10	1-15-10	
Mercury	**0.039**	0.030	7471A	1-14-10	1-14-10	
Nickel	**42**	3.0	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.59	6020	1-15-10	1-15-10	
Silver	**ND**	0.59	6010B	1-15-10	1-15-10	
Zinc	**59**	3.0	6010B	1-15-10	1-15-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-03					
Client ID:	**Ramp-5S**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**100**	3.0	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.60	6010B	1-15-10	1-15-10	
Chromium	**45**	0.60	6010B	1-15-10	1-15-10	
Copper	**36**	1.4	6010B	1-15-10	1-15-10	
Lead	**ND**	6.0	6010B	1-15-10	1-15-10	
Mercury	**0.040**	0.030	7471A	1-14-10	1-14-10	
Nickel	**39**	3.0	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.60	6020	1-15-10	1-15-10	
Silver	**ND**	0.60	6010B	1-15-10	1-15-10	
Zinc	**49**	3.0	6010B	1-15-10	1-15-10	
Lab ID:	01-034-04					
Client ID:	**Ramp-5D**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**80**	3.0	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.60	6010B	1-15-10	1-15-10	
Chromium	**35**	0.60	6010B	1-15-10	1-15-10	
Copper	**33**	1.5	6010B	1-15-10	1-15-10	
Lead	**ND**	6.0	6010B	1-15-10	1-15-10	
Mercury	**0.041**	0.030	7471A	1-14-10	1-14-10	
Nickel	**37**	3.0	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.60	6020	1-15-10	1-15-10	
Silver	**ND**	0.60	6010B	1-15-10	1-15-10	
Zinc	**47**	3.0	6010B	1-15-10	1-15-10	

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Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-05					
Client ID:	**Ramp-7S**					
Arsenic	**ND**	11	6010B	1-15-10	1-15-10	
Barium	**29**	2.7	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.55	6010B	1-15-10	1-15-10	
Chromium	**17**	0.55	6010B	1-15-10	1-15-10	
Copper	**14**	1.3	6010B	1-15-10	1-15-10	
Lead	**ND**	5.5	6010B	1-15-10	1-15-10	
Mercury	**ND**	0.027	7471A	1-14-10	1-14-10	
Nickel	**21**	2.7	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.55	6020	1-15-10	1-15-10	
Silver	**ND**	0.55	6010B	1-15-10	1-15-10	
Zinc	**30**	2.7	6010B	1-15-10	1-15-10	
Lab ID:	01-034-06					
Client ID:	**Ramp-7D**					
Arsenic	**ND**	13	6010B	1-15-10	1-15-10	
Barium	**89**	3.2	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.64	6010B	1-15-10	1-15-10	
Chromium	**36**	0.64	6010B	1-15-10	1-15-10	
Copper	**54**	1.5	6010B	1-15-10	1-15-10	
Lead	**ND**	6.4	6010B	1-15-10	1-15-10	
Mercury	**0.043**	0.032	7471A	1-14-10	1-14-10	
Nickel	**38**	3.2	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.64	6020	1-15-10	1-15-10	
Silver	**ND**	0.64	6010B	1-15-10	1-15-10	
Zinc	**74**	3.2	6010B	1-15-10	1-15-10	

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Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-07					
Client ID:	**Ramp-6S**					
Arsenic	**ND**	13	6010B	1-15-10	1-15-10	
Barium	**200**	3.3	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.66	6010B	1-15-10	1-15-10	
Chromium	**29**	0.66	6010B	1-15-10	1-15-10	
Copper	**65**	1.6	6010B	1-15-10	1-15-10	
Lead	**130**	6.6	6010B	1-15-10	1-15-10	
Mercury	**0.084**	0.033	7471A	1-14-10	1-14-10	
Nickel	**31**	3.3	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.66	6020	1-15-10	1-15-10	
Silver	**ND**	0.66	6010B	1-15-10	1-15-10	
Zinc	**260**	3.3	6010B	1-15-10	1-15-10	
Lab ID:	01-034-08					
Client ID:	**Ramp-6D**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**110**	3.1	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.62	6010B	1-15-10	1-15-10	
Chromium	**29**	0.62	6010B	1-15-10	1-15-10	
Copper	**34**	1.5	6010B	1-15-10	1-15-10	
Lead	**76**	6.2	6010B	1-15-10	1-15-10	
Mercury	**0.073**	0.031	7471A	1-14-10	1-14-10	
Nickel	**32**	3.1	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.62	6020	1-15-10	1-15-10	
Silver	**ND**	0.62	6010B	1-15-10	1-15-10	
Zinc	**140**	3.1	6010B	1-15-10	1-15-10	

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Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-09					
Client ID:	**Ramp-1S**					
Arsenic	**ND**	11	6010B	1-15-10	1-15-10	
Barium	**74**	2.8	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.56	6010B	1-15-10	1-15-10	
Chromium	**23**	0.56	6010B	1-15-10	1-15-10	
Copper	**28**	1.3	6010B	1-15-10	1-15-10	
Lead	**11**	5.6	6010B	1-15-10	1-15-10	
Mercury	**0.035**	0.028	7471A	1-14-10	1-14-10	
Nickel	**32**	2.8	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.56	6020	1-15-10	1-15-10	
Silver	**ND**	0.56	6010B	1-15-10	1-15-10	
Zinc	**51**	2.8	6010B	1-15-10	1-15-10	
Lab ID:	01-034-10					
Client ID:	**Ramp-10S**					
Arsenic	**ND**	11	6010B	1-15-10	1-15-10	
Barium	**87**	2.8	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.56	6010B	1-15-10	1-15-10	
Chromium	**27**	0.56	6010B	1-15-10	1-15-10	
Copper	**30**	1.4	6010B	1-15-10	1-15-10	
Lead	**35**	5.6	6010B	1-15-10	1-15-10	
Mercury	**0.041**	0.028	7471A	1-14-10	1-14-10	
Nickel	**38**	2.8	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.56	6020	1-15-10	1-15-10	
Silver	**ND**	0.56	6010B	1-15-10	1-15-10	
Zinc	**74**	2.8	6010B	1-15-10	1-15-10	

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TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-11					
Client ID:	**Ramp-1D**					
Arsenic	**ND**	13	6010B	1-15-10	1-15-10	
Barium	**150**	3.3	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.65	6010B	1-15-10	1-15-10	
Chromium	**32**	0.65	6010B	1-15-10	1-15-10	
Copper	**38**	1.6	6010B	1-15-10	1-15-10	
Lead	**44**	6.5	6010B	1-15-10	1-15-10	
Mercury	**0.058**	0.033	7471A	1-14-10	1-14-10	
Nickel	**35**	3.3	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.65	6020	1-15-10	1-15-10	
Silver	**ND**	0.65	6010B	1-15-10	1-15-10	
Zinc	**150**	3.3	6010B	1-15-10	1-15-10	
Lab ID:	01-034-12					
Client ID:	**Ramp-3S**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**70**	3.1	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.62	6010B	1-15-10	1-15-10	
Chromium	**31**	0.62	6010B	1-15-10	1-15-10	
Copper	**35**	1.5	6010B	1-15-10	1-15-10	
Lead	**17**	6.2	6010B	1-15-10	1-15-10	
Mercury	**0.048**	0.031	7471A	1-14-10	1-14-10	
Nickel	**39**	3.1	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.62	6020	1-15-10	1-15-10	
Silver	**ND**	0.62	6010B	1-15-10	1-15-10	
Zinc	**69**	3.1	6010B	1-15-10	1-15-10	

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TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-13					
Client ID:	**Ramp-3D**					
Arsenic	**ND**	13	6010B	1-15-10	1-15-10	
Barium	**150**	3.2	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.64	6010B	1-15-10	1-15-10	
Chromium	**29**	0.64	6010B	1-15-10	1-15-10	
Copper	**52**	1.5	6010B	1-15-10	1-15-10	
Lead	**130**	6.4	6010B	1-15-10	1-15-10	
Mercury	**0.042**	0.032	7471A	1-14-10	1-14-10	
Nickel	**37**	3.2	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.70	6020	1-15-10	1-15-10	
Silver	**ND**	0.64	6010B	1-15-10	1-15-10	
Zinc	**240**	3.2	6010B	1-15-10	1-15-10	
Lab ID:	01-034-14					
Client ID:	**Ramp-2S**					
Arsenic	**ND**	11	6010B	1-15-10	1-15-10	
Barium	**45**	2.7	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.54	6010B	1-15-10	1-15-10	
Chromium	**19**	0.54	6010B	1-15-10	1-15-10	
Copper	**21**	1.3	6010B	1-15-10	1-15-10	
Lead	**13**	5.4	6010B	1-15-10	1-15-10	
Mercury	**ND**	0.027	7471A	1-14-10	1-14-10	
Nickel	**29**	2.7	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.54	6020	1-15-10	1-15-10	
Silver	**ND**	0.54	6010B	1-15-10	1-15-10	
Zinc	**44**	2.7	6010B	1-15-10	1-15-10	

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Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-15					
Client ID:	**Ramp-2D**					
Arsenic	**ND**	12	6010B	1-15-10	1-15-10	
Barium	**99**	3.1	6010B	1-15-10	1-15-10	
Cadmium	**ND**	0.62	6010B	1-15-10	1-15-10	
Chromium	**26**	0.62	6010B	1-15-10	1-15-10	
Copper	**44**	1.5	6010B	1-15-10	1-15-10	
Lead	**59**	6.2	6010B	1-15-10	1-15-10	
Mercury	**ND**	0.031	7471A	1-14-10	1-14-10	
Nickel	**33**	3.1	6010B	1-15-10	1-15-10	
Selenium	**ND**	0.62	6020	1-15-10	1-15-10	
Silver	**ND**	0.62	6010B	1-15-10	1-15-10	
Zinc	**97**	3.1	6010B	1-15-10	1-15-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A
METHOD BLANK QUALITY CONTROL

Date Extracted: 1-14&15-10
Date Analyzed: 1-14&15-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0114S3&MB0115S1

Analyte	Method	Result	PQL
Arsenic	6010B	**ND**	10
Barium	6010B	**ND**	2.5
Cadmium	6010B	**ND**	0.50
Chromium	6010B	**ND**	0.50
Copper	6010B	**ND**	1.2
Lead	6010B	**ND**	5.0
Mercury	7471A	**ND**	0.025
Nickel	6010B	**ND**	2.5
Selenium	6020	**ND**	0.50
Silver	6010B	**ND**	0.50
Zinc	6010B	**ND**	2.5

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A
DUPLICATE QUALITY CONTROL

Date Extracted: 1-14&15-10
Date Analyzed: 1-14&15-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-064-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	10	
Barium	**78.6**	**77.1**	2	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**27.8**	**27.7**	1	0.50	
Copper	**31.3**	**30.1**	4	1.2	
Lead	**ND**	**ND**	NA	5.0	
Mercury	**ND**	**0.0280**	NA	0.025	
Nickel	**32.7**	**33.0**	1	2.5	
Selenium	**ND**	**ND**	NA	0.50	
Silver	**ND**	**ND**	NA	0.50	
Zinc	**48.0**	**48.3**	1	2.5	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TOTAL METALS
EPA 6010B/6020/7471A
MS/MSD QUALITY CONTROL

Date Extracted: 1-14&15-10
Date Analyzed: 1-14&15-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-064-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**97.9**	98	**97.8**	98	0	
Barium	100	**166**	88	**172**	93	3	
Cadmium	50	**47.1**	94	**47.4**	95	1	
Chromium	100	**118**	90	**121**	93	2	
Copper	50	**76.2**	90	**78.0**	93	2	
Lead	250	**235**	94	**231**	92	2	
Mercury	0.50	**0.503**	101	**0.499**	100	1	
Nickel	100	**123**	90	**126**	93	2	
Selenium	100	**95.1**	95	**99.0**	99	4	
Silver	25	**23.4**	94	**23.5**	94	1	
Zinc	100	**141**	93	**145**	97	3	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-01					
Client ID:	**Ramp-4S**					
Hexavalent Chromium	**ND**	1.2	7196A mod	1-26-10	1-26-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
METHOD BLANK QUALITY CONTROL

Date Extracted:	1-26-10
Date Analyzed:	1-26-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0126S1

Analyte	Method	Result	PQL
Hexavalent Chromium	7196A	**ND**	1.0

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
DUPLICATE QUALITY CONTROL

Date Extracted: 1-26-10
Date Analyzed: 1-26-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-034-01

Analyte	Sample Result	Duplicate Result	RPD	Flags	PQL
Hexavalent Chromium	**ND**	**ND**	NA		1.0

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
MS/MSD QUALITY CONTROL

Date Extracted: 1-26-10
Date Analyzed: 1-26-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 01-034-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Hexavalent Chromium	5.0	**4.59**	92	**4.74**	95	3	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TCLP Metals
EPA 1311/6010B/7470A

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

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-034-07					
Client ID:	**Ramp-6S**					
Barium	**0.36**	0.20	6010B	1-25-10	1-26-10	
Lead	**ND**	0.20	6010B	1-25-10	1-26-10	
Mercury	**ND**	0.0050	7470A	1-25-10	1-25-10	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TCLP Metals
EPA 1311/6010B/7470A
METHOD BLANK QUALITY CONTROL

Date Prepared:	1-22-10
Date Extracted:	1-25-10
Date Analyzed:	1-25&26-10
Matrix:	TCLP Extract
Units:	mg/L (ppm)
Lab ID:	MB0125T1&MB0125T2

Analyte	Method	Result	PQL
Barium	6010B	**ND**	0.20
Lead	6010B	**ND**	0.20
Mercury	7470A	**ND**	0.0050

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TCLP Metals
EPA 1311/6010B/7470A
DUPLICATE QUALITY CONTROL

Date Prepared: 1-22-10
Date Extracted: 1-25-10
Date Analyzed: 1-25&26-10

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

Lab ID: 01-115-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Barium	**0.247**	**0.249**	1	0.20	
Lead	**ND**	**ND**	NA	0.20	
Mercury	**ND**	**ND**	NA	0.0050	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

TCLP Metals
EPA 1311/6010B/7470A
MS/MSD QUALITY CONTROL

Date Prepared: 1-22-10
Date Extracted: 1-25-10
Date Analyzed: 1-25&26-10

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

Lab ID: 01-115-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Barium	4.0	**3.71**	86	**3.79**	89	2	
Lead	10	**8.86**	89	**8.97**	90	1	
Mercury	0.050	**0.0499**	100	**0.0489**	98	2	

Date of Report: January 27, 2010
Samples Submitted: January 7, 2010
Laboratory Reference: 1001-034
Project: 10131

% MOISTURE

Date Analyzed: 1-8-10

Client ID	Lab ID	% Moisture
Ramp-4S	01-034-01	17
Ramp-4D	01-034-02	16
Ramp-5S	01-034-03	16
Ramp-5D	01-034-04	17
Ramp-7S	01-034-05	9
Ramp-7D	01-034-06	22
Ramp-6S	01-034-07	25
Ramp-6D	01-034-08	20
Ramp-1S	01-034-09	11
Ramp-10S	01-034-10	12
Ramp-1D	01-034-11	24
Ramp-3S	01-034-12	19
Ramp-3D	01-034-13	22
Ramp-2S	01-034-14	8
Ramp-2D	01-034-15	20

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

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

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

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

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

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

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

I - Compound recovery is outside of the control limits.

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

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

L - The RPD is outside of the control limits.

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

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

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

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

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

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

Q - Surrogate recovery is outside of the control limits.

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

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

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

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

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

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

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

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

Chain of Custody

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

Company: AMEC GMX
Project Number: 10131
Project Name: MJB South Dock
Project Manager: K. Goodman
Sampled by: N. Bacher

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 01-034

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8) (*)	TCLP Metals	HEM by 1664	PCDD/PCDF via 8290		Hex chrome	TCLP Ba, Hg, Pb		% Moisture
1	Ramp-4S	1/7/10	0900	Soil	2			X			X					X					⊗			X
2	Ramp-4D		0910		2			X			X					X								
3	Ramp-5S		0920		2			X			X					X								
4	Ramp-5D		0925		2			X			X					X								
5	Ramp-7S		0935		2			X			X					X			X					
6	Ramp-7D		0940		2			X			X					X								
7	Ramp-6S		0955		2			X			X					X						⊗		
8	Ramp-6D		1000		2			X			X					X								
9	Ramp-1S		1005		2			X			X					X								
10	Ramp-10S		1008		2			X								X								

	Signature	Company	Date	Time
Relinquished by	Ken Bacher	AMEC GMX	1/7/10	1415
Received by		0825	1/7/10	1415
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

(*) RCRA 8 + Cu, Ni, Zn using element specific EPA method

⊗ Added 1/19/10. DB

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Client Copy

Chain of Custody

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

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)*	TCLP Metals	HEM by 1664	% Moisture
11	Ramp-1D	1/7/10	1010	Soil	2			X			X					X			X
12	Ramp-3S		1020		2			X			X					X			
13	Ramp-3D		1025		2			X			X					X			
14	Ramp-2S		1040		2			X			X					X			
15	Ramp-2D		1045		2			X			X					X			

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by		AMEC GMX	1/7/10	1415	(*) RCRA 8 + Cu, Ni, Zn using element specific EPA method.
Received by			1/7/10	1415	
Relinquished by					
Received by					
Relinquished by					
Received by					

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Client Copy

EcoChem, INC.
Environmental Data Quality

DATA VALIDATION REPORT

RAMP 7S SAMPLE

Prepared for:

AMEC Geomatrix
600 University Street, Suite 1020
Seattle, Washington 98101

Prepared by:

EcoChem, Inc.
710 Second Avenue, Suite 660
Seattle, Washington 98104

EcoChem Project: C22403-1

February 16, 2010

Approved by:

Eric Strout
Technical Director
EcoChem, Inc.

PROJECT NARRATIVE

Basis for Data Validation

This report summarizes results of data quality screening (EPA Stage 2A) performed on soil sample data and associated laboratory quality control data. Sample identifiers are provided in the dioxin summary of findings, following this narrative.

Samples were analyzed by Pace Analytical Services, Inc., Minneapolis, MN. The analytical method and validation chemists are listed below.

Test	Method	Primary Chemist	Secondary Chemist
Dioxin/Furan Compounds	SW8290	Eric Strout	Melissa Swanson

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *USEPA Region 10 SOP for Validation of Dioxins & Furans* (USEPA, 1996); and *USEPA National Functional Guidelines for Chlorinated Dibenzo-p Dioxins (CDD) and Chlorinated Dibenzofurans (CDF) Data Review* (USEPA, 2005).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Data qualifier definitions, reason codes, and validation criteria are included as **APPENDIX A**. A summary table of all qualified data is presented in **APPENDIX B.** Data Validation Worksheets will be kept on file at EcoChem, Inc.

Total Toxic Equivalence (TEQ)

The laboratory reported a TEQ value for this sample. The TEQ values were calculated using the 2005 WHO toxic equivalence factors (TEF) multiplied by the reported result (for detected compounds) or one-half the detection limit (for non-detected compounds).

Since several compounds were qualified as not detected (U) during the data review process, the TEQ values were recalculated for each sample. For Sample Ramp-7S, the TEQ value increased slightly, from 0.83 ng/Kg to 0.84 ng/Kg.

DATA VALIDATION REPORT
Sample ID Ramp-7S
Dioxin/Furan Compounds by Method SW8290

This report documents the review of analytical data from the analyses of soil samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Pace Analytical Services Inc., Minneapolis, MN. The following data were reviewed:

Onsite SDG	Pace SDG	Sample ID	Validation Level
01-034	10120130	Ramp-7S	Screening (Stage 2A)

I. DATA PACKAGE COMPLETENESS

The laboratory submitted all deliverables required for data quality screening (Stage 2A). The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

II. TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table.

	Sample Receipt, Preservation, and Holding Times	1	Field Duplicates
1	Laboratory Method Blank	1	Field Blanks
2	Labeled Compound Recovery		Target Analyte List
2	Matrix Spikes/Matrix Spike Duplicate (MS/MSD)	2	Compound Identification (Laboratory flag review)
	Ongoing Precision and Recovery (OPR)		

[1] ***Quality control results are discussed below, but no data were qualified.***
[2] ***Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.***

Laboratory Method Blank

Method blanks were extracted and analyzed at the proper frequency. Low levels of several target analytes were present in each of the method blanks. As the concentrations in the samples were significantly greater than the blank concentrations, no further action was necessary.

Labeled Compound Recovery

Labeled compounds were added to each field and quality control (QC) sample. With the exceptions noted below, all labeled compound percent recovery (%R) values were within the 40% - 135% method control limits.

SDG 01-034: Recovery values for 13C-OCDD were less than the lower control limit (40%) in several samples. The result in Sample Ramp-7S was estimated; no qualifiers were applied to the laboratory QC samples.

Sample ID	OCDD %R	Qualifier
Ramp-7S	27%	J-13
Method Blank	36%	--
Matrix Spike (Ramp-7S)	27%	--
Matrix Spike Duplicate (Ramp-7S)	26%	--

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD analyses were performed using Sample Ramp-7S. The %R values for OCDD (at 292%) and OCDF (263%) were greater than the upper control limit in the MS. The %R values were acceptable in the MSD. The relative percent difference (RPD) values were greater than the 50% control limit for OCDD and OCDF, at 87% and 71%, respectively. The OCDD and OCDF results in Sample Ramp-7S were estimated (J-8, 9) based on the accuracy and precision outliers.

Field Duplicates

No samples identified as field duplicates were submitted.

Field Blanks

No samples identified as field blanks were submitted.

Compound Identification

The laboratory reported EMPC or "estimated maximum possible concentrations" values for one or more of the target analytes. These results were "I" flagged by the laboratory. As required by the method, an EMPC value is reported when a peak was detected but did not meet quantitation criteria; therefore, the result cannot be considered as positive identification for the analyte. To indicate that the reported result is essentially an elevated detection limit, the EMPC values were qualified as not detected (U-22) at the reported values.

III. OVERALL ASSESSMENT

As was determined by this evaluation, the laboratory followed the specified analytical method.

Accuracy was acceptable, as demonstrated by the labeled compound, OPR, and MS/MSD %R values, with the exceptions noted above. Precision was acceptable based on the MS/MSD RPD values, with the exceptions noted above.

Data were estimated based on accuracy and precision outliers in the MS/MSD analysis, and based on a labeled compound recovery outlier. Data were also qualified to indicate that EMPC values represent an elevated detection limit.

All data, as qualified, are acceptable for use.

Total Toxic Equivalence (TEQ) Calculation
AMEC Geomatrix

Analyte	2005 WHO TEF	Ramp-7S Result	Flag	EMPC	Original TEQ	Recalc TEQ
2378 TCDF	0.1	0.39	J		0.039	0.039
2378 TCDD	1	0.14	U		0.07	0.07
12378 PeCDF	0.03	0.15	U		0.00225	0.00225
23478 PeCDF	0.3	0.42	J		0.126	0.126
12378 PeCDD	1	0.31	J		0.31	0.31
123478 HxCDF	0.1	0.34	J		0.034	0.034
123678 HxCDF	0.1	0.16	J		0.016	0.016
234678 HxCDF	0.1	0.32	J		0.032	0.032
123789 HxCDF	0.1	0.23	U		0.0115	0.0115
123478 HxCDD	0.1	0.18	U		0.009	0.009
123678 HxCDD	0.1	0.25	I	0.42	0.0125	0.021
123789 HxCDD	0.1	0.21	U		0.0105	0.0105
1234678 HpCDF	0.01	3.6	J		0.036	0.036
1234789 HpCDF	0.01	0.64	I	0.77	0.0032	0.00385
1234678 HxCDD	0.01	9.2			0.092	0.092
OCDF	0.0003	23			0.0069	0.0069
OCDD	0.0003	78			0.0234	0.0234
				Total TEQ:	0.83425	0.8434

TEQ = (2005 Who TEF) * Result for detected analytes
TEQ = (2005 Who TEF) * (1/2 Detection Limit) for non-detected analytes
When an EMPC value is present, 1/2 of the EMPC value was used for the recalculated TEQ value

EcoChem, INC.
Environmental Data Quality

APPENDIX A
DATA QUALIFIER DEFINITIONS REASON CODES AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

1	Holding Time/Sample Preservation
2	Chromatographic pattern in sample does not match pattern of calibration standard.
3	Compound Confirmation
4	Tentatively Identified Compound (TIC) (associated with NJ only)
5A	Calibration (initial)
5B	Calibration (continuing)
6	Field Blank Contamination
7	Lab Blank Contamination (e.g., method blank, instrument, etc.)
8	Matrix Spike(MS & MSD) Recoveries
9	Precision (all replicates)
10	Laboratory Control Sample Recoveries
11	A more appropriate result is reported (associated with "R" and "DNR" only)
12	Reference Material
13	Surrogate Spike Recoveries (a.k.a., labeled compounds & recovery standards)
14	Other (define in validation report)
15	GFAA Post Digestion Spike Recoveries
16	ICP Serial Dilution % Difference
17	ICP Interference Check Standard Recovery
18	Trip Blank Contamination
19	Internal Standard Performance (e.g., area, retention time, recovery)
20	Linear Range Exceeded
21	Potential False Positives
22	Elevated Detection Limit Due to Interference (i.e., laboratory, chemical and/or matrix)

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS (Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Cooler/Storage Temperature	Waters/Solids < 4°C Tissues <-10°C	**EcoChem PJ, see TM-05**	1
Holding Time	Extraction - Water: 30 days from collection *Note:* Under CWA, SDWA, and RCRA the HT for H2O is 7 days* Extraction - Soil: 30 days from collection Analysis: 40 days from extraction	J(+)/UJ(-) if ext > 30 days J(+)/UJ(-) if analysis > 40 Days **EcoChem PJ, see TM-05**	1
Mass Resolution	>=10,000 resolving power at m/z 304.9824 Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift	R(+/-) if not met	14
Window Defining Mix and Column Performance Mix	Window defining mixture/Isomer specificity std run before ICAL and CCAL Valley < 25% (valley = (x/y)*100%) x = ht. of TCDD y = baseline to bottom of valley For all isomers eluting near 2378-TCDD/TCDF isomers (TCDD only for 8290)	J(+) if valley > 25%	5A (ICAL) 5B (CCAL
Initial Calibration	Minimum of five standards %RSD < 20% for native compounds %RSD <30% for labeled compounds (%RSD <35% for labeled compounds under 1613b)	J(+) natives if %RSD > 20%	5A
	Abs. RT of $^{13}C_{12}$-1234-TCDD >25 min on DB5 >15 min on DB-225	**EcoChem PJ, see TM-05**	
	Ion Abundance ratios within QC limits **(Table 8 of method 8290)** **(Table 9 of method 1613B)**	**EcoChem PJ, see TM-05**	
	S/N ratio > 10 for all native and labeled compounds in CS1 std.	If <10, elevate Det. Limit or R(-)	

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS (Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Continuing Calibration	Analyzed at the start and end of each 12 hour shift. %D+/-20% for native compounds %D +/-30% for labeled compounds (Must meet limits in **Table 6, Method 1613B**) (If %Ds in the closing CCAL are w/in 25%/35% the avg RF from the two CCAL may be used to calculate samples per **Method 8290, Section 8.3.2.4**)	Do not qualify labeled compounds. Narrate in report for labeled compound %D outliers. For native compound %D outliers: 8290: J(+)/UJ(-) if %D = 20% - 75% J(+)/R(-) if %D > 75% 1613: J(+)/UJ(-) if %D is outside Table 6 limits J(+)/R(-) if %D is +/- 75% of Table 6 limit	5B
	Abs. RT of $^{13}C_{12}$-1234-TCDD and $^{13}C12$-123789-HxCDD +/- 15 sec of ICAL.	**EcoChem PJ, see ICAL section of TM-05**	
	RRT of all other compounds must meet Table 2 of 1613B.	**EcoChem PJ, see TM-05**	
	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	**EcoChem PJ, see TM-05**	
	S/N ratio > 10	If <10, elevate Det. Limit or R(-)	
Method Blank	One per matrix per batch No positive results	If sample result <5X action level, qualify U at reported value.	7
Field Blanks (Not Required)	No positive results	If sample result <5X action level, qualify U at reported value.	6
LCS / OPR	Concentrations must meet limits in **Table 6, Method 1613B** or lab limits.	J(+) if %R > UCL J(+)/UJ(-) if %R < LCL J(+)/R(-) using PJ if %R <<LCL (< 10%)	10
MS/MSD (recovery)	May not analyze MS/MSD %R should meet lab limits.	Qualify parent only unless other QC indicates systematic problems: J(+) if both %R > UCL J(+)/UJ(-) if both %R < LCL J(+)/R(-) if both %R < 10% **PJ if only one %R outlier**	8
MS/MSD (RPD)	May not analyze MS/MSD RPD < 20%	J(+) in parent sample if RPD > CL	9

EcoChem Validation Guidelines for Dioxin/Furan Analysis by HRMS (Based on EPA Reg. 10 SOP, Rev. 2, 1996 & EPA SW-846, Methods 1613b and 8290)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Lab Duplicate	RPD <25% if present.	J(+)/UJ(-) if outside limts	9
Labeled Compounds / Internal Standards	*Method 8290:* %R = 40% - 135% in all samples --- *Method 1613B:* %R must meet limits specified in **Table 7, Method 1613**	J(+)/UJ(-) if %R = 10% to LCL J(+) if %R > UCL J(+)/R(-) if %R < 10%	13
Quantitation/ Identification	Ions for analyte, IS, and rec. std. must max w/in 2 sec. S/N >2.5 IA ratios meet limits in **Table 9 of 1613B** or **Table 8 of 8290** RRTs w/in limits in **Table 2 of 1613B**	If RT criteria not met, use PJ (**see TM-05**) If S/N criteria not met, J(+). if unlabelled ion abundance not met, change to EMPC If labelled ion abundance not met, J(+).	21
EMPC (estimated maximum possible concentration)	If quantitation idenfication criteria are not met, laboratory should report an EMPC value.	If laboratory correctly reported an EMPC value, qualify with U to indicate that the value is a detection limit.	14
Interferences	PCDF interferences from PCDPE	If both detected, change PCDF result to EMPC	14
Second Column Confirmation	All 2378-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC specs in this table must be met for the confirmation analysis.	Report lower of the two values. If not performed use PJ (**see TM-05**).	3
Field Duplicates	**Use QAPP limits. If no QAPP:** Solids: RPD <50% OR absolute diff. < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR absolute diff. < 1X RL (for results < 5X RL)	Narrate and qualify if required by project **(EcoChem PJ)**	9
Two analyses for one sample	Report only one result per analyte	"DNR" results that should not be used	11

EcoChem, INC.
Environmental Data Quality

APPENDIX B
QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
AMEC Geomatrix
Ramp 7S Sample

Onsite SDG	Field ID	Lab ID	Analyte	Result	Lab Flag	DV Qualifier	DV Reason
01-034	Ramp-7S	10120130-001	1,2,3,6,7,8-HxCDD	0.42	I	U	22
01-034	Ramp-7S	10120130-001	1,2,3,4,7,8,9-HpCDF	0.77	I	U	22
01-034	Ramp-7S	10120130-001	OCDD	78		J	8,9,13
01-034	Ramp-7S	10120130-001	OCDF	23		J	8,9,13

Pace Analytical™

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Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

David Baumeister
Onsite Environmental, Inc.
14648 NE 95th Street
Redmond WA 98052

REPORT OF LABORATORY ANALYSIS FOR PCDD/PCDF

Report Information:

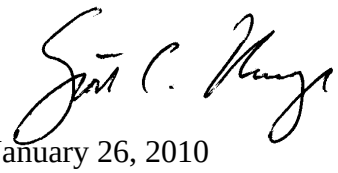
Pace Project #: 10120130
Sample Receipt Date: 01/08/2010
Client Project #: 01-034 10131
Client Sub PO #: N/A
State Cert #: C755

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:



January 26, 2010

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
January 26, 2010

ACCREDITED IN ACCORDANCE WITH nelac

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analysis performed on one sample submitted by a representative of OnSite Environmental, Inc. The sample was analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using a modified version of USEPA Method 8290. The reporting limits were set to correspond to the limits of detection.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extract ranged from 27-100%. With the exceptions of four low values, which were flagged "R" on the results tables, the labeled standard recoveries obtained for this project were within the 40-135% target range specified in Method 8290. Also, since the quantification of the native 2,3,7,8-substituted isomers was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

The sample extracts contained components that interferred with the determination of selected PCDDs and PCDFs. The results were flagged "I" where isotope ratios were outside of the target ranges.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to contain trace levels of HpCDD isomers. These levels were below the calibration range for this method. The levels reported for the affected congeners in the field sample were higher than the corresponding blank levels by an order of magnitude or greater. These results indicate that the sample processing steps did not contribute significantly to the levels reported for the field sample.

Laboratory and matrix spike samples were also prepared with the sample batch using clean sand or sample matrix that had been fortified with native standard materials. The results show that the spiked native compounds were generally recovered at 84-126%, with relative percent differences generally from 0.2-21.4% These results indicate generally high degrees of accuracy and precision for these determinations. Somewhat variable results were obtained for OCDF and OCDD congeners in the matrix spike samples, possibly due to sample inhomogeneity.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN00064_2000
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101
Georgia (DNR)	959	Oklahoma	D9922
Guam	09-019r	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN200001-005
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana		South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	LA0900016	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

Report No.....10120130_8290

10128130

OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 · (425) 883-3881

Laboratory Reference #: 01-034

Subcontract Laboratory: Pace Analytical Service, Inc.

Contact Person: Scott Unze / Dioxin Manger

Address: 1700 Elm St. Ste. 200 Minneapolis, MN 55414

Phone Number: (612) 607-6383

Date/Time: _____

Turnaround Request:

1 Day 2 Day 3 Day

(Standard)

Other: _____

Project Manager: David Baumeister

email: dbaumeister@onsite-env.com

Project Number: 10131

Project Name: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	Requested Analysis
5	Ramp-7S	1/7/10		S	1	Dioxin/Furans 8290 001

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by: [signature]	OnSite Environ	1/7/10	1500	
Received by: [signature]	PACE	1/8/10	921	
Relinquished by:				
Received by:				
Relinquished by:				
Received by:				

T = 3.4

Pace Analytical

Sample Condition Upon Receipt

Client Name: Onsite Env. **Project #** 10120130

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z 684 E1W 13 9272 7023

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ____ No ✓

Thermometer Used 80344042 or (179425) **Type of Ice:** Wet (Blue) None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.4 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1/8/10 SL

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Samp #
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☑No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 01/11/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR.

F-L213Rev.00, 05Aug2009

Pace Analytical Services, Inc.
1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

Appendix B

Sample Analysis Summary

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Sample Analysis Results

Client - Onsite Environmental, Inc.

Client's Sample ID	RAMP-7S		
Lab Sample ID	10120130001		
Filename	F100123A_08		
Injected By	BAL		
Total Amount Extracted	10.9 g	Matrix	Solid
% Moisture	7.9	Dilution	NA
Dry Weight Extracted	10.0 g	Collected	01/07/2010
ICAL ID	F100108	Received	01/08/2010 09:19
CCal Filename(s)	F100122C_16 & F100123A_11	Extracted	01/19/2010 17:15
Method Blank ID	BLANK-23487	Analyzed	01/23/2010 14:22

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg		Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.39	-----	0.18	J	2,3,7,8-TCDF-13C	2.00	75
Total TCDF	4.70	-----	0.18		2,3,7,8-TCDD-13C	2.00	86
					1,2,3,7,8-PeCDF-13C	2.00	78
2,3,7,8-TCDD	ND	-----	0.14		2,3,4,7,8-PeCDF-13C	2.00	85
Total TCDD	3.60	-----	0.14		1,2,3,7,8-PeCDD-13C	2.00	95
					1,2,3,4,7,8-HxCDF-13C	2.00	69
1,2,3,7,8-PeCDF	ND	-----	0.15		1,2,3,6,7,8-HxCDF-13C	2.00	95
2,3,4,7,8-PeCDF	0.42	-----	0.11	J	2,3,4,6,7,8-HxCDF-13C	2.00	81
Total PeCDF	3.10	-----	0.13	J	1,2,3,7,8,9-HxCDF-13C	2.00	74
					1,2,3,4,7,8-HxCDD-13C	2.00	68
1,2,3,7,8-PeCDD	0.31	-----	0.15	J	1,2,3,6,7,8-HxCDD-13C	2.00	100
Total PeCDD	6.30	-----	0.15		1,2,3,4,6,7,8-HpCDF-13C	2.00	55
					1,2,3,4,7,8,9-HpCDF-13C	2.00	45
1,2,3,4,7,8-HxCDF	0.34	-----	0.22	J	1,2,3,4,6,7,8-HpCDD-13C	2.00	57
1,2,3,6,7,8-HxCDF	0.16	-----	0.14	J	OCDD-13C	4.00	27 R
2,3,4,6,7,8-HxCDF	0.32	-----	0.14	J			
1,2,3,7,8,9-HxCDF	ND	-----	0.23		1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	2.60	-----	0.18	J	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	-----	0.18		2,3,7,8-TCDD-37Cl4	0.20	82
1,2,3,6,7,8-HxCDD	-----	0.42	0.25	I			
1,2,3,7,8,9-HxCDD	ND	-----	0.21				
Total HxCDD	8.40	-----	0.21				
1,2,3,4,6,7,8-HpCDF	3.60	-----	0.30	J	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	-----	0.77	0.64	I	Equivalence: 0.83 ng/Kg		
Total HpCDF	14.00	-----	0.47		(Using 2005 WHO Factors - Using PRL/2 where ND)		
1,2,3,4,6,7,8-HpCDD	9.20	-----	0.28				
Total HpCDD	22.00	-----	0.28				
OCDF	23.00	-----	0.84				
OCDD	78.00	-----	1.10				

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit.

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
I = Interference present

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Blank Analysis Results

Lab Sample ID	BLANK-23487	Matrix	Solid
Filename	U100122A_09	Dilution	NA
Total Amount Extracted	20.5 g	Extracted	01/19/2010 17:15
ICAL ID	U100106	Analyzed	01/22/2010 11:52
CCal Filename(s)	U100121B_16 & U100122A_11	Injected By	SMT

Native Isomers	Conc ng/Kg	EMPC ng/Kg	RL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	-----	0.041	2,3,7,8-TCDF-13C	2.00	70
Total TCDF	ND	-----	0.041	2,3,7,8-TCDD-13C	2.00	81
				1,2,3,7,8-PeCDF-13C	2.00	78
2,3,7,8-TCDD	ND	-----	0.059	2,3,4,7,8-PeCDF-13C	2.00	85
Total TCDD	ND	-----	0.059	1,2,3,7,8-PeCDD-13C	2.00	102
				1,2,3,4,7,8-HxCDF-13C	2.00	76
1,2,3,7,8-PeCDF	ND	-----	0.073	1,2,3,6,7,8-HxCDF-13C	2.00	76
2,3,4,7,8-PeCDF	ND	-----	0.065	2,3,4,6,7,8-HxCDF-13C	2.00	73
Total PeCDF	ND	-----	0.069	1,2,3,7,8,9-HxCDF-13C	2.00	72
				1,2,3,4,7,8-HxCDD-13C	2.00	84
1,2,3,7,8-PeCDD	ND	-----	0.090	1,2,3,6,7,8-HxCDD-13C	2.00	87
Total PeCDD	ND	-----	0.090	1,2,3,4,6,7,8-HpCDF-13C	2.00	69
				1,2,3,4,7,8,9-HpCDF-13C	2.00	52
1,2,3,4,7,8-HxCDF	ND	-----	0.057	1,2,3,4,6,7,8-HpCDD-13C	2.00	67
1,2,3,6,7,8-HxCDF	ND	-----	0.055	OCDD-13C	4.00	36 R
2,3,4,6,7,8-HxCDF	ND	-----	0.048			
1,2,3,7,8,9-HxCDF	ND	-----	0.060	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	-----	0.055	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	-----	0.082	2,3,7,8-TCDD-37Cl4	0.20	77
1,2,3,6,7,8-HxCDD	ND	-----	0.076			
1,2,3,7,8,9-HxCDD	ND	-----	0.086			
Total HxCDD	ND	-----	0.081			
1,2,3,4,6,7,8-HpCDF	ND	-----	0.096	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	-----	0.140	Equivalence: 0.11 ng/Kg		
Total HpCDF	ND	-----	0.120	(Using 2005 WHO Factors - Using PRL/2 where ND)		
1,2,3,4,6,7,8-HpCDD	0.14	-----	0.081 J			
Total HpCDD	0.33	-----	0.081 J			
OCDF	ND	-----	0.200			
OCDD	-----	1.1	0.400 I			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
I = Interference present

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Laboratory Control Spike Results

Lab Sample ID	LCS-23488		
Filename	U100122A_10	Matrix	Solid
Total Amount Extracted	20.0 g	Dilution	NA
ICAL ID	U100106	Extracted	01/19/2010 17:15
CCal Filename(s)	U100121B_16 & U100122A_11	Analyzed	01/22/2010 12:39
Method Blank ID	BLANK-23487	Injected By	SMT

Native Isomers	**Qs** (ng)	**Qm** (ng)	% Rec.	**Internal Standards**	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF	0.20	0.19	94	2,3,7,8-TCDF-13C	2.0	75
Total TCDF				2,3,7,8-TCDD-13C	2.0	89
				1,2,3,7,8-PeCDF-13C	2.0	78
2,3,7,8-TCDD	0.20	0.18	91	2,3,4,7,8-PeCDF-13C	2.0	87
Total TCDD				1,2,3,7,8-PeCDD-13C	2.0	100
				1,2,3,4,7,8-HxCDF-13C	2.0	69
1,2,3,7,8-PeCDF	1.0	0.95	95	1,2,3,6,7,8-HxCDF-13C	2.0	67
2,3,4,7,8-PeCDF	1.0	0.89	89	2,3,4,6,7,8-HxCDF-13C	2.0	72
Total PeCDF				1,2,3,7,8,9-HxCDF-13C	2.0	73
				1,2,3,4,7,8-HxCDD-13C	2.0	81
1,2,3,7,8-PeCDD	1.0	0.88	88	1,2,3,6,7,8-HxCDD-13C	2.0	85
Total PeCDD				1,2,3,4,6,7,8-HpCDF-13C	2.0	76
				1,2,3,4,7,8,9-HpCDF-13C	2.0	78
1,2,3,4,7,8-HxCDF	1.0	0.90	90	1,2,3,4,6,7,8-HpCDD-13C	2.0	92
1,2,3,6,7,8-HxCDF	1.0	0.96	96	OCDD-13C	4.0	64
2,3,4,6,7,8-HxCDF	1.0	0.92	92			
1,2,3,7,8,9-HxCDF	1.0	0.90	90	1,2,3,4-TCDD-13C	2.0	NA
Total HxCDF				1,2,3,7,8,9-HxCDD-13C	2.0	NA
1,2,3,4,7,8-HxCDD	1.0	0.90	90	2,3,7,8-TCDD-37Cl4	0.20	84
1,2,3,6,7,8-HxCDD	1.0	0.93	93			
1,2,3,7,8,9-HxCDD	1.0	0.92	92			
Total HxCDD						
1,2,3,4,6,7,8-HpCDF	1.0	1.0	100			
1,2,3,4,7,8,9-HpCDF	1.0	0.93	93			
Total HpCDF						
1,2,3,4,6,7,8-HpCDD	1.0	0.84	84			
Total HpCDD						
OCDF	2.0	1.8	92			
OCDD	2.0	2.0	101			

Qs = Quantity Spiked
Qm = Quantity Measured
Rec. = Recovery (Expressed as Percent)
R = Recovery outside of target range

Y = RF averaging used in calculations
Nn = Value obtained from additional analysis
NA = Not Applicable
* = See Discussion

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Spiked Sample Report

Client - Onsite Environmental, Inc.

Client's Sample ID	RAMP-7S-MS		
Lab Sample ID	10120130001-MS		
Filename	F100123A_09	Matrix	Solid
Total Amount Extracted	11.0 g	Dilution	NA
ICAL ID	F100108	Extracted	01/19/2010 17:15
CCal Filename(s)	F100122C_16 & F100123A_11	Analyzed	01/23/2010 15:08
Method Blank ID	BLANK-23487	Injected By	BAL

Native Isomers	**Qs** (ng)	**Qm** (ng)	% Rec.	**Internal Standards**	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF	0.20	0.22	108	2,3,7,8-TCDF-13C	2.00	78
				2,3,7,8-TCDD-13C	2.00	89
				1,2,3,7,8-PeCDF-13C	2.00	82
2,3,7,8-TCDD	0.20	0.19	93	2,3,4,7,8-PeCDF-13C	2.00	87
				1,2,3,7,8-PeCDD-13C	2.00	98
				1,2,3,4,7,8-HxCDF-13C	2.00	83
1,2,3,7,8-PeCDF	1.00	1.04	104	1,2,3,6,7,8-HxCDF-13C	2.00	93
2,3,4,7,8-PeCDF	1.00	0.99	99	2,3,4,6,7,8-HxCDF-13C	2.00	86
				1,2,3,7,8,9-HxCDF-13C	2.00	80
				1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,7,8-PeCDD	1.00	0.90	90	1,2,3,6,7,8-HxCDD-13C	2.00	106
				1,2,3,4,6,7,8-HpCDF-13C	2.00	56
				1,2,3,4,7,8,9-HpCDF-13C	2.00	45
1,2,3,4,7,8-HxCDF	1.00	0.94	94	1,2,3,4,6,7,8-HpCDD-13C	2.00	59
1,2,3,6,7,8-HxCDF	1.00	1.03	103	OCDD-13C	4.00	27 R
2,3,4,6,7,8-HxCDF	1.00	0.98	98			
1,2,3,7,8,9-HxCDF	1.00	0.95	95	1,2,3,4-TCDD-13C	2.00	NA
				1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	1.00	0.98	98	2,3,7,8-TCDD-37Cl4	0.20	85
1,2,3,6,7,8-HxCDD	1.00	0.99	99			
1,2,3,7,8,9-HxCDD	1.00	0.94	94			
1,2,3,4,6,7,8-HpCDF	1.00	1.29	129			
1,2,3,4,7,8,9-HpCDF	1.00	0.98	98			
1,2,3,4,6,7,8-HpCDD	1.00	1.21	121			
OCDF	2.00	6.07	303			
OCDD	2.00	6.04	302			

Qs = Quantity Spiked Qm = Quantity Measured Rec. = Recovery (Expressed as Percent)

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Spiked Sample Report

Client - Onsite Environmental, Inc.

Client's Sample ID	RAMP-7S-MSD		
Lab Sample ID	10120130001-MSD		
Filename	F100123A_10	Matrix	Solid
Total Amount Extracted	11.2 g	Dilution	NA
ICAL ID	F100108	Extracted	01/19/2010 17:15
CCal Filename(s)	F100122C_16 & F100123A_11	Analyzed	01/23/2010 15:54
Method Blank ID	BLANK-23487	Injected By	BAL

Native Isomers	**Qs** (ng)	**Qm** (ng)	% Rec.	**Internal Standards**	**ng's Added**	**Percent Recovery**
2,3,7,8-TCDF	0.20	0.22	109	2,3,7,8-TCDF-13C	2.00	78
				2,3,7,8-TCDD-13C	2.00	90
				1,2,3,7,8-PeCDF-13C	2.00	83
2,3,7,8-TCDD	0.20	0.19	95	2,3,4,7,8-PeCDF-13C	2.00	86
				1,2,3,7,8-PeCDD-13C	2.00	98
				1,2,3,4,7,8-HxCDF-13C	2.00	79
1,2,3,7,8-PeCDF	1.00	1.06	106	1,2,3,6,7,8-HxCDF-13C	2.00	95
2,3,4,7,8-PeCDF	1.00	0.99	99	2,3,4,6,7,8-HxCDF-13C	2.00	84
				1,2,3,7,8,9-HxCDF-13C	2.00	77
				1,2,3,4,7,8-HxCDD-13C	2.00	72
1,2,3,7,8-PeCDD	1.00	0.92	92	1,2,3,6,7,8-HxCDD-13C	2.00	105
				1,2,3,4,6,7,8-HpCDF-13C	2.00	55
				1,2,3,4,7,8,9-HpCDF-13C	2.00	45
1,2,3,4,7,8-HxCDF	1.00	1.03	103	1,2,3,4,6,7,8-HpCDD-13C	2.00	58
1,2,3,6,7,8-HxCDF	1.00	0.92	92	OCDD-13C	4.00	26 R
2,3,4,6,7,8-HxCDF	1.00	0.99	99			
1,2,3,7,8,9-HxCDF	1.00	0.95	95	1,2,3,4-TCDD-13C	2.00	NA
				1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	1.00	1.19	119	2,3,7,8-TCDD-37Cl4	0.20	83
1,2,3,6,7,8-HxCDD	1.00	0.91	91			
1,2,3,7,8,9-HxCDD	1.00	0.96	96			
1,2,3,4,6,7,8-HpCDF	1.00	1.04	104			
1,2,3,4,7,8,9-HpCDF	1.00	0.98	98			
1,2,3,4,6,7,8-HpCDD	1.00	1.01	101			
OCDF	2.00	2.38	119			
OCDD	2.00	2.88	144			

Qs = Quantity Spiked Qm = Quantity Measured Rec. = Recovery (Expressed as Percent)

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 8290 Spike Sample Results

Client - Onsite Environmental, Inc.

Client Sample ID	RAMP-7S			Dry Weights	
Lab Sample ID	10120130001	Sample Filename	F100123A_08	Sample Amount	10.0 g
MS ID	10120130001-MS	MS Filename	F100123A_09	MS Amount	10.1 g
MSD ID	10120130001-MSD	MSD Filename	F100123A_10	MSD Amount	10.3 g

Analyte	Sample Conc. ng/Kg	MS/MSD Qs (ng)	MS Qm (ng)	MSD Qm (ng)	RPD	Background Subtracted MS % Rec.	MSD % Rec.	RPD
2,3,7,8-TCDF	0.391	0.20	0.22	0.22	0.7	106	107	0.7
2,3,7,8-TCDD	0.000	0.20	0.19	0.19	1.8	93	95	1.8
1,2,3,7,8-PeCDF	0.000	1.00	1.04	1.06	1.9	104	106	1.9
2,3,4,7,8-PeCDF	0.420	1.00	0.99	0.99	0.9	98	99	0.9
1,2,3,7,8-PeCDD	0.305	1.00	0.90	0.92	1.9	90	92	1.9
1,2,3,4,7,8-HxCDF	0.344	1.00	0.94	1.03	8.8	94	102	8.8
1,2,3,6,7,8-HxCDF	0.157	1.00	1.03	0.92	11.1	103	92	11.1
2,3,4,6,7,8-HxCDF	0.318	1.00	0.98	0.99	0.4	98	98	0.4
1,2,3,7,8,9-HxCDF	0.000	1.00	0.95	0.95	0.5	95	95	0.5
1,2,3,4,7,8-HxCDD	0.000	1.00	0.98	1.19	19.5	98	119	19.5
1,2,3,6,7,8-HxCDD	0.000	1.00	0.99	0.91	9.4	99	90	9.5
1,2,3,7,8,9-HxCDD	0.000	1.00	0.94	0.96	1.7	94	96	1.7
1,2,3,4,6,7,8-HpCDF	3.625	1.00	1.29	1.04	21.4	126	101	22.1
1,2,3,4,7,8,9-HpCDF	0.000	1.00	0.98	0.98	0.2	97	97	0.2
1,2,3,4,6,7,8-HpCDD	9.171	1.00	1.21	1.01	18.5	112	91	20.3
OCDF	22.908	2.00	6.07	2.38	87.3	292	107	92.5
OCDD	77.857	2.00	6.04	2.88	71.0	263	104	86.8

Definitions

MS = Matrix Spike
MSD = Matrix Spike Duplicate
Qm = Quantity Measured
Qs = Quantity Spiked
% Rec. = Percent Recovery
RPD = Relative Percent Difference
NA = Not Applicable
NC = Not Calculated

CDD = Chlorinated dibenzo-p-dioxin
CDF = Chlorinated dibenzo-p-furan
T = Tetra
Pe = Penta
Hx = Hexa
Hp = Hepta
O = Octa