CLOSURE REPORT

FOR

Western Forge & Flange Co. - Albany

540 Cleveland Avenue
Albany, CA

May 2009

Prepared By Chemical Data Management Systems

CLOSURE REPORT

Prepared for:

Western Forge & Flange Co. - Albany

To be submitted to:

Alameda County Department of Environmental Health

This Closure Report is being submitted under the following conditions:

- Facility Decommissioning to be verified by aboveground sampling
- Subsurface investigations, cleanup, and sampling to be assessed by the Alameda County Department of Environmental Health Site mitigation/Local Oversight Program
- Facility closure activities meet the requirements set by the Alameda County Department of Environmental Health as described in the approved closure plan

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I. FACILITY DESCRIPTION

A. SITE INFORMATION

Business Name:	Western Forge & Flange Co. - Albany
Site Address:	540 Cleveland Ave
City, State, Zip:	Albany, CA 94706
County:	Alameda

Mailing Address

Company:	Western Forge & Flange Co.
Contact Name:	Walter Pierce
Title:	President
Street:	687 County Rd. 2201
City, State, Zip:	Cleveland, TX 77327
Telephone Number:	(281) 727-7001

Property Owner

Company:	Western Forge & Flange Co.
Contact Name:	Walter Pierce
Title:	President
Street:	687 County Rd. 2201
City, State, Zip:	Cleveland, TX 77327
Contact:	Walter Pierce
Telephone:	(281) 727-7001

B. SITE USE AND HISTORY

Business Activity Description:

Albany Western Forge & Flange manufactures flanges and forgings made from a variety of different materials including: titanium, aluminum, high nickel alloys, stainless steel, and alloy steels. Raw material stock is cut and then heated in furnaces. The flanges are then forged (hammered or pressed) into shape. The part is machined, if requested by the customer. Approximately 60% of all projects are machined. Flanges are then inspected and shipped to customers.

Date Business Started: 1944

Facility Description:

Square Footage:	25,000 (approximate)
Buildings:	1 Building
Hazardous Materials Area(s):	Production Area

Containment Area Description:

All hazardous material are in portable secondary container units.

Adjacent Properties:

North:	Albany Steel
South:	Grace Bakery
East:	Freeway I-80
West:	Railroad tracks

C. BUILDING LAYOUT

Refer to the facility drawing in Figure 1(Section III).

D. GEOLOGIC SETTING

The site is underlain by a low permeability clay saturated above a dry dense clay above a poorly cemented sand. The clay contains a thin perched ground water zone between 6 to 12 feet below the ground surface, which rose to within a foot below ground surface during the 2008-2009 wet season.

II. CLOSURE PROCEDURES-ABOVEGROUND

Western Forge and Flange relocated its manufacturing operation to their Texas facility during the course of one year (2007-2008). During this process, equipment and chemicals used at this facility were gradually moved to the Texas facility. All chemicals were shipped using hazardous material transporters. The equipment; the forges and hammers, were decommissioned at the Albany site and shipped to the Texas site. All the equipment and chemicals that were relocated to Texas were put into service at that location. Once the Texas facility was operational, the decision was made to close the Albany, California facility.

This section describes the procedures used to achieve closure. Closure activities were only implemented in the areas where hazardous materials were used and/or stored. All equipment and floor surfaces were decontaminated by triple rinsing with hot pressurized water. The wash water was then collected using industrial grade vacuums and transferred into a sealed 6500 gallon Baker tank. The wash water was then profiled and hauled off-site by a licensed waste hauler to an approved hazardous waste treatment site.

A. Production Area

Facility closure procedures in this area included the following:

1. All hazardous materials and equipment were removed and transported to the Texas facility by licensed hazardous material haulers during the operation of the Albany facility and prior to the facility closure.

2. Floors in this area were swept using a ride-on sweeper to eliminate the release of contaminated dust to the air during pressure washing. Sweepings were placed into 55-gallon drums and hauled off-site as Non-RCRA Hazardous Waste by a licensed waste hauler.

3. Floors in this area were triple rinsed with hot pressurized water. Wash water was collected using industrial grade vacuums and transferred into a sealed 6500 gallon Baker tank and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site

4. All wash water was contained using absorbent socks and temporary berms during the cleaning process to prevent releases

5. Loose soil and gravel in all the pits was removed using a backhoe and placed into 40 yd bins and hauled off-site as Non-RCRA Hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site The pits were the result of equipment removal (presses and hammers) anchored below the floor surface.

6. The pit housing the hydraulic ring roller was triple rinsed with hot pressurized water. The wash water was collected using industrial grade vacuums and transferred to a 6500 gallon Baker tank and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

7. The oil/water separator tank was triple rinsed with hot pressurized water. The wash water was collected using industrial grade vacuums and transferred to a 6500 gallon Baker tank and hauled off-site as Non-RCRA Hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

8. All piping containing oil previously connected to the oil/water separator has been removed and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

B. Rafters, Control Panels, and Structural Elements

Facility closure procedures in this area included the following:

1. All loose residues that accumulated on the rafters and structural elements during the facilities operation were collected and removed using industrial grade vacuums and transferred and sealed into 55-gallon drums. The drums were then hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

2. All rafters and structural elements were scraped with stainless steel spatulas and wire brushes following the removal of the loose residue to further remove any contamination. The dust and debris that resulted from this action was collected using industrial grade vacuums and transferred and sealed into 55-gallon drums. The drums were then hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

3. Following actions 1 and 2 described above, the rafters and structural elements were triple rinsed using hot pressurized water. The wash water was collected using industrial grade vacuums and transferred into a sealed 6500 gallon Baker tank and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.

4. All wash water was contained using absorbent socks and temporary berms during the cleaning process to prevent releases.

C. Welding/Shipping Area

This area of the Facility closure procedures included the following:

1. All hazardous materials and equipment was removed and transported to the Texas facility by licensed hazardous material haulers during the operation of the Albany facility and prior to the facility closure.
2. Floors in this area were swept using a ride-on sweeper to eliminate the release of contaminated dust to the air during pressure washing. Sweepings were placed into 55-gallon drums and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler.
3. Floors in this area were triple rinsed with hot pressurized water in an attempt to remove hazardous materials and residues. Wash water was collected by industrial vacuums and placed in a sealed Baker tank and hauled off-site as Non-RCRA hazardous waste by a licensed waste hauler to an approved hazardous waste treatment site.
4. All wash water was contained using absorbent socks and temporary berms during the cleaning process to prevent releases from the cleanup area.

III. SAMPLING AND ANALYSIS

During the facility closure, Chemical Data Management Systems (CDMS) on behalf of Western Forge and Flange Co. conducted several sampling events.

Sample locations were established jointly by a representative of Alameda County Environmental Health Department (ACDEH) and CDMS, and at additional locations selected by CDMS based upon surface staining and the locations of other operations. Four-inch holes were sawn through the 6 – 9 inches of concrete, and the samples were collected using a hydropunch rig. Core tubes were lined with clear liners and were advanced three feet at a time. At water sampling locations, slotted PVC well screens were inserted into the borehole, and water samples were taken with a bailer. Cement grout was tremied through the well screens to seal the holes upon completion. Figure 1.

The additional samples collected by CDMS, which were not approved by the County are identified as sample locations W101, W103, W107, W108, SB103, SB106, SB107, SB108, and SB110. These were collected to provide an additional source of data to evaluate potential contamination at suspect areas.

Parameters for the analysis of all samples were selected under the direction of Sukla De and Susan Hugo, representatives for ACDEH. ACDEH has adopted the San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESL) for soil and groundwater, and the Department of Energy's clean-up standards for all wipe samples.

ESLs for soil and groundwater are included in Table 1A. These ESLs are representative of areas considered a potential source of drinking water. Additional ESLs from the Regional Water Quality Control Board are found in Table 1B. The ESLs in Table 1B were referenced as an additional source for clean-up levels. Clean-up levels for wipe sampling is included in Table 1C.

Table 1A. SFRWQCB ESLs for TPH and Metals for areas considered a potential source of drinking water

	TPH	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
Soil (mg/kg)	410	410	410	410	410
Groundwater (ug/L)	210 ppb	5 ug/l	50 ug/l	100 ug/l	15 ug/l

Table 1B. ESLs for Gross Contamination (RWQCB)

	TPH	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
Soil (mg/kg)	2500	2500	2500	2500	2500
Groundwater (ug/L)	1,000	5	50,000	50,000	50,000

Table 1C. DOE Clean-up standards for wipe sampling.

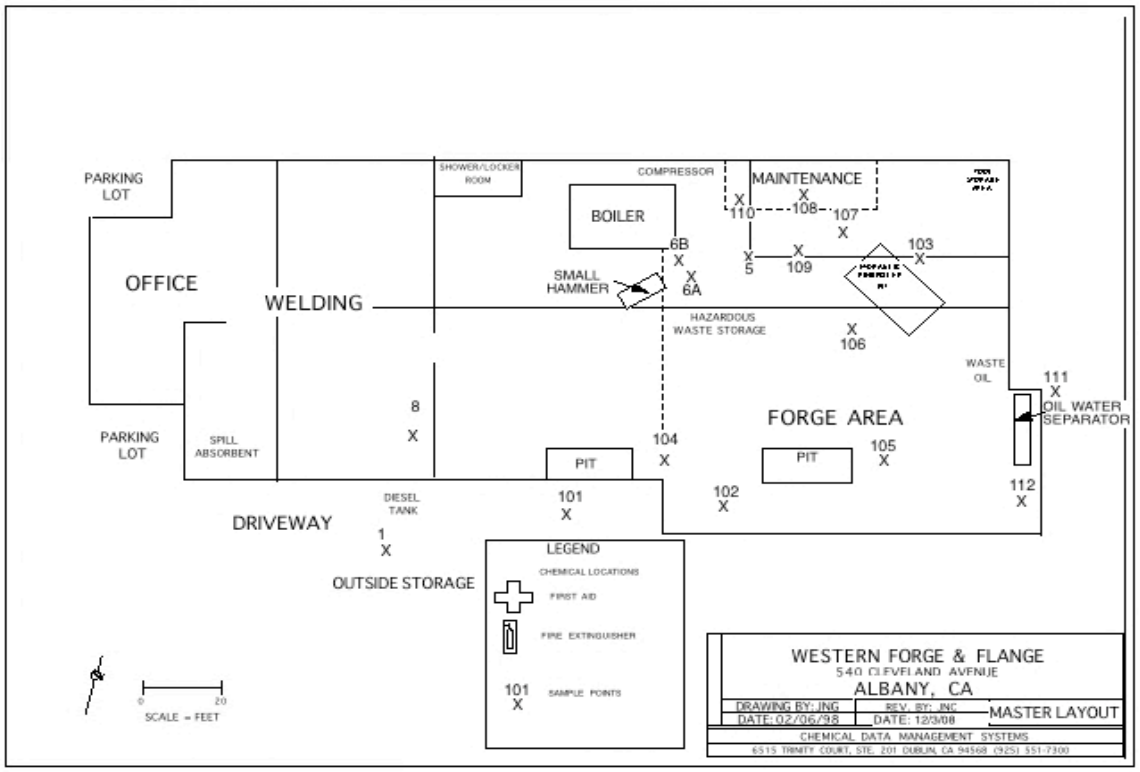
	Cd ($ug/100cm^2$)	**Cr ($ug/100cm^2$)**	**Ni ($ug/100cm^2$)**	**Pb ($ug/100cm^2$)**	**Zn ($ug/100cm^2$)**	**O&G (mg/100cm)**
Wipes	0.2	3.3	10	4.3	Unestablished	Unestablished

Three types of sampling occurred during the facility closure; wipe, soil, and groundwater sampling. All sampling was limited to the production area and the dirt area behind the oil/water separator in the rear of the building.

Tables for all the sample results are summarized below in each subsection as they occurred. Values found in bold in the tables below represent values that have exceeded the ESLs or Clean-up Levels for the sampling locations of each event. (Figure 1). Note that the Total Petroleum Hydrocarbon (TPH) analysis found in the following tables include TPH Diesel (TPH (D)), TPH Motor Oil (TPH(MO)), and TPH Carbon Ranges C19 – C36 (TPH (TPH (CR)) respectively.

The following subsections will chronicle the sampling events as they occurred. Refer to Figure 1 for a description of all sampling locations.

Figure 1. Locations of Subsurface Sampling Events for Soil and Groundwater



A. Sampling Event, October 3, 2008

On October 3, 2008 the first round of soil and groundwater sampling occurred in the production area, wielding area and in the area immediately behind the oil/water separator on the outside of the building. This sampling event includes sampling locations initially proposed by the ACDEH. Oversight was provided by ACDEH.

Due to the number of samples required for both soil and groundwater samples, this event was extended to other sampling events as described in the following subsections.

The ESLs from Table 1C were used during the analysis of the results for Sampling Event October 3, 2008. Table 2A includes the results from the soil samples collected during the October 3, 2008 sampling event. Results for this sampling event indicated that sampling locations #5-6"-12", #5-3', and #6B exceeded the ESLs for TPH. Additional subsurface investigations and remediation occurred in these locations and is discussed in detail in Section IV.

Groundwater sampling results for this sampling event are included in Table 2B. These results exceeded the ESLs for cadmium, chromium, nickel, lead, and zinc, and are pending further evaluation by ACDEH Site Mitigation/Local Oversight Program.

Table 2A. Sampling Event October 3, 2008. Soil Sampling

Sample ID	Depth (ft.)	TPH (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Ni (mg/kg)	Pb (mg/kg)	Zn (mg/kg)
#5-6"-12"	6"-12"	**6500**	ND	51	140	30	73
#5-3'	3' 10"	**4900**	ND	16	20	81	110
#6A-2.5'-3'	2.5'-3'	ND	ND	54	67	110	140
#6A-3'-4'	3'-4'	ND	ND	14	8.3	7.1	16
#6B 1'10"-2'4"	1'10"-2'4"	**3700**	ND	52	83	7.9	81
#6B 3'-3.5"-3' 9.5"	3.5"-3'9"	780	ND	15	9.2	56	76
#8-1'-1.5"	1'-1.5"	880	ND	18	14	180	130
#8-3'-4"	3'-4"	1500	ND	73	180	140	90
#9-9"-15"	9"-15"	ND	ND	15	14	23	56
#9-3'-3'10"	3'-3'10"	ND	ND	20	24	15	29

*Values in bold print represent those that exceed the ESL as determined by ACDEH

Table 2B. Sampling Event October 3, 2008. Groundwater Sampling

Sample ID	Depth (ft.)	TPH (mg/L)	Cd (mg/L)	Cr (mg/L)	Ni (mg/L)	Pb (mg/L)	Zn (mg/L)
1-6	1'-6"	ND	**0.019**	**1.1**	**5.8**	**1.1**	**1.9**

*Values in bold print represent those that exceed the ESL as determined by ACDEH

B. Wipe Sampling Event October 3, 2008

As part of the closure requirements, the ceiling rafters, electrical boxes and structural elements were decontaminated by the methods described in Section II B. Verification wipe samples were taken in the production area, specifically on the electrical boxes, rafters and structural elements. These samples served to verify the removal of hazardous particulates (materials) on those structures. Results from Wipe Sampling Event October 3, 2008 are included in Table 3.

Results from all samples collected during this sampling event exceeded the clean-up levels for chromium, nickel, and lead which prompted further decontamination efforts of the ceiling and structural elements.

Table 3. Results from Wipe Sampling Event October 3, 2008

Sample ID	Cd (mg/wipe)	Cr (mg/wipe)	Ni (mg/wipe)	Pb (mg/wipe)	Zn (mg/wipe)
#1 Hoist A	ND	**0.29**	**1.6**	**0.22**	0.64
#2 Electrical Box A	ND	**0.46**	**7.6**	**0.054**	1
#3 Ring Roller A	ND	**0.39**	**2.3**	**0.28**	0.48

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

C. Wipe Sampling Event October 28, 2008

Following the completion of a second round of decontamination, verification wipe samples were collected on October 28, 2008 without oversight from ACDEH. Results from Sampling Event October 28, 2008 indicate elevated levels of chromium, nickel and lead at those sample locations and are included in Table 4.

The findings from Sampling Event October 28, 2008 prompted further decontamination efforts on the rafters and adjacent structural elements.

Table 4. Results from Wipe Sampling October 28, 2008.

Sample ID	Cd (mg/wipe)	Cr (mg/wipe)	Ni (mg/wipe)	Pb (mg/wipe)	Zn (mg/wipe)
Electrical Box A	0.0052	**0.16**	**2.2**	**0.052**	5.2
Hoist A	ND	**0.36**	**2.3**	**0.51**	1.8
Ring Roller A	ND	**0.29**	**3.0**	**0.27**	0.6

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

D. Sampling Event November 14, 2008

This sampling event is a continuation of the subsurface sampling events that occurred on October 3, 2008. The sample locations identified below are the initial sampling locations proposed by ACDEH. Oversight was provided by ACDEH during this sampling event

Table 5A includes the results from the soil samples collected during Sampling Event November 14, 2008. No soil samples during this sampling event exceeded the ESLs for TPH or metals.

The results from the groundwater samples collected during this sampling event are included in Table 5B. These results show elevated levels of nickel for all samples collected during this sampling event. Elevated levels of lead were found in sample locations W102 and W 103.

Table 5A. Sampling Event November 14, 2008. Soil Sampling

Sample ID	Depth (ft.)	TPH (D) (mg/kg)	TPH (MO) (mg/kg)	TPH (CR) (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Ni (mg/kg)	Pb (mg/kg)	Zn (mg/kg)
SB-101 3'-4'	3'-4'	85	58	150	ND	17	22	12	26
SB 101 7'-8'	7'-8'	ND	ND	ND	ND	14	8.2	5.2	9.4
SB 101 11'-12'	11'-12'	ND	ND	ND	ND	8.8	10	3.7	14
SB 101 15'-16'	15'-16'	ND	ND	ND	ND	16	20	6.2	23Q
SB 102 3'-4'	3'-4'	ND	ND	ND	ND	45	60	15	33
SB 102 7'-8'	7'-8'	13	ND	52	ND	16	7.8	110	70
SB 102 11'-12'	11'-12'	ND	ND	ND	ND	13	9.4	5	13
SB 102 15'-16'	15'-16'	4.9	ND	ND	ND	11	15	7.1	26
SB 103 3'-4'	3'-4'	46	180	210	ND	67	85	11	52
SB 103 7'-8'	7'-8'	23	94	110	ND	18	9.7	150	110
SB 103 11'-12'	11'-12'	ND	ND	ND	ND	18	23	3.7	12
SB 103 15'-16'	15'-16'	ND	ND	ND	ND	18	23	3.9	12
SB 111 0'-1'	0'-1'	68	310	360	ND	37	180	19	X
SB 111 3'-4'	3'-4'	8.6	55	60	ND	50	69	6.6	44
SB 111 5'-6'	5'-6'	3.6	ND	ND	ND	26	21	29	62
SB 111 7'-8'	7'-8'	23	70	87	ND	15	12	49	50
SB 111 9'-10'	9'-10'	ND	ND	ND	ND	14	8.8	10	13
SB 112 3'-4'	3'-4'	16	51	63	ND	13	26	13	29
SB 112 7'-8'	7'-8'	58	ND	ND	ND	70	86	7.7	42

(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

Table 5B. Sampling Event November 14, 2008. Groundwater Sampling

Sample ID	Depth (ft.)	TPH (D) (mg/L)	TPH (MO) (mg/L)	TPH (CR) (mg/L)	Cd (mg/L)	Cr (mg/L)	Ni (mg/L)	Pb (mg/L)	Zn (mg/L)
W 101		58	ND	ND	ND	ND	**0.12**	0.0065	0.056
W 102		54	ND	ND	ND	0.014	**0.14**	**0.77**	1.2
W 103		74	ND	ND	ND	0.026	**0.38**	**0.061**	1.4
W 111		91	ND	ND	ND	ND	**0.42**	ND	8.4

(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

E. Sampling Event November 21, 2008

This sampling event was conducted without agency oversight to collect the remaining samples from all proposed subsurface sample locations. Tables 6A includes the results from this sampling event for soil.

Table 6A. November 21, 2008. Soil Sampling

Sample ID	Depth (ft.)	TPH (D) (mg/kg)	TPH (MO) (mg/kg)	TPH (CR) (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Ni (mg/kg)	Pb (mg/kg)	Zn (mg/kg)
SB 104	1'-2'	2.2	ND	ND	ND	32	35	10	34
SB 104	3'-4'	6.1	ND	ND	ND	16	11	75	120
SB 104	7'-8'	ND	ND	ND	ND	12	8.3	13	17
SB 105	1'-2'	ND	ND	ND	ND	70	82	9	62
SB 105	3'-4'	3.4	ND	ND	ND	17	12	44	62
SB 105	7'-8'	ND	ND	ND	ND	14	10	17	35
SB 106	1'6"-2'6"	ND	ND	ND	ND	53	64	11	46
SB 106	4'-5'	**1100**	**1900**	**2800**	ND	54	79	31	67
SB 106	7'-8'	2.8	ND	ND	ND	12	24	210	200
SB 107	1'-2'	**5500**	**11000**	**15000**	1.3	72	72	260	580
SB 107	4'-5'	230	520	700	ND	14	10	23	49
SB 107	7'-8'	ND	ND	ND	ND	14	11	5.2	12
SB 108	1'-2'	2.6	ND	ND	ND	52	59	12	41
SB 108	4'-5'	49	110	150	ND	25	24	65	100
SB 108	7'-8'	ND	ND	ND	ND	14	10	4.8	9.3
SB 109	1'-2'	7.6	ND	ND	ND	14	12	160	210
SB109	4'-5'	8.4	ND	ND	ND	19	14	120	200
SB 109	7'-8'	ND	ND	ND	ND	13	10	4.8	10
SB 110	1'-2'	1.5	ND	ND	ND	25	19	87	290
SB 110	4'-5'	ND	ND	ND	ND	17	11	10	26
SB 110	7'-8'	ND	ND	ND	ND	13	8.4	5.3	7.8

(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36 . *Values in bold print represent those that exceed the clean-up level as determined by ACDEH

Groundwater results indicated that sample location W105 exceeded the ESLs for nickel, and sample locations W107 and W108 exceeded the ESLs for lead. Groundwater results for this event are included in Table 6B.

Table 6B. Sampling Event November 21, 2008. Groundwater Sampling

Sample ID	Depth (ft.)	TPH (D) (mg/L)	TPH (MO) (mg/L)	TPH (CR) (mg/L)	Cd (mg/L)	Cr (mg/L)	Ni (mg/L)	Pb (mg/L)	Zn (mg/L)
W 105		52	ND	ND	ND	ND	**0.052**	0.0094	0.93
W 107		62	ND	ND	0.0031	0.022	0.48	**0.12**	1.3
W 108		58	ND	ND	0.0022	0.025	0.076	**5.6**	0.97
W 109		ND	ND	ND	ND	ND	ND	ND	0.018

(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

F. Wipe Sampling Event March 18, 2009

Following another round of cleanup on the rafters and adjacent structural elements, wipe Sampling Event March 18, 2009 occurred. This event was proposed for verification sampling with oversight provided by ACDEH.

Results from Wipe Sampling Event March 18, 2008 indicated that sample locations S-1 and S-2 exceeded the clean-up levels for chromium, nickel, and lead. Following this finding, another round of clean up was required. Wipe Sampling Event March 18, 2009 followed the last round of clean up. Table 7. includes the results from this sampling event.

Table 7. Results from Wipe Sampling Event March 18, 2009

	Cd ($mg/100cm^2$)	Cr ($mg/100cm^2$)	Ni ($mg/100cm^2$)	Pb ($mg/100cm^2$)	Zn ($mg/100cm^2$)	O&G (mg/100cm)
S-1	ND	**0.35**	**3.4**	**0.24**	0.68	ND
S-2	ND	**0.1**	**0.76**	**0.033**	0.15	ND
S-3	ND	ND	0.011	ND	0.12	ND

*Values in bold print represent those that exceed the clean-up level as determined by ACDEH

Table 8 summarizes the sample locations that were above the ESLs.

Table 8. Summary of Results Above ESLs

Sample ID	Depth (ft.)	O&G	TPH Total	TPH (D)	TPH (MO)	TPH (CR)	Cd	Cr	Ni	Pb	Zn
#5-6"-12"	6"-12"	-	6500 (mg/kg)	-	-	-	-	-	-	-	-
#5-3'	3'10"	-	4900 (mg/kg)	-	-	-	-	-	-	-	-
#6B	1'10-2'4"	-	3700 (mg/kg)	-	-	-	-	-	-	-	-
SB106	4'-5'	-	-	1100 (mg/kg)	1900 (mg/kg)	2800 (mg/kg)	-	-	-	-	-
SB107	1'-2'	-	-	5500 (mg/kg)	11000 (mg/kg)	15000 (mg/kg)	-	-	-	-	-
1-6	1'-6"	-	-	-	-	-	0.019 (mg/L)	1.1 (mg/L)	5.8 (mg/L)	1.1 (mg/L)	1.9 (mg/L)
W 105	-	-	-	-	-	-	-	-	0.052 (mg/L)	0.0094 (mg/L)	0.93 (mg/L)
W 107	-	-	-	-	-	-	0.0031 (mg/L)	0.022 (mg/L)	0.48 (mg/L)	0.12 (mg/L)	1.3 (mg/L)
W 108	-	-	-	-	-	-	0.0022 (mg/L)	0.025 (mg/L)	0.076 (mg/L)	5.6 (mg/L)	0.97 (mg/L)
W 109	-	-	-	-	-	-	-	-	-	-	0.018 (mg/L)
W101	-	-	-	-	-	-	-	-	0.12 (mg/L)	-	-
W102	-	-	-	-	-	-	-	-	0.14 (mg/L)	0.77 (mg/L)	-
W103	-	-	-	-	-	-	-	-	0.38 (mg/L)	0.061 (mg/L)	
W111									0.42 (mg/L)	-	-
#1 Hoist A	-	-	-	-	-	-	-	0.29 (mg/wipe)	1.6 (mg/wipe)	0.22 (mg/wipe)	-
#2 Electrical Box	-	-	-	-	-	-	-	0.46 (mg/wipe)	7.6 (mg/wipe)	0.054 (mg/wipe)	-
#3 Ring Roller	-	-	-	-	-	-	-	0.39 (mg/wipe)	2.3 (mg/wipe)	0.28 (mg/wipe)	-
Electrical Box A	-	-	-	-	-	-	-	0.16	2.2	0.052	-
Hoist A	-	-	-	-	-	-	-	0.36 (mg/wipe)	2.3 (mg/wipe)	0.51 (mg/wipe)	-
Ring Roller A	-	-	-	-	-	-	-	0.29 (mg/wipe)	3.0 (mg/wipe)	0.27 (mg/wipe)	
S-1	-	-	-	-	-	-	-	0.35 (mg/wipe)	3.4 (mg/wipe)	0.24 (mg/wipe)	-
S-2	-	-	-	-	-	-	-	0.1 (mg/wipe)	0.76 (mg/wipe)	0.033 (mg/wipe)	-
S-3	-	-	-	-	-	-	-	-	0.011 (mg/wipe)	-	-

(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36

IV. SUBSURFACE INVESTIGATIONS

A. Subsurface Soil Exploration

Chemical analytical reports from the soil sampling events described in Section III indicated elevated levels of hydrocarbons (described as HEM and TPH in the analytical reports) at sample locations 5, 6B, SB106, SB107. Based on these findings, a soil cleanup plan was developed to remediate the proximity of these sample locations. A CDMS Environmental Specialist led all excavations and subsurface investigations. Consulting Geologist Fredric Hoffman provided additional guidance and support throughout the investigations. Refer to Table 9 for the excavation size and depth. Figure 2 identifies the excavation locations.

All contaminated soil that was removed during the excavations was placed into 40-yard bins and hauled offsite as hazardous waste by a licensed waste hauler. Wastewater pumped put from the pit and used absorbents were drummed and hauled offsite as hazardous waste by a licensed hauler.

Figure 2. Excavation Locations

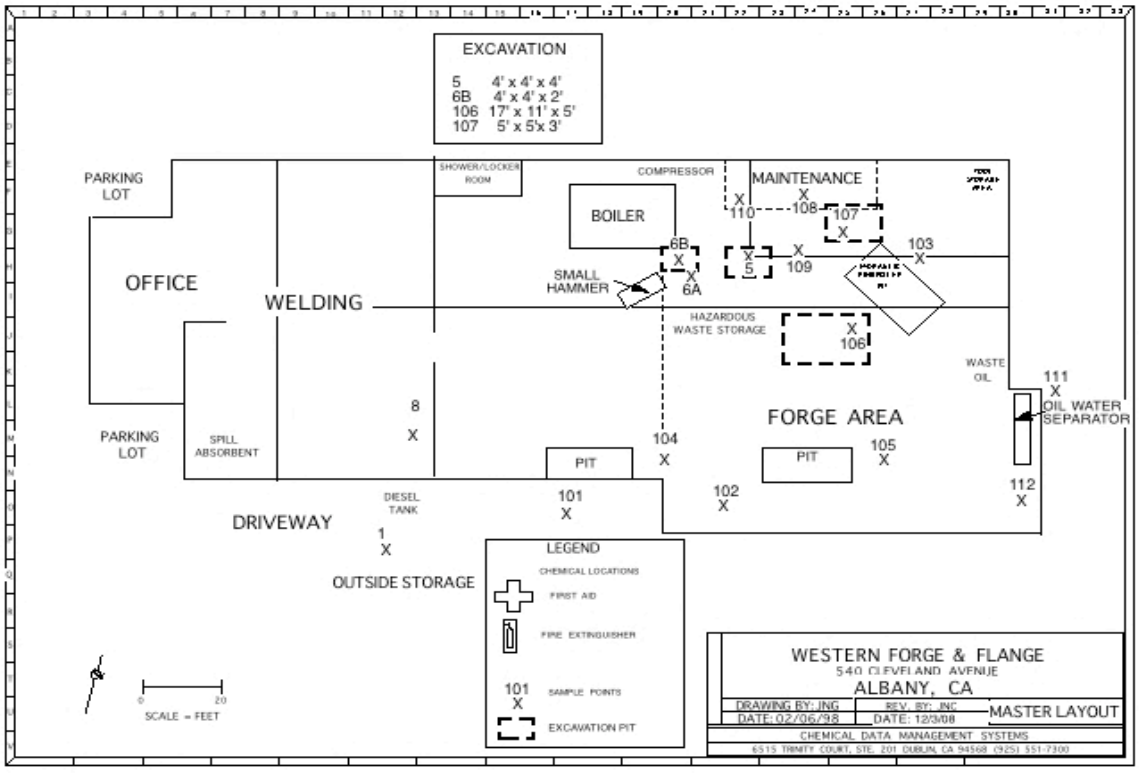


Table 9. Excavation Location, Size and Depth

Sample Loc	Width (in ft)	Length (in ft)	Depth (in ft)
5	4	4	5
6B	4	4	3
106	17	11	5
107	5	5	3

Clean up began on January 21, 2009. In all three of the initial excavations, at locations 5, 6B, and 107 the dark gray clay began at 18" below the ground surface (bgs) and was present throughout the excavations. The excavations at Sample locations 107 and 6B were terminated at three feet in moist clay. The excavation at sample location 5 was terminated at five feet and water began to accumulate in the bottom of the trench.

After breaking up the concrete for the large excavation at sample location 106, a large steel foundation was uncovered, and the decision was made to limit the excavation to a 5' wide and 11" long trench that encompassed the sample location and extended parallel to the hydraulic ring roller pit.

The excavation was in the dark gray clay and ground water was encountered at 5' bgs. Approaching the 10' to 11' limit of the planned trench, oil began to seep from a point source in the wall of the trench closest to the pit at 2.5 feet below ground surface, and began to accumulate on the water in the bottom of the pit.

In order to discover the source of the oil, additional concrete was removed and a new trench was excavated on the north side of the roller pit. At 2.5 feet below ground surface oil began seeping into the new excavation from the pit side of the trench, but not from the outside face of the trench. Trenching continued around the north and west side of the roller pit following the oil seeps.

On the following morning, January 22, 2009, the oil and water had risen in the trench to 3.5' bgs. Excavation continued along the west side of the roller pit until no more oil was observed seeping into the excavation. Oil and water was then pumped out of the excavations into 2 - 55 gallon drums, and the excavators began to excavate the sediments right up to the edge of the cement sides of the roller pit. A layer of gravel was discovered in the trench against the walls of the pit and was removed by the excavators.

Following these events Fredric Hoffman, Geologist with CDMS evaluated the site and concluded that the oil that was released into the subsurface next to the hydraulic roller press, was held in the gravel backfill around the roller pit and had not appreciably penetrated the surrounding clay. When the excavator nicked a corner of the gravel, the oil was released into the excavation. The excavator then released the remainder of the oil into the trench when the oil-contaminated gravel was removed.

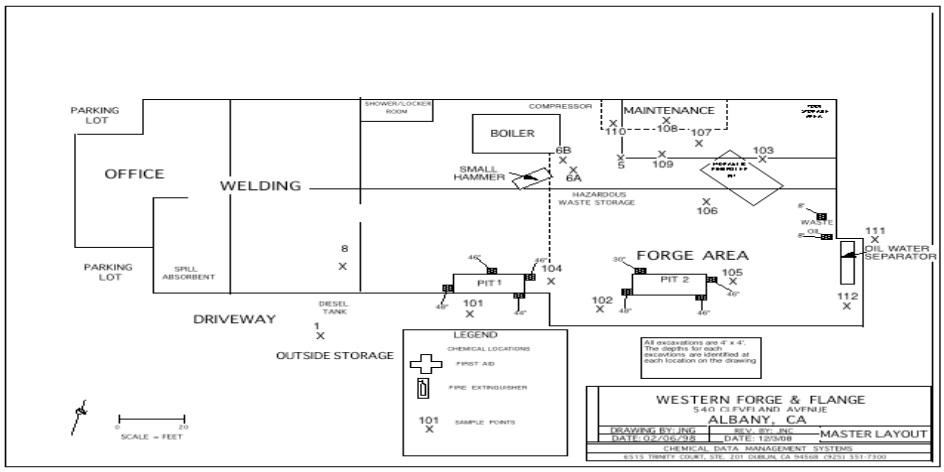
After investigations around the roller pit had ceased, further subsurface investigations were conducted around Pit 1 and Pit 2 in the northwest side of the building and near the rear wall at the west side of the building. Figure 2.

The purpose of this investigation was to determine whether or not these areas had the same issues as the roller pit area and were contaminated with oil. Excavators removed 4'x4' pieces of concrete at each location. During the excavation, soil was removed from each site, until the soil was moist, indicating a short interval between the soil and the water table. After about 15 minutes water slowly began to seep into these excavations. At that point excavation ceased.

At the pits, excavation occurred adjacent to the steel lining of the pits. If oil were present in this area, it would be found between the soil and the steel lining of the pit; as was the case with the roller pit. No indications of contamination were observed during or after excavation at these sites.

At the west side of the building, excavation occurred near the wall where etching was visible and where waste oil was once stored. Water was found immediately below the concrete, at which point the excavations ceased. No indications of contamination were observed during or after excavation at these sites.

Figure 2. Additional Subsurface Investigations



B. Subsurface Investigation-Ground Water

In early February 2009, Jim Carro, Fredric Hoffman, and Jamie Hernandez of CDMS evaluated the site. The focus of this site evaluation was the excavation pit near the ring roller. A thin film of oil was observed on the surface of the water in the excavation pit near the ring roller. After discussing possible alternatives to remedy the oil film on the water surface, the CDMS representatives decided to skim the surface of the water to remove the oil followed by the removal of the standing water by a vacuum tanker truck.

The removal of the oil from the water surface involved the use of oil absorbent pads, oil absorbent socks, and oil-only sorbent skimmers®. After several rounds of skimming, approximately 3/4 of the water volume was then removed using a vacuum tanker truck. These procedures have significantly reduced the amount of oil on the surface of the water.

Currently, Most of the discharged oil has been removed from the water surface in the pit near the ring roller. A consulting Geologist Fredric Hoffman believes that the remaining oil is contained in the disturbed sediments of the excavation. It is Mr. Hoffman's recommendation to inoculate the excavation near the ring roller pit with a chemical reagent designed to treat organic contaminants in an effort to address this area of concern. Addtional subsurface investigations and remedial activities are pending in this area, identified as sample location SB106, following Mr. Hoffman's recommendation.

V. Conclusion

Since the relocation of the Western Forge and Flange Co. facility in Albany to Texas, there have been extensive clean up activities in the effort to decommission the facility and achieve closure.

Subsurface sampling occurred during several sampling events. The results from these sampling events indicated elevated levels of metals at various sample locations for groundwater when using the criteria provided by ACDEH. (Table 2B, Table 5B, and Table 6B). When comparing the results of Table 2B, 5B, and Table 6B to the criteria in Table 1C, all groundwater results were found below the ESLs.

Results also indicated elevated levels of oil and grease (shown as TPH in the analytical report) and TPH (residual fuel) for soil samples at sample locations 5, 6B, SB106, and SB107. (Table 2A and Table 6A). Further investigation occurred at those locations, and the contaminated soil was ultimately removed during several soil cleanup excavations. As a result of the soil cleanup excavations, TPH (residual fuel) contamination has been eliminated at soil sampling locations 5, 6B, and SB107.

In addition, oil was discovered during the soil cleanup excavation of soil sample location SB106 and several oil cleanup efforts have been conducted. Currently, this sample location is pending further remedial activities.

Based on the findings of the subsurface samples, ACDEH has made the decision to transfer all subsurface concerns and investigations to ACDEH Site Mitigation/Local Oversight Program (LOP). Western Forge and Flange Co. is currently anticipating a meeting with ACDEH LOP to address all subsurface issues.

In addition, several phases of cleaning occurred on the rafters and structural elements before and in between wipe sampling events to further remove trace contaminants. The results from initial wipe sampling events indicated elevated levels of metals. Similarly, final wipe sampling results also indicated elevated levels of metals when compared to the standards set by ACDEH.

At this time CDMS believes that due diligence has been served in decontaminating the above ground portions of the facility to the fullest extent possible at the Western Forge and Flange Co. facility in Albany, with the guidance of ACDEH. Further work in remediating the subsurface at soil sample location SB106 at the site is pending.

VI. APPENDICES

A. HAZARDOUS WASTE MANIFESTS

VII. ANALYTICAL REPORTS

TestAmerica. 2008a. Analytical Report, Job Number 720-16304-1, Job Description: Western Forge. October 10, 2008.

TestAmerica. 2008b. Analytical Report, Job Number 720-16328-1, Job Description: Western Forge, Albany. October 16, 2008.

TestAmerica. 2008c. Analytical Report, Job Number 720-16651-1, Job Description: Western Forge. November 04, 2008.

TestAmerica. 2008d. Analytical Report, Job Number 720-16931-1, Job Description: Western Forge, Albany. November 24, 2008.

TestAmerica. 2008e. Analytical Report, Job Number 720-17028-1, Job Description: Western Forge, Albany. December 02, 2008.

VIII. References

Brown and Caldwell. 1984. Western Forge and flange, Albany Facility – Problem Definition Report. Submitted to Western Forge and Flange on July 10, 1984

Hoffman. 2008. Data Evaluation of Materials Related to the Subsurface Environmental Closure of Western Forge & Flange, 540 Cleveland Ave., Albany CA. Prepared for Chemical Data Management Systems, Inc., Dublin, CA (CDMS). December 18, 2008

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAD981371396

2. Page 1 of

3. Emergency Response Phone

4. **Manifest Tracking Number**: 004250627 **JJK**

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

9a HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Waste Paint Related Material 3 UN1263 PGII	3	DM	51	G	D001	331	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

3x55 Lab Pack

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Joseph A. Brown agent for

Signature

Month: 06 Day: 20 Year: 08

TRANSPORTER | INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only) Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CHRIS GEBHARDT

Signature

Month: 06 Day: 20 Year: 08

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

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DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 909-721-2038	4. Manifest Tracking Number 004250889 JJK

Generator's Name and Mailing Address

WESTERN FORGE & FLANGE
540 CLEVELAND AVE
ALBANY, CA 94706

Generator's Phone: 408-372-9893

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: ENVIRONMENTAL LOGISTICS, INC — U.S. EPA ID Number: CAR000172478

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EVERGREEN OIL COMPANY
6880 SMITH AVE
NEWARK, CA 94560
Facility's Phone: 510-795-4400 — U.S. EPA ID Number: CAD980887418

GENERATOR

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON RCRA HAZARDOUS WASTE LIQUID	1	TT	2700	G	223		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

9B.1) OILY WATER # WEAR APPROPRIATE PPE INV#47312

BILL TO: COMS

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Jaime Hernandez — Signature — Month 7 Day 25 Year 08

TRANSPORTER INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: CHRIS GEBHARDT — Signature — Month 7 Day 25 Year 08

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. H141	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Mark Scott — Signature — Month 7 Day 25 Year 08

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UNIFORM HAZARDOUS WASTE MANIFEST	Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	[illegible]	1	800-721-2038	004250889 JJK

5. Generator's Name and Mailing Address
WESTERN FORGE & FLANGE
640 CLEVELAND AVE
ALBANY, CA 94706
Generator's Phone: 408-373-9863

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: ENVIRONMENTAL LOGISTICS, INC — U.S. EPA ID Number: CAR000172478

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
EVERGREEN OIL COMPANY
6880 SMITH AVE.
NEWARK, CA 94560
Facility's Phone: 510-795-4400
U.S. EPA ID Number: CAD980887418

8a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON RCRA HAZARDOUS WASTE LIQUID	1	TT	2700	G	223
	2.					
	3.					
	4.					

GENERATOR

14. Special Handling Instructions and Additional Information
98.1) OILY WATER # — WEAR APPROPRIATE PPE — 9W#47312

BILL TO: CDMS

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Jamie Hernandez — Signature: [signature] — Month 7 Day 25 Year 08

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: CHRIS GEBHARDT — Signature: [signature] — Month 7 Day 25 Year 08
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H135 — 2. — 3. — 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Charles Scott — Signature: [signature] — Month 7 Day 25 Year 08

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAD981371396

2. Page 1 of 1

3. Emergency Response Phone: [illegible]

4. Manifest Tracking Number: 004250892 JJK

5. Generator's Name and Mailing Address: [illegible]
540 CLEVELAND AVE
ALBANY CA 94706

Generator's Site Address (if different than mailing address)

Generator's Phone: [illegible]

6. Transporter 1 Company Name: ENVIRONMENTAL LOGISTICS INC

U.S. EPA ID Number: [illegible]

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address: [illegible]

U.S. EPA ID Number: CAD982444481

Facility's Phone: [illegible]

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON RCRA HAZARDOUS WASTE SOLID	2D	[illegible]	5400	[illegible]	[illegible]
	2. NON RCRA HAZARDOUS WASTE SOLID	1	DF	20	P	352
	3.					
	4.					

14. Special Handling Instructions and Additional Information
[illegible] 20X55 1X55 WEAR APPROPRIATE PPE [illegible]
BILL TO: [illegible] 21X55

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jamie Hernandez | Signature: [signature] | Month 7 Day 28 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: ____
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: CHRIS GEBHARDT | Signature: [signature] | Month 7 Day 28 Year 08
Transporter 2 Printed/Typed Name | Signature | Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. H141 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Steven Master | Signature: [signature] | Month 7 Day 31 Year 08

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DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

FORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	CAD981371306	1	909-721-2038	004849758 JJK

5. Generator's Name and Mailing Address

WESTERN FORGE & FLANGE
640 CLEVELAND AVE
ALBANY, CA 94706

Generator's Phone: 408-373-0663

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name — U.S. EPA ID Number

ENVIRONMENTAL LOGISTICS, INC — CAR000172478

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

CWM INC
35251 OLD SKYLINE ROAD
KETTLEMAN CITY, CA 93239 — CAT000646117

Facility's Phone: 559-386-9711

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON RCRA HAZARDOUS WASTE SOLID	1	CM	20	Y	811
	2.					
	3.					
	4.					

GENERATOR

14. Special Handling Instructions and Additional Information

9B 1(SOIL PROFILE # CA3037/96 WEAR APPROPRIATE PPE INV#47915

PU # 3016

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a:

Printed/Typed Name — Signature — Month — Day — Year

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or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	CAD981371396	1	909-721-2038	004849759 JJK

5. Generator's Name and Mailing Address
WESTERN FORGE & FLANGE
540 CLEVELAND AVE
ALBANY, CA 94706
Generator's Phone: 408-373-9663

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: ENVIRONMENTAL LOGISTICS, INC — U.S. EPA ID Number: CAR000172478

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
CWM INC
35251 OLD SKYLINE ROAD
KETTLEMAN CITY, CA 93230
Facility's Phone: 559-386-9711

U.S. EPA ID Number: CAT000646117

GENERATOR

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON RCRA HAZARDOUS WASTE SOLID	1	CM	10	Y	611
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
98.1%OIL. PROFILE # CA3003706 / D.H. WEAR APPROPRIATE PPE INV#47916
1013 18.89TONS

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month 10 — Day 06 — Year 08

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month — Day — Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

ANALYTICAL REPORT

Job Number: 720-16304-1

Job Description: Western Forge

For:
Chemical Data Management
6515 Trinity Court
Suite 201
Dublin, CA 94568-2665

Attention: Mr. James Carro

Designee for
Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
10/10/2008

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
No additional comments.

Receipt
Did not receive containers to do water analyses for metals or oil and grease.

All other samples were received in good condition within temperature requirements.

GC Semi VOA
No analytical or quality issues were noted.

Metals
Method(s) 3010A: Sample were preserved with HCL. A deviation from the Standard Operating Procedure (SOP) occurred.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 42268 were outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep
Method(s) 9071B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 42554 were outside control limits. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management

Job Number: 720-16304-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16304-1	**1-6**				
Cadmium		0.019	0.0020	mg/L	6010B
Chromium		1.1	0.0050	mg/L	6010B
Nickel		5.8	0.0050	mg/L	6010B
Lead		1.1	0.0050	mg/L	6010B
Zinc		1.9	0.010	mg/L	6010B
720-16304-2	**#5-6"-12"**				
Chromium		51	1.0	mg/Kg	6010B
Nickel		140	1.0	mg/Kg	6010B
Lead		30	1.0	mg/Kg	6010B
Zinc		73	1.0	mg/Kg	6010B
HEM		6500	100	mg/Kg	9071B
720-16304-3	**#5-3'-3' 10"**				
Chromium		16	1.0	mg/Kg	6010B
Nickel		20	1.0	mg/Kg	6010B
Lead		81	1.0	mg/Kg	6010B
Zinc		110	1.0	mg/Kg	6010B
HEM		4900	100	mg/Kg	9071B
720-16304-4	**#6A-2.5'-3'**				
Chromium		54	0.94	mg/Kg	6010B
Nickel		67	0.94	mg/Kg	6010B
Lead		110	0.94	mg/Kg	6010B
Zinc		140	0.94	mg/Kg	6010B
720-16304-5	**#6A-3'-4'**				
Chromium		14	1.0	mg/Kg	6010B
Nickel		8.3	1.0	mg/Kg	6010B
Lead		7.1	1.0	mg/Kg	6010B
Zinc		16	1.0	mg/Kg	6010B
720-16304-6	**#6B-1' 10"-2' 4"**				
Chromium		52	0.95	mg/Kg	6010B
Nickel		83	0.95	mg/Kg	6010B
Lead		7.9	0.95	mg/Kg	6010B
Zinc		81	0.95	mg/Kg	6010B
HEM		3700	100	mg/Kg	9071B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management

Job Number: 720-16304-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16304-7	**#6B-3' 3.5"-3' 9.5"**				
Chromium		15	1.1	mg/Kg	6010B
Nickel		9.2	1.1	mg/Kg	6010B
Lead		56	1.1	mg/Kg	6010B
Zinc		76	1.1	mg/Kg	6010B
HEM		780	100	mg/Kg	9071B
720-16304-8	**#8-1'-1.5'**				
Chromium		18	0.98	mg/Kg	6010B
Nickel		14	0.98	mg/Kg	6010B
Lead		180	0.98	mg/Kg	6010B
Zinc		130	0.98	mg/Kg	6010B
HEM		880	100	mg/Kg	9071B
720-16304-9	**#8-3'-4'**				
Chromium		73	0.99	mg/Kg	6010B
Nickel		180	0.99	mg/Kg	6010B
Lead		140	0.99	mg/Kg	6010B
Zinc		90	0.99	mg/Kg	6010B
HEM		1500	100	mg/Kg	9071B
720-16304-10	**#9-9"-15"**				
Chromium		15	0.96	mg/Kg	6010B
Nickel		14	0.96	mg/Kg	6010B
Lead		23	0.96	mg/Kg	6010B
Zinc		56	0.96	mg/Kg	6010B
720-16304-11	**#9-3'-3' 10"**				
Chromium		20	0.98	mg/Kg	6010B
Nickel		24	0.98	mg/Kg	6010B
Lead		15	0.98	mg/Kg	6010B
Zinc		29	0.98	mg/Kg	6010B

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-16304-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Metals	TAL SF		SW846 3050B
HEM	TAL SF	SW846 9071B	
HEM	TAL SF		SW846 9071B
Matrix: Water			
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Microextraction of Organic Compounds	TAL SF		SW846 3511
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Total Metals	TAL SF		SW846 3010A

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Chemical Data Management

Job Number: 720-16304-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-16304-1	1-6	Water	10/03/2008 1415	10/03/2008 1625
720-16304-2	#5-6"-12"	Solid	10/03/2008 1145	10/03/2008 1625
720-16304-3	#5-3'-3' 10"	Solid	10/03/2008 1145	10/03/2008 1625
720-16304-4	#6A-2.5'-3'	Solid	10/03/2008 1130	10/03/2008 1625
720-16304-5	#6A-3'-4'	Solid	10/03/2008 1130	10/03/2008 1625
720-16304-6	#6B-1' 10"-2' 4"	Solid	10/03/2008 1210	10/03/2008 1625
720-16304-7	#6B-3' 3.5"-3' 9.5"	Solid	10/03/2008 1210	10/03/2008 1625
720-16304-8	#8-1'-1.5'	Solid	10/03/2008 1105	10/03/2008 1625
720-16304-9	#8-3'-4'	Solid	10/03/2008 1105	10/03/2008 1625
720-16304-10	#9-9"-15"	Solid	10/03/2008 1320	10/03/2008 1625
720-16304-11	#9-3'-3' 10"	Solid	10/03/2008 1320	10/03/2008 1625

Client: Chemical Data Management | Job Number: 720-16304-1

Client Sample ID: **1-6**

Lab Sample ID:	720-16304-1	Date Sampled:	10/03/2008 1415
Client Matrix:	Water	Date Received:	10/03/2008 1625

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-42366	Instrument ID:	Varian DRO2	
Preparation:	3511	Prep Batch: 720-42208	Lab File ID:	N/A	
Dilution:	1.0		Initial Weight/Volume:	35	mL
Date Analyzed:	10/10/2008 1337		Final Weight/Volume:	2	mL
Date Prepared:	10/08/2008 1124		Injection Volume:		
			Column ID:	PRIMARY	

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	95	50 - 130

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **1-6**

Lab Sample ID: 720-16304-1
Client Matrix: Water

Date Sampled: 10/03/2008 1415
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3010A
Dilution: 1.0
Date Analyzed: 10/10/2008 1139
Date Prepared: 10/09/2008 0912

Analysis Batch: 720-42350
Prep Batch: 720-42267

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 30 mL
Final Weight/Volume: 30 mL

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	0.019		0.0020
Chromium	1.1		0.0050
Nickel	5.8		0.0050
Lead	1.1		0.0050
Zinc	1.9		0.010

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#5-6"-12"**

Lab Sample ID: 720-16304-2
Client Matrix: Solid

Date Sampled: 10/03/2008 1145
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/10/2008 1201
Date Prepared: 10/09/2008 0808

Analysis Batch: 720-42348
Prep Batch: 720-42261

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.99 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.51
Chromium		51		1.0
Nickel		140		1.0
Lead		30		1.0
Zinc		73		1.0

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#5-3'-3' 10"**

Lab Sample ID: 720-16304-3
Client Matrix: Solid

Date Sampled: 10/03/2008 1145
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42348		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-42261		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Date Analyzed:	10/10/2008 1205			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		16		1.0
Nickel		20		1.0
Lead		81		1.0
Zinc		110		1.0

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#6A-2.5'-3'**

Lab Sample ID: 720-16304-4
Client Matrix: Solid

Date Sampled: 10/03/2008 1130
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42348		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-42261		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Date Analyzed:	10/10/2008 1208			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.47
Chromium		54		0.94
Nickel		67		0.94
Lead		110		0.94
Zinc		140		0.94

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#6A-3'-4'**

Lab Sample ID: 720-16304-5
Client Matrix: Solid

Date Sampled: 10/03/2008 1130
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/10/2008 1211
Date Prepared: 10/09/2008 0808

Analysis Batch: 720-42348
Prep Batch: 720-42261

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		14		1.0
Nickel		8.3		1.0
Lead		7.1		1.0
Zinc		16		1.0

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#6B-1' 10"-2' 4"**

Lab Sample ID: 720-16304-6
Client Matrix: Solid

Date Sampled: 10/03/2008 1210
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42348		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-42261		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	10/10/2008 1215			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		52		0.95
Nickel		83		0.95
Lead		7.9		0.95
Zinc		81		0.95

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#6B-3' 3.5"-3' 9.5"**

Lab Sample ID: 720-16304-7
Client Matrix: Solid

Date Sampled: 10/03/2008 1210
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/10/2008 1225
Date Prepared: 10/09/2008 0808

Analysis Batch: 720-42348
Prep Batch: 720-42261

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.95 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.53
Chromium		15		1.1
Nickel		9.2		1.1
Lead		56		1.1
Zinc		76		1.1

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#8-1'-1.5'**

Lab Sample ID: 720-16304-8
Client Matrix: Solid

Date Sampled: 10/03/2008 1105
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42348		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-42261		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Date Analyzed:	10/10/2008 1229			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		18		0.98
Nickel		14		0.98
Lead		180		0.98
Zinc		130		0.98

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#8-3'-4'**

Lab Sample ID: 720-16304-9
Client Matrix: Solid

Date Sampled: 10/03/2008 1105
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42325		Instrument ID:	Varian ICP
Preparation:	3050B	Prep Batch: 720-42268		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Date Analyzed:	10/09/2008 1943			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0918				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		73		0.99
Nickel		180		0.99
Lead		140		0.99
Zinc		90		0.99

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#9-9"-15"**

Lab Sample ID: 720-16304-10
Client Matrix: Solid

Date Sampled: 10/03/2008 1320
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/09/2008 1947
Date Prepared: 10/09/2008 0918

Analysis Batch: 720-42325
Prep Batch: 720-42268

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		15		0.96
Nickel		14		0.96
Lead		23		0.96
Zinc		56		0.96

Client: Chemical Data Management

Job Number: 720-16304-1

Client Sample ID: **#9-3'-3' 10"**

Lab Sample ID: 720-16304-11
Client Matrix: Solid

Date Sampled: 10/03/2008 1320
Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/09/2008 1951
Date Prepared: 10/09/2008 0918

Analysis Batch: 720-42325
Prep Batch: 720-42268

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		20		0.98
Nickel		24		0.98
Lead		15		0.98
Zinc		29		0.98

General Chemistry

Client Sample ID: #5-6"-12"

Lab Sample ID: 720-16304-2 Date Sampled: 10/03/2008 1145
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	6500		mg/Kg	100	1.0	9071B
	Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759		DryWt Corrected: N	
	Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134			

Client Sample ID: #5-3'-3' 10"

Lab Sample ID: 720-16304-3 Date Sampled: 10/03/2008 1145
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	4900		mg/Kg	100	1.0	9071B
	Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759		DryWt Corrected: N	
	Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134			

Client Sample ID: #6A-2.5'-3'

Lab Sample ID: 720-16304-4 Date Sampled: 10/03/2008 1130
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/Kg	100	1.0	9071B
	Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759		DryWt Corrected: N	
	Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134			

Client Sample ID: #6A-3'-4'

Lab Sample ID: 720-16304-5 Date Sampled: 10/03/2008 1130
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/Kg	100	1.0	9071B
	Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759		DryWt Corrected: N	
	Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134			

Client Sample ID: #6B-1' 10"-2' 4"

Lab Sample ID: 720-16304-6 Date Sampled: 10/03/2008 1210
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	3700		mg/Kg	100	1.0	9071B
	Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759		DryWt Corrected: N	
	Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134			

General Chemistry

Client Sample ID: **#6B-3' 3.5"-3' 9.5"**

Lab Sample ID: 720-16304-7 Date Sampled: 10/03/2008 1210
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	780		mg/Kg	100	1.0	9071B
Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759			DryWt Corrected: N	
Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134				

Client Sample ID: **#8-1'-1.5'**

Lab Sample ID: 720-16304-8 Date Sampled: 10/03/2008 1105
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	880		mg/Kg	100	1.0	9071B
Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759			DryWt Corrected: N	
Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134				

Client Sample ID: **#8-3'-4'**

Lab Sample ID: 720-16304-9 Date Sampled: 10/03/2008 1105
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	1500		mg/Kg	100	1.0	9071B
Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759			DryWt Corrected: N	
Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134				

Client Sample ID: **#9-9"-15"**

Lab Sample ID: 720-16304-10 Date Sampled: 10/03/2008 1320
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/Kg	100	1.0	9071B
Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759			DryWt Corrected: N	
Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134				

Client Sample ID: **#9-3'-3' 10"**

Lab Sample ID: 720-16304-11 Date Sampled: 10/03/2008 1320
Client Matrix: Solid Date Received: 10/03/2008 1625

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/Kg	100	1.0	9071B
Anly Batch: 720-42254	Date Analyzed	10/08/2008 1759			DryWt Corrected: N	
Prep Batch: 720-42211	Date Prepared:	10/08/2008 1134				

DATA REPORTING QUALIFIERS

Client: Chemical Data Management Job Number: 720-16304-1

Lab Section	Qualifier	Description
General Chemistry		
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Client: Chemical Data Management

Job Number: 720-16304-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-42208					
LCS 720-42208/2-A	Lab Control Spike	T	Water	3511	
LCSD 720-42208/3-A	Lab Control Spike Duplicate	T	Water	3511	
MB 720-42208/1-A	Method Blank	T	Water	3511	
720-16304-1	1-6	T	Water	3511	
Analysis Batch:720-42366					
LCS 720-42208/2-A	Lab Control Spike	T	Water	8015B	720-42208
LCSD 720-42208/3-A	Lab Control Spike Duplicate	T	Water	8015B	720-42208
MB 720-42208/1-A	Method Blank	T	Water	8015B	720-42208
720-16304-1	1-6	T	Water	8015B	720-42208

Report Basis

T = Total

Client: Chemical Data Management

Job Number: 720-16304-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-42261					
LCS 720-42261/2-A	Lab Control Spike	T	Solid	3050B	
LCSD 720-42261/3-A	Lab Control Spike Duplicate	T	Solid	3050B	
LCSSRM 720-42261/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-42261/1-A	Method Blank	T	Solid	3050B	
720-16292-G-7-A MS	Matrix Spike	T	Solid	3050B	
720-16292-G-7-B MSD	Matrix Spike Duplicate	T	Solid	3050B	
720-16304-2	#5-6"-12"	T	Solid	3050B	
720-16304-3	#5-3'-3' 10"	T	Solid	3050B	
720-16304-4	#6A-2.5'-3'	T	Solid	3050B	
720-16304-5	#6A-3'-4'	T	Solid	3050B	
720-16304-6	#6B-1' 10"-2' 4"	T	Solid	3050B	
720-16304-7	#6B-3' 3.5"-3' 9.5"	T	Solid	3050B	
720-16304-8	#8-1'-1.5'	T	Solid	3050B	
Prep Batch: 720-42267					
LCS 720-42267/2-A	Lab Control Spike	T	Water	3010A	
LCSD 720-42267/3-A	Lab Control Spike Duplicate	T	Water	3010A	
MB 720-42267/1-A	Method Blank	T	Water	3010A	
720-16296-F-8-A MS	Matrix Spike	T	Water	3010A	
720-16296-F-8-B MSD	Matrix Spike Duplicate	T	Water	3010A	
720-16304-1	1-6	T	Water	3010A	
Prep Batch: 720-42268					
LCS 720-42268/2-A	Lab Control Spike	T	Solid	3050B	
LCSD 720-42268/3-A	Lab Control Spike Duplicate	T	Solid	3050B	
LCSSRM 720-42268/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-42268/1-A	Method Blank	T	Solid	3050B	
720-16304-9	#8-3'-4'	T	Solid	3050B	
720-16304-10	#9-9"-15"	T	Solid	3050B	
720-16304-11	#9-3'-3' 10"	T	Solid	3050B	
720-16370-A-4-E MS	Matrix Spike	T	Solid	3050B	
720-16370-A-4-F MSD	Matrix Spike Duplicate	T	Solid	3050B	
Analysis Batch:720-42325					
LCS 720-42268/2-A	Lab Control Spike	T	Solid	6010B	720-42268
LCSD 720-42268/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-42268
LCSSRM 720-42268/25-A	LCS-Standard Reference Material	T	Solid	6010B	720-42268
MB 720-42268/1-A	Method Blank	T	Solid	6010B	720-42268
720-16304-9	#8-3'-4'	T	Solid	6010B	720-42268
720-16304-10	#9-9"-15"	T	Solid	6010B	720-42268
720-16304-11	#9-3'-3' 10"	T	Solid	6010B	720-42268
720-16370-A-4-E MS	Matrix Spike	T	Solid	6010B	720-42268
720-16370-A-4-F MSD	Matrix Spike Duplicate	T	Solid	6010B	720-42268

Client: Chemical Data Management

Job Number: 720-16304-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-42348					
LCS 720-42261/2-A	Lab Control Spike	T	Solid	6010B	720-42261
LCSD 720-42261/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-42261
LCSSRM 720-42261/25-A	LCS-Standard Reference Material	T	Solid	6010B	720-42261
MB 720-42261/1-A	Method Blank	T	Solid	6010B	720-42261
720-16292-G-7-A MS	Matrix Spike	T	Solid	6010B	720-42261
720-16292-G-7-B MSD	Matrix Spike Duplicate	T	Solid	6010B	720-42261
720-16304-2	#5-6"-12"	T	Solid	6010B	720-42261
720-16304-3	#5-3'-3' 10"	T	Solid	6010B	720-42261
720-16304-4	#6A-2.5'-3'	T	Solid	6010B	720-42261
720-16304-5	#6A-3'-4'	T	Solid	6010B	720-42261
720-16304-6	#6B-1' 10"-2' 4"	T	Solid	6010B	720-42261
720-16304-7	#6B-3' 3.5"-3' 9.5"	T	Solid	6010B	720-42261
720-16304-8	#8-1'-1.5'	T	Solid	6010B	720-42261
Analysis Batch:720-42350					
LCS 720-42267/2-A	Lab Control Spike	T	Water	6010B	720-42267
LCSD 720-42267/3-A	Lab Control Spike Duplicate	T	Water	6010B	720-42267
MB 720-42267/1-A	Method Blank	T	Water	6010B	720-42267
720-16296-F-8-A MS	Matrix Spike	T	Water	6010B	720-42267
720-16296-F-8-B MSD	Matrix Spike Duplicate	T	Water	6010B	720-42267
720-16304-1	1-6	T	Water	6010B	720-42267

Report Basis

T = Total

Client: Chemical Data Management

Job Number: 720-16304-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 720-42211					
LCS 720-42211/2-A	Lab Control Spike	T	Solid	9071B	
LCSD 720-42211/3-A	Lab Control Spike Duplicate	T	Solid	9071B	
MB 720-42211/1-A	Method Blank	T	Solid	9071B	
720-16304-2	#5-6"-12"	T	Solid	9071B	
720-16304-3	#5-3'-3' 10"	T	Solid	9071B	
720-16304-4	#6A-2.5'-3'	T	Solid	9071B	
720-16304-5	#6A-3'-4'	T	Solid	9071B	
720-16304-6	#6B-1' 10"-2' 4"	T	Solid	9071B	
720-16304-6MS	Matrix Spike	T	Solid	9071B	
720-16304-6MSD	Matrix Spike Duplicate	T	Solid	9071B	
720-16304-7	#6B-3' 3.5"-3' 9.5"	T	Solid	9071B	
720-16304-8	#8-1'-1.5'	T	Solid	9071B	
720-16304-9	#8-3'-4'	T	Solid	9071B	
720-16304-10	#9-9"-15"	T	Solid	9071B	
720-16304-11	#9-3'-3' 10"	T	Solid	9071B	
Analysis Batch:720-42254					
LCS 720-42211/2-A	Lab Control Spike	T	Solid	9071B	720-42211
LCSD 720-42211/3-A	Lab Control Spike Duplicate	T	Solid	9071B	720-42211
MB 720-42211/1-A	Method Blank	T	Solid	9071B	720-42211
720-16304-2	#5-6"-12"	T	Solid	9071B	720-42211
720-16304-3	#5-3'-3' 10"	T	Solid	9071B	720-42211
720-16304-4	#6A-2.5'-3'	T	Solid	9071B	720-42211
720-16304-5	#6A-3'-4'	T	Solid	9071B	720-42211
720-16304-6	#6B-1' 10"-2' 4"	T	Solid	9071B	720-42211
720-16304-6MS	Matrix Spike	T	Solid	9071B	720-42211
720-16304-6MSD	Matrix Spike Duplicate	T	Solid	9071B	720-42211
720-16304-7	#6B-3' 3.5"-3' 9.5"	T	Solid	9071B	720-42211
720-16304-8	#8-1'-1.5'	T	Solid	9071B	720-42211
720-16304-9	#8-3'-4'	T	Solid	9071B	720-42211
720-16304-10	#9-9"-15"	T	Solid	9071B	720-42211
720-16304-11	#9-3'-3' 10"	T	Solid	9071B	720-42211

Report Basis
T = Total

Method Blank - Batch: 720-42208

Method: 8015B
Preparation: 3511

Lab Sample ID: MB 720-42208/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1311
Date Prepared: 10/08/2008 1124

Analysis Batch: 720-42366
Prep Batch: 720-42208
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	97	50 - 130

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42208

Method: 8015B
Preparation: 3511

LCS Lab Sample ID: LCS 720-42208/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1220
Date Prepared: 10/08/2008 1124

Analysis Batch: 720-42366
Prep Batch: 720-42208
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-42208/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1245
Date Prepared: 10/08/2008 1124

Analysis Batch: 720-42366
Prep Batch: 720-42208
Units: ug/L

Instrument ID: Varian DRO2
Lab File ID: N/A
Initial Weight/Volume: 35 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	85	91	40 - 130	7	25		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	97	103	50 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Method Blank - Batch: 720-42261

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-42261/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/10/2008 1044
Date Prepared: 10/09/2008 0808

Analysis Batch: 720-42348
Prep Batch: 720-42261
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.96 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.52
Chromium	ND		1.0
Nickel	ND		1.0
Lead	ND		1.0
Zinc	ND		1.0

LCS-Standard Reference Material - Batch: 720-42261

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-42261/25-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/10/2008 1232
Date Prepared: 10/09/2008 0808

Analysis Batch: 720-42348
Prep Batch: 720-42261
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	43.5	41.4	95	67 - 118	
Chromium	254	241	95	67 - 121	
Nickel	99.8	95.2	95	65 - 117	
Lead	45.5	42.1	93	62 - 113	
Zinc	45.4	41.5	92	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42261

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID:	LCS 720-42261/2-A	Analysis Batch:	720-42348	Instrument ID:	Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch:	720-42261	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1.02 g
Date Analyzed:	10/10/2008 1048			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

LCSD Lab Sample ID:	LCSD 720-42261/3-A	Analysis Batch:	720-42348	Instrument ID:	Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch:	720-42261	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1.04 g
Date Analyzed:	10/10/2008 1100			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0808				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	99	97	80 - 120	4	20		
Chromium	99	94	80 - 120	7	20		
Nickel	100	98	80 - 120	4	20		
Lead	99	98	80 - 120	4	20		
Zinc	99	97	80 - 120	4	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-42261

Method: 6010B
Preparation: 3050B

MS Lab Sample ID:	720-16292-G-7-A MS	Analysis Batch: 720-42348	Instrument ID: Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch: 720-42261	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 1.00 g
Date Analyzed:	10/10/2008 1104		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0808		

MSD Lab Sample ID:	720-16292-G-7-B MSD	Analysis Batch: 720-42348	Instrument ID: Thermo 6500 ICP
Client Matrix:	Solid	Prep Batch: 720-42261	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 1.04 g
Date Analyzed:	10/10/2008 1107		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0808		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cadmium	90	86	75 - 125	8	20		
Chromium	88	85	75 - 125	7	20		
Nickel	91	87	75 - 125	9	20		
Lead	89	85	75 - 125	8	20		
Zinc	94	85	75 - 125	11	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-42267

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 720-42267/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1102
Date Prepared: 10/09/2008 0912

Analysis Batch: 720-42350
Prep Batch: 720-42267
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	ND		0.0050
Lead	ND		0.0050
Zinc	ND		0.010

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42267

Method: 6010B
Preparation: 3010A

LCS Lab Sample ID: LCS 720-42267/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1105
Date Prepared: 10/09/2008 0912

Analysis Batch: 720-42350
Prep Batch: 720-42267
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-42267/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/10/2008 1109
Date Prepared: 10/09/2008 0912

Analysis Batch: 720-42350
Prep Batch: 720-42267
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	99	101	80 - 120	2	20		
Chromium	100	103	80 - 120	2	20		
Nickel	99	101	80 - 120	3	20		
Lead	100	102	80 - 120	3	20		
Zinc	98	100	80 - 120	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-42267

Method: 6010B
Preparation: 3010A

MS Lab Sample ID:	720-16296-F-8-A MS	Analysis Batch: 720-42350	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-42267	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 50 mL
Date Analyzed:	10/10/2008 1113		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0912		

MSD Lab Sample ID:	720-16296-F-8-B MSD	Analysis Batch: 720-42350	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-42267	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 50 mL
Date Analyzed:	10/10/2008 1117		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0912		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cadmium	93	93	75 - 125	1	25		
Chromium	97	99	75 - 125	2	25		
Nickel	91	93	75 - 125	2	25		
Lead	91	92	75 - 125	1	25		
Zinc	89	91	75 - 125	2	25		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Method Blank - Batch: 720-42268

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-42268/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/09/2008 1828
Date Prepared: 10/09/2008 0918

Analysis Batch: 720-42325
Prep Batch: 720-42268
Units: mg/Kg

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 0.96 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.52
Chromium	ND		1.0
Nickel	ND		1.0
Lead	ND		1.0
Zinc	ND		1.0

LCS-Standard Reference Material - Batch: 720-42268

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-42268/25-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/09/2008 2018
Date Prepared: 10/09/2008 0918

Analysis Batch: 720-42325
Prep Batch: 720-42268
Units: mg/Kg

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	42.2	40.0	95	67 - 118	
Chromium	246	236	96	67 - 121	
Nickel	96.8	90.6	94	65 - 117	
Lead	44.1	40.4	92	62 - 113	
Zinc	44.0	38.8	88	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42268

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID:	LCS 720-42268/2-A	Analysis Batch:	720-42325	Instrument ID:	Varian ICP
Client Matrix:	Solid	Prep Batch:	720-42268	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	0.96 g
Date Analyzed:	10/09/2008 1831			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0918				

LCSD Lab Sample ID:	LCSD 720-42268/3-A	Analysis Batch:	720-42325	Instrument ID:	Varian ICP
Client Matrix:	Solid	Prep Batch:	720-42268	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1.02 g
Date Analyzed:	10/09/2008 1836			Final Weight/Volume:	50 mL
Date Prepared:	10/09/2008 0918				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	100	99	80 - 120	7	20		
Chromium	102	100	80 - 120	7	20		
Nickel	100	99	80 - 120	7	20		
Lead	100	98	80 - 120	7	20		
Zinc	99	98	80 - 120	8	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-42268

Method: 6010B
Preparation: 3050B

MS Lab Sample ID:	720-16370-A-4-E MS	Analysis Batch: 720-42325	Instrument ID: Varian ICP
Client Matrix:	Solid	Prep Batch: 720-42268	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 1.00 g
Date Analyzed:	10/09/2008 1840		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0918		

MSD Lab Sample ID:	720-16370-A-4-F MSD	Analysis Batch: 720-42325	Instrument ID: Varian ICP
Client Matrix:	Solid	Prep Batch: 720-42268	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 0.98 g
Date Analyzed:	10/09/2008 1845		Final Weight/Volume: 50 mL
Date Prepared:	10/09/2008 0918		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cadmium	84	85	75 - 125	3	20		
Chromium	80	81	75 - 125	2	20		
Nickel	82	83	75 - 125	2	20		
Lead	83	83	75 - 125	2	20		
Zinc	81	79	75 - 125	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Method Blank - Batch: 720-42211

Method: 9071B
Preparation: 9071B

Lab Sample ID: MB 720-42211/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/08/2008 1759
Date Prepared: 10/08/2008 1134

Analysis Batch: 720-42254
Prep Batch: 720-42211
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.01 g
Final Weight/Volume: 10.01 mL

Analyte	Result	Qual	RL
HEM	ND		100

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42211

Method: 9071B
Preparation: 9071B

LCS Lab Sample ID: LCS 720-42211/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/08/2008 1759
Date Prepared: 10/08/2008 1134

Analysis Batch: 720-42254
Prep Batch: 720-42211
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.01 g
Final Weight/Volume: 10.01 mL

LCSD Lab Sample ID: LCSD 720-42211/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 10/08/2008 1759
Date Prepared: 10/08/2008 1134

Analysis Batch: 720-42254
Prep Batch: 720-42211
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.01 g
Final Weight/Volume: 10.01 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	86	84	79 - 120	3	18		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16304-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-42211

Method: 9071B
Preparation: 9071B

MS Lab Sample ID:	720-16304-6	Analysis Batch:	720-42254	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	720-42211	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	10.07 g
Date Analyzed:	10/08/2008 1759			Final Weight/Volume:	10.07 mL
Date Prepared:	10/08/2008 1134				

MSD Lab Sample ID:	720-16304-6	Analysis Batch:	720-42254	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	720-42211	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	10.03 g
Date Analyzed:	10/08/2008 1759			Final Weight/Volume:	10.03 mL
Date Prepared:	10/08/2008 1134				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
HEM	24	-165	79 - 120	48	20	4	4

Calculations are performed before rounding to avoid round-off errors in calculated results.

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720-16304

Reference #: 112742

Date 10/3/08 Page 1 of 2

Report To

Attn: JIM CARRO

Company: CDMS

Address:

Phone: Email:

Bill To: Sampled By:

Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☑ Diesel ☐ Motor Oil ☐ Other	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Tota	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☑ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium: ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4			
1-6	10/3/08	2:15	W	HCl			X					X				X										
#5 - 6"-12"		11:45	S									X				X										
#5 - 3'-3'10"		11.45	S									X				X										
#6A - 2.5'-3'		11:30	S									X				X										
#6A - 3'-4'		11 30	S									X				X										
#6B - 1'10"-2'4"		12:10	S									X				X										
#6B - 3'3.5"-3'9.5"		12 10	S									X				X										
#8 - 1'-1.5'		11:05	S									X				X										
#8 - 3'-4'		11:05	S									X				X										

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Project Info.

Project Name: Western Forge

Project#: 102730

PO#: 102730

Credit Card#:

Sample Receipt

of Containers:

Head Space:

Temp: Sent 24.8 Work 4.7

Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID

Special Instructions / Comments:

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 4:25 PM 10/3/08	Signature: Time:	Signature: Time:
Printed Name: FELICIA ARUTAKUMARA Date:	Printed Name: Date:	Printed Name: Date:
Company: CDMS	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 16:25	Signature: Time:	Signature: Time:
Printed Name: [signature] Date: 10-3-08	Printed Name: Date:	Printed Name: Date:
Company: TestAmerica	Company:	Company:

Rev 06/04

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax (925) 600-3002

720-16304

Reference #: 112742

Date 10/3/08 Page 2 of 2

Report To

Attn: JIM CARRO

Company: CDMS

Address:

Phone: Email:

Bill To: Sampled By:

Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021: ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other:	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☑ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☑ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	Spec Cond ☐ Alkalinity ☐ TSS ☐	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
#9 - 9" - 15"	10/3/08	1:20	S									X				X					
#9 - 3' - 3'10"	?	1:20	S									X				X					

Project Info.

Project Name: Western Forge

Project#: 102730

PO#: 102730

Credit Card#:

Sample Receipt

of Containers:

Head Space:

Temp:

Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID

Special Instructions / Comments:

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: 4:25 PM (Time)	Signature: Time:	Signature: Time:
Printed Name: FELICIA ARISTAKUMARA Date: 10/3/08	Printed Name: Date:	Printed Name: Date:
Company: CDMS	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: Time: 16:25	Signature: Time:	Signature: Time:
Printed Name: Jay Hilley Date: 10-3-08	Printed Name: Date:	Printed Name: Date:
Company: Test America	Company:	Company:

Rev 06-04

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Login Sample Receipt Check List

Client: Chemical Data Management

Job Number: 720-16304-1

Login Number: 16304

List Source: TestAmerica San Francisco

Creator: Mullen, Joan

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	See Narrative
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-16328-1

Job Description: Western Forge, Albany

For:
Chemical Data Management
6515 Trinity Court
Suite 201
Dublin, CA 94568-2665

Attention: Mr. James Carro

Approved for release.
Melissa Brewer
Project Manager I
10/16/2008 11:20 AM

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
10/16/2008

Job Narrative
720-J16328-1

Comments
No additional comments.

Receipt
Insufficient sample volume was provided for all of the samples. Received one wipe per sample for both Metals and Oil & Grease analyses. Per Jim Carro split wipe sample in half.

Total Oil and Grease needed per phone call to Jim.

All three samples were received at the laboratory outside the required temperature criteria for Oil & Grease.

All other samples were received in good condition within temperature requirements.

Metals
Method 3050B: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: Used only half of the wipe sample instead of a full wipe. Batch 42445

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16328-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16328-1	**#1, HOIST**				
Chromium		0.29	0.0050	mg/wipe	6010B
Nickel		1.6	0.0050	mg/wipe	6010B
Lead		0.22	0.0050	mg/wipe	6010B
Zinc		0.64	0.0050	mg/wipe	6010B
720-16328-2	**#2, ELECTRIC BOX**				
Chromium		0.46	0.0050	mg/wipe	6010B
Nickel		7.6	0.050	mg/wipe	6010B
Lead		0.054	0.0050	mg/wipe	6010B
Zinc		1.0	0.0050	mg/wipe	6010B
720-16328-3	**#3, RING ROLLER**				
Chromium		0.39	0.0050	mg/wipe	6010B
Nickel		2.3	0.0050	mg/wipe	6010B
Lead		0.28	0.0050	mg/wipe	6010B
Zinc		0.48	0.0050	mg/wipe	6010B

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-16328-1

Description	Lab Location	Method	Preparation Method
Matrix: Wipe			
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Metals	TAL SF		SW846 3050B
HEM	TAL SF	SW846 9071B	
HEM	TAL SF		SW846 9071B

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Chemical Data Management Job Number: 720-16328-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-16328-1	#1, HOIST	Wipe	10/03/2008 1015	10/06/2008 1424
720-16328-2	#2, ELECTRIC BOX	Wipe	10/03/2008 1017	10/06/2008 1424
720-16328-3	#3, RING ROLLER	Wipe	10/03/2008 1020	10/06/2008 1424

Client: Chemical Data Management

Job Number: 720-16328-1

Client Sample ID: #1, HOIST

Lab Sample ID: 720-16328-1
Client Matrix: Wipe

Date Sampled: 10/03/2008 1015
Date Received: 10/06/2008 1424

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 10/15/2008 0659
Date Prepared: 10/13/2008 1432

Analysis Batch: 720-42530
Prep Batch: 720-42445

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1 Wipe
Final Weight/Volume: 50 mL

Analyte	Result (mg/wipe)	Qualifier	RL
Cadmium	ND		0.0050
Chromium	0.29		0.0050
Nickel	1.6		0.0050
Lead	0.22		0.0050
Zinc	0.64		0.0050

Client: Chemical Data Management

Job Number: 720-16328-1

Client Sample ID: #2, ELECTRIC BOX

Lab Sample ID: 720-16328-2
Client Matrix: Wipe

Date Sampled: 10/03/2008 1017
Date Received: 10/06/2008 1424

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42530		Instrument ID:	Varian ICP
Preparation:	3050B	Prep Batch: 720-42445		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1 Wipe
Date Analyzed:	10/15/2008 0703			Final Weight/Volume:	50 mL
Date Prepared:	10/13/2008 1432				

Analyte	Result (mg/wipe)	Qualifier	RL
Cadmium	ND		0.0050
Chromium	0.46		0.0050
Lead	0.054		0.0050
Zinc	1.0		0.0050

Method:	6010B	Analysis Batch: 720-42530		Instrument ID:	Varian ICP
Preparation:	3050B	Prep Batch: 720-42445		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	1 Wipe
Date Analyzed:	10/15/2008 0731			Final Weight/Volume:	50 mL
Date Prepared:	10/13/2008 1432				

Analyte	Result (mg/wipe)	Qualifier	RL
Nickel	7.6		0.050

Client: Chemical Data Management

Job Number: 720-16328-1

Client Sample ID: #3, RING ROLLER

Lab Sample ID: 720-16328-3
Client Matrix: Wipe

Date Sampled: 10/03/2008 1020
Date Received: 10/06/2008 1424

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-42530		Instrument ID:	Varian ICP
Preparation:	3050B	Prep Batch: 720-42445		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1 Wipe
Date Analyzed:	10/15/2008 0707			Final Weight/Volume:	50 mL
Date Prepared:	10/13/2008 1432				

Analyte	Result (mg/wipe)	Qualifier	RL
Cadmium	ND		0.0050
Chromium	0.39		0.0050
Nickel	2.3		0.0050
Lead	0.28		0.0050
Zinc	0.48		0.0050

General Chemistry

Client Sample ID: #1, HOIST

Lab Sample ID: 720-16328-1 Date Sampled: 10/03/2008 1015
Client Matrix: Wipe Date Received: 10/06/2008 1424

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/wipe	5.0	1.0	9071B
	Anly Batch: 720-42457		Date Analyzed 10/13/2008 1611			
	Prep Batch: 720-42435		Date Prepared: 10/13/2008 1333			

Client Sample ID: #2, ELECTRIC BOX

Lab Sample ID: 720-16328-2 Date Sampled: 10/03/2008 1017
Client Matrix: Wipe Date Received: 10/06/2008 1424

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/wipe	5.0	1.0	9071B
	Anly Batch: 720-42457		Date Analyzed 10/13/2008 1611			
	Prep Batch: 720-42435		Date Prepared: 10/13/2008 1333			

Client Sample ID: #3, RING ROLLER

Lab Sample ID: 720-16328-3 Date Sampled: 10/03/2008 1020
Client Matrix: Wipe Date Received: 10/06/2008 1424

Analyte	Result	Qual	Units	RL	Dil	Method
HEM	ND		mg/wipe	5.0	1.0	9071B
	Anly Batch: 720-42457		Date Analyzed 10/13/2008 1611			
	Prep Batch: 720-42435		Date Prepared: 10/13/2008 1333			

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: Chemical Data Management Job Number: 720-16328-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-42445					
LCS 720-42445/2-A	Lab Control Spike	T	Wipe	3050B	
LCSD 720-42445/3-A	Lab Control Spike Duplicate	T	Wipe	3050B	
MB 720-42445/1-A	Method Blank	T	Wipe	3050B	
720-16328-1	#1, HOIST	T	Wipe	3050B	
720-16328-2	#2, ELECTRIC BOX	T	Wipe	3050B	
720-16328-3	#3, RING ROLLER	T	Wipe	3050B	
Analysis Batch:720-42530					
LCS 720-42445/2-A	Lab Control Spike	T	Wipe	6010B	720-42445
LCSD 720-42445/3-A	Lab Control Spike Duplicate	T	Wipe	6010B	720-42445
MB 720-42445/1-A	Method Blank	T	Wipe	6010B	720-42445
720-16328-1	#1, HOIST	T	Wipe	6010B	720-42445
720-16328-2	#2, ELECTRIC BOX	T	Wipe	6010B	720-42445
720-16328-3	#3, RING ROLLER	T	Wipe	6010B	720-42445

Report Basis
T = Total

General Chemistry					
Prep Batch: 720-42435					
LCS 720-42435/2-A	Lab Control Spike	T	Wipe	9071B	
LCSD 720-42435/3-A	Lab Control Spike Duplicate	T	Wipe	9071B	
MB 720-42435/1-A	Method Blank	T	Wipe	9071B	
720-16328-1	#1, HOIST	T	Wipe	9071B	
720-16328-2	#2, ELECTRIC BOX	T	Wipe	9071B	
720-16328-3	#3, RING ROLLER	T	Wipe	9071B	
Analysis Batch:720-42457					
LCS 720-42435/2-A	Lab Control Spike	T	Wipe	9071B	720-42435
LCSD 720-42435/3-A	Lab Control Spike Duplicate	T	Wipe	9071B	720-42435
MB 720-42435/1-A	Method Blank	T	Wipe	9071B	720-42435
720-16328-1	#1, HOIST	T	Wipe	9071B	720-42435
720-16328-2	#2, ELECTRIC BOX	T	Wipe	9071B	720-42435
720-16328-3	#3, RING ROLLER	T	Wipe	9071B	720-42435

Report Basis
T = Total

Client: Chemical Data Management

Job Number: 720-16328-1

Method Blank - Batch: 720-42445

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-42445/1-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/15/2008 0644
Date Prepared: 10/13/2008 1432

Analysis Batch: 720-42530
Prep Batch: 720-42445
Units: mg/wipe

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1 Wipe
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.0050
Chromium	ND		0.0050
Nickel	ND		0.0050
Lead	ND		0.0050
Zinc	ND		0.0050

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42445

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID: LCS 720-42445/2-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/15/2008 0652
Date Prepared: 10/13/2008 1432

Analysis Batch: 720-42530
Prep Batch: 720-42445
Units: mg/wipe

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1 Wipe
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-42445/3-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/15/2008 0656
Date Prepared: 10/13/2008 1432

Analysis Batch: 720-42530
Prep Batch: 720-42445
Units: mg/wipe

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume: 1 Wipe
Final Weight/Volume: 50 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	96	95	80 - 120	1	20		
Chromium	97	96	80 - 120	1	20		
Nickel	95	94	80 - 120	1	20		
Lead	96	95	80 - 120	1	20		
Zinc	95	94	80 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16328-1

Method Blank - Batch: 720-42435

Method: 9071B
Preparation: 9071B

Lab Sample ID: MB 720-42435/1-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/13/2008 1611
Date Prepared: 10/13/2008 1333

Analysis Batch: 720-42457
Prep Batch: 720-42435
Units: mg/wipe

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 1 g
Final Weight/Volume: 1 mL

Analyte	Result	Qual	RL
HEM	ND		5.0

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-42435

Method: 9071B
Preparation: 9071B

LCS Lab Sample ID: LCS 720-42435/2-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/13/2008 1611
Date Prepared: 10/13/2008 1333

Analysis Batch: 720-42457
Prep Batch: 720-42435
Units: mg/wipe

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 1 g
Final Weight/Volume: 1 mL

LCSD Lab Sample ID: LCSD 720-42435/3-A
Client Matrix: Wipe
Dilution: 1.0
Date Analyzed: 10/13/2008 1611
Date Prepared: 10/13/2008 1333

Analysis Batch: 720-42457
Prep Batch: 720-42435
Units: mg/wipe

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 1 g
Final Weight/Volume: 1 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	95	94	70 - 120	1	25		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Brewer, Melissa

From: Jim Carro [jim@cdms.com]
Sent: Tuesday, October 14, 2008 8:57 AM
To: Brewer, Melissa
Subject: Re: Files from 720-16328-1 Western Forge, Albany

Melissa,

This email give you permission to split the above mention samples in half.

On Oct 13, 2008, at 4:46PM, Brewer, Melissa wrote:

> Our QA Manager requested that we receive an email in writing that you'd like us to split the wipes in half for analysis. Could you send me an email regarding the above?
>
> Thank you in advance.
>
> **MELISSA BREWER**
>
> TestAmerica
> THE LEADER IN ENVIRONMENTAL TESTING
>
> Tel: 925.484,1919
> www.testamericainc.com
>
> Reference: [033075]
> Attachments: 1
>
>
> <16328.pdf>

Jim Carro

Chemical Data Management Systems
Chain of Custody
6515 Trinity Ct Suite 201 Dublin, CA 94568
(925) 551-7300

T20-16328

Reference # 112782
Date 10/6/8 Page 1 of 1

10/16/2008

Page 15 of 16

Report To	
Attn: James Cairo	
Company: Chemical Data Mgmt Sys	
Address: 6525 Trinity Court, Suite 201	
City, State, Zip: Dublin, CA 94568	
Email: jim@cdms.com	
Email:	
Bill To (Attn): Lori Der	

Analysis Requested

Sample Id	Date	Time	Matrix	Preservative	TPH EPA - ( ) 8015/8021 ( ) 8260B ( ) Gas w/ ( ) BTEX ( ) MTBE	Purgeable Aromatics BTEX EPA - ( ) BTEX ( ) 8260B	TEPH EPA 8015M* (Silica Gel ( ) Diesel ( ) Motor Oil ( ) Other	Fuel Tests EPA 8260B: ( ) Gas ( ) BTEX ( ) Five Oxygenates ( ) DCA, EDB ( ) Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ( ) EPA 8260B ( ) 624	Semivolatiles GC/MS ( ) EPA 8270 ( ) 625	Oil and Grease ( ) Petroleum (EPA 1664) ( ) Total	Pesticides ( ) EPA 8081 ( ) 608 PCBs ( ) EPA 8082 ( ) 608	PHAs by ( ) 8270 ( ) 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ( ) Lead ( ) LUFT ( ) RCRA ( ) Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	( ) W.E.T. (STLC) ( ) TCLP	( ) Hexavalent Chromium ( ) pH (24 h hold time for H2O)	( ) Spec Cond. ( ) Alkalinity ( ) TSS ( ) TDS	Anions: ( ) CL ( ) SO4 ( ) NO3 ( ) F ( ) Br ( ) NO2 ( ) PO4	Cd,Cr,Pb,Ni,Zn			Number of Containers
#1, Hoist	10/3/08	10:15 AM										√									√				1
#2, Electric Box	10/3/08	10:17 AM										√									√				1
#3, Ring Roller	10/3/08	10:20 AM										√									√				1

Project Info					
Project Name:					# of Containers: 3 PLASTIC BAGS
Project #:					Head Space:
PO #:					Temperature: 28.6°C
Credit Card #					Conforms to record
TAT	5 Day	72h	48h	24h	Other

Report: ( ) Routine ( ) Level 3 ( ) Level 4 ( ) EDD ( ) State Tank Fund EDF ( ) Global ID
Special Instructions/Comments:

8015M reported from C9-C24 (industry norm). Default for 8015 is C10-C28

Sample Receipt:

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: J Cairo	Signature: Ronda Slack	Signature:
Printed Name: J. Cairo	Printed Name: Ronda Slack	Printed Name:
Company: CDMS	Company: CDMS	Company:
Phone: 925-551-7300	Phone: 10/10/08 2:25pm (925) 551-7300	Phone:
1) Received by: Ronda Slack	2) Received by:	3) Received by:
Signature: Ronda Slack	Signature: G. Guillen	Signature:
Printed Name: CDMS	Printed Name: TAL-SF	Printed Name:
Company: (925) 551-7300	Company: 925-484-1919	Company:
Phone: 10/6/08 2:11pm	Phone: 10/6/08 14:24	Phone:

Login Sample Receipt Check List

Client: Chemical Data Management

Job Number: 720-16328-1

Login Number: 16328

List Source: TestAmerica San Francisco

Creator: Bullock, Tracy

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	See Narrative
Cooler Temperature is acceptable.	False	See Narrative
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	See Narrative
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	See Narrative
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

ANALYTICAL REPORT

Job Number: 720-16931-1

Job Description: Western Forge, Albany

For:
Chemical Data Management
6515 Trinity Court
Suite 201
Dublin, CA 94568-2665

Attention: Mr. James Carro

Designee for
Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
11/21/2008

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
C19-C36 = Hydraulic Oil

No additional comments.

Receipt
Hold analysis until Monday for client confirmation regarding Silica Gel Cleanup. Felicia confirmed that Silica Gel cleanup required on 11/17/08.

Water samples were logged in for Dissolved Metals and Dissolved TEPH, although the samples were received preserved with acid.

All other samples were received in good condition within temperature requirements.

GC Semi VOA
Method 8015B: Surrogate recovery for the following sample was outside control limits: W-101 (720-16931-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-1	**SB-101 3'-4'**				
Chromium		17	0.95	mg/Kg	6010B
Nickel		22	0.95	mg/Kg	6010B
Lead		12	0.95	mg/Kg	6010B
Zinc		26	0.95	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		85	1.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		58	50	mg/Kg	8015B
C19-C36		150	50	mg/Kg	8015B
720-16931-2	**SB-101 7'-8'**				
Chromium		14	0.98	mg/Kg	6010B
Nickel		8.2	0.98	mg/Kg	6010B
Lead		5.2	0.98	mg/Kg	6010B
Zinc		9.4	0.98	mg/Kg	6010B
720-16931-3	**SB-101 11'-12'**				
Chromium		8.8	0.95	mg/Kg	6010B
Nickel		10	0.95	mg/Kg	6010B
Lead		3.7	0.95	mg/Kg	6010B
Zinc		14	0.95	mg/Kg	6010B
720-16931-4	**SB-101 15'-16'**				
Chromium		16	1.0	mg/Kg	6010B
Nickel		20	1.0	mg/Kg	6010B
Lead		6.2	1.0	mg/Kg	6010B
Zinc		23	1.0	mg/Kg	6010B
720-16931-5	**SB-102 3'-4'**				
Chromium		45	1.0	mg/Kg	6010B
Nickel		60	1.0	mg/Kg	6010B
Lead		15	1.0	mg/Kg	6010B
Zinc		33	1.0	mg/Kg	6010B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-6	**SB-102 7'-8'**				
Chromium		16	1.0	mg/Kg	6010B
Nickel		7.8	1.0	mg/Kg	6010B
Lead		110	1.0	mg/Kg	6010B
Zinc		70	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		13	1.0	mg/Kg	8015B
C19-C36		52	50	mg/Kg	8015B
720-16931-7	**SB-102 11'-12'**				
Chromium		13	1.0	mg/Kg	6010B
Nickel		9.4	1.0	mg/Kg	6010B
Lead		5.0	1.0	mg/Kg	6010B
Zinc		13	1.0	mg/Kg	6010B
720-16931-8	**SB-102 15'-16'**				
Chromium		11	0.96	mg/Kg	6010B
Nickel		15	0.96	mg/Kg	6010B
Lead		7.1	0.96	mg/Kg	6010B
Zinc		26	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		4.9	0.99	mg/Kg	8015B
720-16931-9	**SB-103 3'-4'**				
Chromium		67	1.1	mg/Kg	6010B
Nickel		85	1.1	mg/Kg	6010B
Lead		11	1.1	mg/Kg	6010B
Zinc		52	1.1	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		46	2.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		180	99	mg/Kg	8015B
C19-C36		210	99	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-10	**SB-103 7'-8'**				
Chromium		18	1.0	mg/Kg	6010B
Nickel		9.7	1.0	mg/Kg	6010B
Lead		150	1.0	mg/Kg	6010B
Zinc		110	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		23	1.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		94	50	mg/Kg	8015B
C19-C36		110	50	mg/Kg	8015B
720-16931-11	**SB-103 11'-12'**				
Chromium		18	0.96	mg/Kg	6010B
Nickel		23	0.96	mg/Kg	6010B
Lead		3.7	0.96	mg/Kg	6010B
Zinc		12	0.96	mg/Kg	6010B
720-16931-12	**SB-103 15'-16'**				
Chromium		18	1.0	mg/Kg	6010B
Nickel		23	1.0	mg/Kg	6010B
Lead		3.9	1.0	mg/Kg	6010B
Zinc		12	1.0	mg/Kg	6010B
720-16931-13	**SB-111 0'-1'**				
Chromium		37	1.0	mg/Kg	6010B
Nickel		180	1.0	mg/Kg	6010B
Lead		19	1.0	mg/Kg	6010B
Zinc		920	10	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		68	0.99	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		310	49	mg/Kg	8015B
C19-C36		360	49	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-14	**SB-111 3'-4'**				
Chromium		50	0.99	mg/Kg	6010B
Nickel		69	0.99	mg/Kg	6010B
Lead		6.6	0.99	mg/Kg	6010B
Zinc		44	0.99	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		8.6	0.98	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		55	49	mg/Kg	8015B
C19-C36		60	49	mg/Kg	8015B
720-16931-15	**SB-111 5'-6'**				
Chromium		26	0.97	mg/Kg	6010B
Nickel		21	0.97	mg/Kg	6010B
Lead		29	0.97	mg/Kg	6010B
Zinc		62	0.97	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		3.6	0.99	mg/Kg	8015B
720-16931-16	**SB-111 7'-8'**				
Chromium		15	1.0	mg/Kg	6010B
Nickel		12	1.0	mg/Kg	6010B
Lead		49	1.0	mg/Kg	6010B
Zinc		50	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		23	1.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		70	50	mg/Kg	8015B
C19-C36		87	50	mg/Kg	8015B
720-16931-17	**SB-111 9'-10'**				
Chromium		14	1.0	mg/Kg	6010B
Nickel		8.8	1.0	mg/Kg	6010B
Lead		10	1.0	mg/Kg	6010B
Zinc		13	1.0	mg/Kg	6010B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-18	**SB-112 3'-4'**				
Chromium		13	0.99	mg/Kg	6010B
Nickel		26	0.99	mg/Kg	6010B
Lead		13	0.99	mg/Kg	6010B
Zinc		29	0.99	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		16	0.99	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		51	50	mg/Kg	8015B
C19-C36		63	50	mg/Kg	8015B
720-16931-19	**W-101**				
Dissolved					
Diesel Range Organics [C10-C28]		58	50	ug/L	8015B
Nickel		0.12	0.0050	mg/L	6010B
Lead		0.0065	0.0050	mg/L	6010B
Zinc		0.056	0.010	mg/L	6010B
720-16931-20	**W-102**				
Dissolved					
Diesel Range Organics [C10-C28]		54	50	ug/L	8015B
Chromium		0.014	0.0050	mg/L	6010B
Nickel		0.14	0.0050	mg/L	6010B
Lead		0.77	0.0050	mg/L	6010B
Zinc		1.2	0.010	mg/L	6010B
720-16931-21	**W-103**				
Dissolved					
Diesel Range Organics [C10-C28]		74	50	ug/L	8015B
Chromium		0.026	0.0050	mg/L	6010B
Nickel		0.38	0.0050	mg/L	6010B
Lead		0.061	0.0050	mg/L	6010B
Zinc		1.4	0.010	mg/L	6010B
720-16931-22	**W-111**				
Dissolved					
Diesel Range Organics [C10-C28]		91	50	ug/L	8015B
Nickel		0.42	0.0050	mg/L	6010B
Zinc		8.4	0.010	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-16931-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16931-23	**SB-112 7'-8'**				
Chromium		70	0.96	mg/Kg	6010B
Nickel		86	0.96	mg/Kg	6010B
Lead		7.7	0.96	mg/Kg	6010B
Zinc		42	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		2.2	1.0	mg/Kg	8015B

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-16931-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Ultrasonic Extraction	TAL SF		SW846 3550B
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Metals	TAL SF		SW846 3050B
Matrix: Water			
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Sample Filtration	TAL SF		FILTRATION
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC
Metals (ICP)	TAL SF	SW846 6010B	
Sample Filtration	TAL SF		FILTRATION
Preparation, Soluble	TAL SF		Soluble Metals

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Chemical Data Management

Job Number: 720-16931-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-16931-1	SB-101 3'-4'	Solid	11/14/2008 1200	11/14/2008 1735
720-16931-2	SB-101 7'-8'	Solid	11/14/2008 1200	11/14/2008 1735
720-16931-3	SB-101 11'-12'	Solid	11/14/2008 1200	11/14/2008 1735
720-16931-4	SB-101 15'-16'	Solid	11/14/2008 1200	11/14/2008 1735
720-16931-5	SB-102 3'-4'	Solid	11/14/2008 1250	11/14/2008 1735
720-16931-6	SB-102 7'-8'	Solid	11/14/2008 1250	11/14/2008 1735
720-16931-7	SB-102 11'-12'	Solid	11/14/2008 1250	11/14/2008 1735
720-16931-8	SB-102 15'-16'	Solid	11/14/2008 1250	11/14/2008 1735
720-16931-9	SB-103 3'-4'	Solid	11/14/2008 1400	11/14/2008 1735
720-16931-10	SB-103 7'-8'	Solid	11/14/2008 1400	11/14/2008 1735
720-16931-11	SB-103 11'-12'	Solid	11/14/2008 1400	11/14/2008 1735
720-16931-12	SB-103 15'-16'	Solid	11/14/2008 1400	11/14/2008 1735
720-16931-13	SB-111 0'-1'	Solid	11/14/2008 1510	11/14/2008 1735
720-16931-14	SB-111 3'-4'	Solid	11/14/2008 1510	11/14/2008 1735
720-16931-15	SB-111 5'-6'	Solid	11/14/2008 1510	11/14/2008 1735
720-16931-16	SB-111 7'-8'	Solid	11/14/2008 1510	11/14/2008 1735
720-16931-17	SB-111 9'-10'	Solid	11/14/2008 1510	11/14/2008 1735
720-16931-18	SB-112 3'-4'	Solid	11/14/2008 1555	11/14/2008 1735
720-16931-19	W-101	Water	11/14/2008 1200	11/14/2008 1735
720-16931-20	W-102	Water	11/14/2008 1250	11/14/2008 1735
720-16931-21	W-103	Water	11/14/2008 1445	11/14/2008 1735
720-16931-22	W-111	Water	11/14/2008 1545	11/14/2008 1735
720-16931-23	SB-112 7'-8'	Solid	11/14/2008 1555	11/14/2008 1735

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 3'-4'

Lab Sample ID: 720-16931-1
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1113
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.03 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		85		1.0
Motor Oil Range Organics [C24-C36]		58		50
C19-C36		150		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	70	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 7'-8'

Lab Sample ID: 720-16931-2
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1139
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.41 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		49
C19-C36		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	77	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 11'-12'

Lab Sample ID: 720-16931-3
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1206
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.12 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	83	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 15'-16'

Lab Sample ID: 720-16931-4
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1233
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.08 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	86	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 3'-4'

Lab Sample ID: 720-16931-5
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1300
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.07 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	72	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 7'-8'

Lab Sample ID: 720-16931-6
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1327
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.02 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		13		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		52		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	79	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 11'-12'

Lab Sample ID: 720-16931-7
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1354
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.24 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 15'-16'

Lab Sample ID: 720-16931-8
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 2038
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.39 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		4.9		0.99
Motor Oil Range Organics [C24-C36]		ND		49
C19-C36		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	88	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 3'-4'

Lab Sample ID: 720-16931-9
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 2.0
Date Analyzed: 11/19/2008 0925
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.43 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		46		2.0
Motor Oil Range Organics [C24-C36]		180		99
C19-C36		210		99

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	73	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 7'-8'

Lab Sample ID: 720-16931-10
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1728
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.11 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		23		1.0
Motor Oil Range Organics [C24-C36]		94		50
C19-C36		110		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	77	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 11'-12'

Lab Sample ID: 720-16931-11
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 2105
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.27 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	80	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 15'-16'

Lab Sample ID: 720-16931-12
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 2132
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.22 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	86	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 0'-1'

Lab Sample ID: 720-16931-13
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1635
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.42 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		68		0.99
Motor Oil Range Organics [C24-C36]		310		49
C19-C36		360		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	77	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 3'-4'

Lab Sample ID: 720-16931-14
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1755
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.48 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		8.6		0.98
Motor Oil Range Organics [C24-C36]		55		49
C19-C36		60		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	81	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 5'-6'

Lab Sample ID: 720-16931-15
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1822
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.44 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		3.6		0.99
Motor Oil Range Organics [C24-C36]		ND		49
C19-C36		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	78	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 7'-8'

Lab Sample ID: 720-16931-16
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1849
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.05 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		23		1.0
Motor Oil Range Organics [C24-C36]		70		50
C19-C36		87		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	84	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 9'-10'

Lab Sample ID: 720-16931-17
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 2159
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.39 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		0.99
Motor Oil Range Organics [C24-C36]		ND		49
C19-C36		ND		49

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	79	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-112 3'-4'

Lab Sample ID: 720-16931-18
Client Matrix: Solid

Date Sampled: 11/14/2008 1555
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1916
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.24 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		16		0.99
Motor Oil Range Organics [C24-C36]		51		50
C19-C36		63		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	69	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-101

Lab Sample ID: 720-16931-19
Client Matrix: Water

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/20/2008 1921
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	58		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	44	X	46 - 114

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-102

Lab Sample ID: 720-16931-20
Client Matrix: Water

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/20/2008 1948
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	54		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	63	46 - 114

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-103

Lab Sample ID: 720-16931-21
Client Matrix: Water

Date Sampled: 11/14/2008 1445
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/20/2008 2015
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	74		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	47	46 - 114

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-111

Lab Sample ID: 720-16931-22
Client Matrix: Water

Date Sampled: 11/14/2008 1545
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/20/2008 2042
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	91		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	50	46 - 114

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-112 7'-8'

Lab Sample ID: 720-16931-23
Client Matrix: Solid

Date Sampled: 11/14/2008 1555
Date Received: 11/14/2008 1735

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/19/2008 1943
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.04 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.2		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	79	41 - 105

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 3'-4'

Lab Sample ID: 720-16931-1
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	11/19/2008 1330			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		17		0.95
Nickel		22		0.95
Lead		12		0.95
Zinc		26		0.95

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 7'-8'

Lab Sample ID: 720-16931-2
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Date Analyzed:	11/19/2008 1333			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		14		0.98
Nickel		8.2		0.98
Lead		5.2		0.98
Zinc		9.4		0.98

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 11'-12'

Lab Sample ID: 720-16931-3
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	11/19/2008 1337			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		8.8		0.95
Nickel		10		0.95
Lead		3.7		0.95
Zinc		14		0.95

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-101 15'-16'

Lab Sample ID: 720-16931-4
Client Matrix: Solid

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.97 g
Date Analyzed:	11/19/2008 1340			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		16		1.0
Nickel		20		1.0
Lead		6.2		1.0
Zinc		23		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 3'-4'

Lab Sample ID: 720-16931-5
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.99 g
Date Analyzed:	11/19/2008 1343			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.51
Chromium		45		1.0
Nickel		60		1.0
Lead		15		1.0
Zinc		33		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 7'-8'

Lab Sample ID: 720-16931-6
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Date Analyzed:	11/19/2008 1347			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		16		1.0
Nickel		7.8		1.0
Lead		110		1.0
Zinc		70		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 11'-12'

Lab Sample ID: 720-16931-7
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Date Analyzed:	11/19/2008 1351			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		13		1.0
Nickel		9.4		1.0
Lead		5.0		1.0
Zinc		13		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-102 15'-16'

Lab Sample ID: 720-16931-8
Client Matrix: Solid

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Date Analyzed:	11/19/2008 1354			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		11		0.96
Nickel		15		0.96
Lead		7.1		0.96
Zinc		26		0.96

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 3'-4'

Lab Sample ID: 720-16931-9
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.95 g
Date Analyzed:	11/19/2008 1357			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.53
Chromium		67		1.1
Nickel		85		1.1
Lead		11		1.1
Zinc		52		1.1

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 7'-8'

Lab Sample ID: 720-16931-10
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.96 g
Date Analyzed:	11/19/2008 1412			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		18		1.0
Nickel		9.7		1.0
Lead		150		1.0
Zinc		110		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 11'-12'

Lab Sample ID: 720-16931-11
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Date Analyzed:	11/19/2008 1415			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		18		0.96
Nickel		23		0.96
Lead		3.7		0.96
Zinc		12		0.96

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-103 15'-16'

Lab Sample ID: 720-16931-12
Client Matrix: Solid

Date Sampled: 11/14/2008 1400
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Date Analyzed:	11/19/2008 1419			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		18		1.0
Nickel		23		1.0
Lead		3.9		1.0
Zinc		12		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 0'-1'

Lab Sample ID: 720-16931-13
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.96 g
Date Analyzed:	11/19/2008 1422			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		37		1.0
Nickel		180		1.0
Lead		19		1.0

Method:	6010B	Analysis Batch: 720-44130		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	.96 g
Date Analyzed:	11/21/2008 0921			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Zinc		920		10

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 3'-4'

Lab Sample ID: 720-16931-14
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Date Analyzed:	11/19/2008 1426			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		50		0.99
Nickel		69		0.99
Lead		6.6		0.99
Zinc		44		0.99

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 5'-6'

Lab Sample ID: 720-16931-15
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Date Analyzed:	11/19/2008 1432			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		26		0.97
Nickel		21		0.97
Lead		29		0.97
Zinc		62		0.97

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 7'-8'

Lab Sample ID: 720-16931-16
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.96 g
Date Analyzed:	11/19/2008 1436			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		15		1.0
Nickel		12		1.0
Lead		49		1.0
Zinc		50		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-111 9'-10'

Lab Sample ID: 720-16931-17
Client Matrix: Solid

Date Sampled: 11/14/2008 1510
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	.96 g
Date Analyzed:	11/19/2008 1439			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		14		1.0
Nickel		8.8		1.0
Lead		10		1.0
Zinc		13		1.0

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-112 3'-4'

Lab Sample ID: 720-16931-18
Client Matrix: Solid

Date Sampled: 11/14/2008 1555
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Date Analyzed:	11/19/2008 1443			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		13		0.99
Nickel		26		0.99
Lead		13		0.99
Zinc		29		0.99

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-101

Lab Sample ID: 720-16931-19
Client Matrix: Water

Date Sampled: 11/14/2008 1200
Date Received: 11/14/2008 1735

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-44094		Instrument ID:	Varian ICP
Preparation:	Soluble Metals	Prep Batch: 720-44081		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	11/20/2008 1153			Final Weight/Volume:	1.0 mL
Date Prepared:	11/20/2008 1034				

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	0.12		0.0050
Lead	0.0065		0.0050
Zinc	0.056		0.010

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-102

Lab Sample ID: 720-16931-20
Client Matrix: Water

Date Sampled: 11/14/2008 1250
Date Received: 11/14/2008 1735

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-44094		Instrument ID:	Varian ICP
Preparation:	Soluble Metals	Prep Batch: 720-44081		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	11/20/2008 1157			Final Weight/Volume:	1.0 mL
Date Prepared:	11/20/2008 1034				

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	0.014		0.0050
Nickel	0.14		0.0050
Lead	0.77		0.0050
Zinc	1.2		0.010

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-103

Lab Sample ID: 720-16931-21
Client Matrix: Water

Date Sampled: 11/14/2008 1445
Date Received: 11/14/2008 1735

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-44094		Instrument ID:	Varian ICP
Preparation:	Soluble Metals	Prep Batch: 720-44081		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	11/20/2008 1201			Final Weight/Volume:	1.0 mL
Date Prepared:	11/20/2008 1034				

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	0.026		0.0050
Nickel	0.38		0.0050
Lead	0.061		0.0050
Zinc	1.4		0.010

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: W-111

Lab Sample ID: 720-16931-22
Client Matrix: Water

Date Sampled: 11/14/2008 1545
Date Received: 11/14/2008 1735

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-44094		Instrument ID:	Varian ICP
Preparation:	Soluble Metals	Prep Batch: 720-44081		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	11/20/2008 1204			Final Weight/Volume:	1.0 mL
Date Prepared:	11/20/2008 1034				

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	0.42		0.0050
Lead	ND		0.0050
Zinc	8.4		0.010

Client: Chemical Data Management

Job Number: 720-16931-1

Client Sample ID: SB-112 7'-8'

Lab Sample ID: 720-16931-23
Client Matrix: Solid

Date Sampled: 11/14/2008 1555
Date Received: 11/14/2008 1735

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44062		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-43961		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Date Analyzed:	11/19/2008 1446			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2008 0922				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		70		0.96
Nickel		86		0.96
Lead		7.7		0.96
Zinc		42		0.96

DATA REPORTING QUALIFIERS

Client: Chemical Data Management Job Number: 720-16931-1

Lab Section	Qualifier	Description
GC Semi VOA		
	X	Surrogate exceeds the control limits

Client: Chemical Data Management Job Number: 720-16931-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-43948					
LCS 720-43947/2-B	Lab Control Spike	D	Water	3510C SGC	
LCSD 720-43947/3-B	Lab Control Spike Duplicate	D	Water	3510C SGC	
MB 720-43947/1-B	Method Blank	D	Water	3510C SGC	
720-16931-19	W-101	D	Water	3510C SGC	
720-16931-20	W-102	D	Water	3510C SGC	
720-16931-21	W-103	D	Water	3510C SGC	
720-16931-22	W-111	D	Water	3510C SGC	
Prep Batch: 720-43962					
MB 720-43962/1-A	Method Blank	A	Solid	3550B	
720-16931-1	SB-101 3'-4'	A	Solid	3550B	
720-16931-2	SB-101 7'-8'	A	Solid	3550B	
720-16931-3	SB-101 11'-12'	A	Solid	3550B	
720-16931-3MS	Matrix Spike	A	Solid	3550B	
720-16931-3MSD	Matrix Spike Duplicate	A	Solid	3550B	
720-16931-4	SB-101 15'-16'	A	Solid	3550B	
720-16931-5	SB-102 3'-4'	A	Solid	3550B	
720-16931-6	SB-102 7'-8'	A	Solid	3550B	
720-16931-7	SB-102 11'-12'	A	Solid	3550B	
720-16931-8	SB-102 15'-16'	A	Solid	3550B	
720-16931-9	SB-103 3'-4'	A	Solid	3550B	
720-16931-10	SB-103 7'-8'	A	Solid	3550B	
720-16931-11	SB-103 11'-12'	A	Solid	3550B	
720-16931-12	SB-103 15'-16'	A	Solid	3550B	
720-16931-13	SB-111 0'-1'	A	Solid	3550B	
720-16931-14	SB-111 3'-4'	A	Solid	3550B	
720-16931-15	SB-111 5'-6'	A	Solid	3550B	
720-16931-16	SB-111 7'-8'	A	Solid	3550B	
720-16931-17	SB-111 9'-10'	A	Solid	3550B	
720-16931-18	SB-112 3'-4'	A	Solid	3550B	
720-16931-23	SB-112 7'-8'	A	Solid	3550B	

Client: Chemical Data Management

Job Number: 720-16931-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-44103					
MB 720-43962/1-A	Method Blank	A	Solid	8015B	720-43962
720-16931-1	SB-101 3'-4'	A	Solid	8015B	720-43962
720-16931-2	SB-101 7'-8'	A	Solid	8015B	720-43962
720-16931-3	SB-101 11'-12'	A	Solid	8015B	720-43962
720-16931-3MS	Matrix Spike	A	Solid	8015B	720-43962
720-16931-3MSD	Matrix Spike Duplicate	A	Solid	8015B	720-43962
720-16931-4	SB-101 15'-16'	A	Solid	8015B	720-43962
720-16931-5	SB-102 3'-4'	A	Solid	8015B	720-43962
720-16931-6	SB-102 7'-8'	A	Solid	8015B	720-43962
720-16931-7	SB-102 11'-12'	A	Solid	8015B	720-43962
720-16931-8	SB-102 15'-16'	A	Solid	8015B	720-43962
720-16931-9	SB-103 3'-4'	A	Solid	8015B	720-43962
720-16931-10	SB-103 7'-8'	A	Solid	8015B	720-43962
720-16931-11	SB-103 11'-12'	A	Solid	8015B	720-43962
720-16931-12	SB-103 15'-16'	A	Solid	8015B	720-43962
720-16931-13	SB-111 0'-1'	A	Solid	8015B	720-43962
720-16931-14	SB-111 3'-4'	A	Solid	8015B	720-43962
720-16931-15	SB-111 5'-6'	A	Solid	8015B	720-43962
720-16931-16	SB-111 7'-8'	A	Solid	8015B	720-43962
720-16931-17	SB-111 9'-10'	A	Solid	8015B	720-43962
720-16931-18	SB-112 3'-4'	A	Solid	8015B	720-43962
720-16931-23	SB-112 7'-8'	A	Solid	8015B	720-43962
Analysis Batch:720-44141					
LCS 720-43947/2-B	Lab Control Spike	D	Water	8015B	720-43948
LCSD 720-43947/3-B	Lab Control Spike Duplicate	D	Water	8015B	720-43948
MB 720-43947/1-B	Method Blank	D	Water	8015B	720-43948
720-16931-19	W-101	D	Water	8015B	720-43948
720-16931-20	W-102	D	Water	8015B	720-43948
720-16931-21	W-103	D	Water	8015B	720-43948
720-16931-22	W-111	D	Water	8015B	720-43948

Report Basis
D = Dissolved
A = Silica Gel Cleanup

Client: Chemical Data Management Job Number: 720-16931-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-43961					
LCSSRM 720-43961/26-A	LCS-Standard Reference Material	T	Solid	3050B	
720-16931-1	SB-101 3'-4'	T	Solid	3050B	
720-16931-2	SB-101 7'-8'	T	Solid	3050B	
720-16931-3	SB-101 11'-12'	T	Solid	3050B	
720-16931-4	SB-101 15'-16'	T	Solid	3050B	
720-16931-5	SB-102 3'-4'	T	Solid	3050B	
720-16931-6	SB-102 7'-8'	T	Solid	3050B	
720-16931-7	SB-102 11'-12'	T	Solid	3050B	
720-16931-8	SB-102 15'-16'	T	Solid	3050B	
720-16931-9	SB-103 3'-4'	T	Solid	3050B	
720-16931-10	SB-103 7'-8'	T	Solid	3050B	
720-16931-11	SB-103 11'-12'	T	Solid	3050B	
720-16931-12	SB-103 15'-16'	T	Solid	3050B	
720-16931-13	SB-111 0'-1'	T	Solid	3050B	
720-16931-14	SB-111 3'-4'	T	Solid	3050B	
720-16931-15	SB-111 5'-6'	T	Solid	3050B	
720-16931-16	SB-111 7'-8'	T	Solid	3050B	
720-16931-17	SB-111 9'-10'	T	Solid	3050B	
720-16931-18	SB-112 3'-4'	T	Solid	3050B	
720-16931-23	SB-112 7'-8'	T	Solid	3050B	
Analysis Batch:720-44062					
LCSSRM 720-43961/26-A	LCS-Standard Reference Material	T	Solid	6010B	720-43961
720-16931-1	SB-101 3'-4'	T	Solid	6010B	720-43961
720-16931-2	SB-101 7'-8'	T	Solid	6010B	720-43961
720-16931-3	SB-101 11'-12'	T	Solid	6010B	720-43961
720-16931-4	SB-101 15'-16'	T	Solid	6010B	720-43961
720-16931-5	SB-102 3'-4'	T	Solid	6010B	720-43961
720-16931-6	SB-102 7'-8'	T	Solid	6010B	720-43961
720-16931-7	SB-102 11'-12'	T	Solid	6010B	720-43961
720-16931-8	SB-102 15'-16'	T	Solid	6010B	720-43961
720-16931-9	SB-103 3'-4'	T	Solid	6010B	720-43961
720-16931-10	SB-103 7'-8'	T	Solid	6010B	720-43961
720-16931-11	SB-103 11'-12'	T	Solid	6010B	720-43961
720-16931-12	SB-103 15'-16'	T	Solid	6010B	720-43961
720-16931-13	SB-111 0'-1'	T	Solid	6010B	720-43961
720-16931-14	SB-111 3'-4'	T	Solid	6010B	720-43961
720-16931-15	SB-111 5'-6'	T	Solid	6010B	720-43961
720-16931-16	SB-111 7'-8'	T	Solid	6010B	720-43961
720-16931-17	SB-111 9'-10'	T	Solid	6010B	720-43961
720-16931-18	SB-112 3'-4'	T	Solid	6010B	720-43961
720-16931-23	SB-112 7'-8'	T	Solid	6010B	720-43961

Client: Chemical Data Management Job Number: 720-16931-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-44081					
LCS 720-44081/2-A	Lab Control Spike	S	Water	Soluble Metals	
LCSD 720-44081/3-A	Lab Control Spike Duplicate	S	Water	Soluble Metals	
MB 720-43953/1-B	Method Blank	D	Water	Soluble Metals	
720-16931-19	W-101	D	Water	Soluble Metals	
720-16931-19MS	Matrix Spike	D	Water	Soluble Metals	
720-16931-19MSD	Matrix Spike Duplicate	D	Water	Soluble Metals	
720-16931-20	W-102	D	Water	Soluble Metals	
720-16931-21	W-103	D	Water	Soluble Metals	
720-16931-22	W-111	D	Water	Soluble Metals	
Analysis Batch:720-44094					
LCS 720-44081/2-A	Lab Control Spike	S	Water	6010B	720-44081
LCSD 720-44081/3-A	Lab Control Spike Duplicate	S	Water	6010B	720-44081
MB 720-43953/1-B	Method Blank	D	Water	6010B	720-44081
720-16931-19	W-101	D	Water	6010B	720-44081
720-16931-19MS	Matrix Spike	D	Water	6010B	720-44081
720-16931-19MSD	Matrix Spike Duplicate	D	Water	6010B	720-44081
720-16931-20	W-102	D	Water	6010B	720-44081
720-16931-21	W-103	D	Water	6010B	720-44081
720-16931-22	W-111	D	Water	6010B	720-44081
Analysis Batch:720-44130					
720-16931-13	SB-111 0'-1'	T	Solid	6010B	720-43961

Report Basis
D = Dissolved
S = Soluble
T = Total

Client: Chemical Data Management

Job Number: 720-16931-1

Method Blank - Batch: 720-43948

Method: 8015B
Preparation: 3510C SGC Dissolved

Lab Sample ID: MB 720-43947/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2008 1853
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	68	46 - 114

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-43948

Method: 8015B
Preparation: 3510C SGC Dissolved

LCS Lab Sample ID: LCS 720-43947/2-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2008 1759
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-43947/3-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2008 1826
Date Prepared: 11/17/2008 1744

Analysis Batch: 720-44141
Prep Batch: 720-43948
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	71	71	41 - 103	0	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	81	80	46 - 114

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16931-1

Method Blank - Batch: 720-43962

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-43962/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/19/2008 1046
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.26 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		0.99
Motor Oil Range Organics [C24-C36]	ND		50
C19-C36	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	95	41 - 105

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-43962

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

MS Lab Sample ID: 720-16931-3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/19/2008 2226
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.15 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

MSD Lab Sample ID: 720-16931-3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/19/2008 2253
Date Prepared: 11/18/2008 1212

Analysis Batch: 720-44103
Prep Batch: 720-43962

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.27 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Diesel Range Organics [C10-C28]	75	79	50 - 130	4	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
p-Terphenyl	89	90	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16931-1

LCS-Standard Reference Material - Batch: 720-43961

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-43961/26-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/19/2008 1537
Date Prepared: 11/18/2008 0922

Analysis Batch: 720-44062
Prep Batch: 720-43961
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	42.2	37.7	89	67 - 118	
Chromium	246	220	89	67 - 121	
Nickel	96.8	84.8	88	65 - 117	
Lead	44.1	36.9	84	62 - 113	
Zinc	44.0	37.3	85	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16931-1

Method Blank - Batch: 720-44081

Method: 6010B
Preparation: Soluble Metals Dissolved

Lab Sample ID: MB 720-43953/1-B
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/20/2008 1211
Date Prepared: 11/20/2008 1034

Analysis Batch: 720-44094
Prep Batch: 720-44081
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	ND		0.0050
Lead	ND		0.0050
Zinc	ND		0.010

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44081

Method: 6010B
Preparation: Soluble Metals Soluble

LCS Lab Sample ID: LCS 720-44081/2-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/20/2008 1138
Date Prepared: 11/20/2008 1034

Analysis Batch: 720-44094
Prep Batch: 720-44081
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

LCSD Lab Sample ID: LCSD 720-44081/3-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/20/2008 1142
Date Prepared: 11/20/2008 1034

Analysis Batch: 720-44094
Prep Batch: 720-44081
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	97	98	80 - 120	1	20		
Chromium	100	101	80 - 120	1	20		
Nickel	98	99	80 - 120	1	20		
Lead	99	100	80 - 120	1	20		
Zinc	96	97	80 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-16931-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44081

Method: 6010B
Preparation: Soluble Metals Dissolved

MS Lab Sample ID:	720-16931-19	Analysis Batch: 720-44094	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-44081	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	11/20/2008 1145		Final Weight/Volume: 1.0 mL
Date Prepared:	11/20/2008 1034		

MSD Lab Sample ID:	720-16931-19	Analysis Batch: 720-44094	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-44081	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	11/20/2008 1149		Final Weight/Volume: 1.0 mL
Date Prepared:	11/20/2008 1034		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cadmium	92	92	75 - 125	1	20		
Chromium	98	99	75 - 125	1	20		
Nickel	93	94	75 - 125	1	20		
Lead	93	94	75 - 125	1	20		
Zinc	88	90	75 - 125	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Brewer, Melissa

From: Felicia Aristakumara [felicia@cdms.com]
Sent: Monday, November 17, 2008 1:27 PM
To: Brewer, Melissa
Cc: Jim Carro
Subject: Re: Silica gel cleanup
Importance: High

Hi Melissa,

Yes, I think we would like to go ahead and filter anyway, for both TEPH and Metals.
Thanks for confirming.

Felicia-

On Nov 17, 2008, at 1:15 PM, Brewer, Melissa wrote:

> I'm glad you mentioned the filtering. Our normal Sample Control employee is gone and the person who logged it in didn't notice your note. I didn't notice it either! I understand that Surinder mentioned that we don't normally filter if the sample is preserved. I assume that you decided to go ahead and filter it anyway?? Surinder is not here right now, so I can't ask her about the conversation.
>
> Also, I assume that you want the Metals bottle filtered as well. The woman in Sample Control thought it was only the Diesel bottles, but I think she might have misunderstood. Our computer will report it as "Dissolved Metals" or "Dissolved TEPH" although it is not really dissolved since the acid could have dissolved something that might normally be filterable.
>
> **MELISSA BREWER**
> Project Manager
>
> (new email address melissa.brewer@testamericainc.com)
>
> Test America
> THE LEADER IN ENVIRONMENTAL TESTING
>
> 1220 Quarry Lane
> Pleasanton, Ca 94566
> Tel 925.484.1919 | Fax 925.600.3002
> www.testamericainc.com
>
> -----Original Message-----
> **From:** Felicia Aristakumara [mailto:felicia@cdms.com]
> **Sent:** Monday, November 17, 2008 1:00 PM
> **To:** Brewer, Melissa
> **Subject:** Silica gel cleanup
>
> Hi Melissa,

I dropped some samples for the Western Forge project on Friday and I'd just like to confirm that we would like to use the silica-gel cleanup to analyze the samples. Please filter the water samples as well (I've noted this already in the chain of custody).

If you have any questions, please call me.
Thanks,

Felicia Aristakumara
Environmental Specialist

Chemical Data Management Systems
6515 Trinity Court, Suite 201
Dublin, CA 94568
P: 925-551-7300
F: 925-829-3886
felicia@cdms.com

Felicia Aristakumara
Environmental Specialist

Chemical Data Management Systems
6515 Trinity Court, Suite 201
Dublin, CA 94568
P: 925-551-7300
F: 925-829-3886
felicia@cdms.com

720-16931

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113411

Date 11/14/08 Page 1 of 3

11/21/2008

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Report To

Attn: JIM CARRO

Company: CDMS

Address:

Phone: Email:

Bill To: Sampled By:

Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Pres erv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other Hydraulic oil	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4			
1. SB-101 3'-4'	11/14	12:00	S				X									X									
2. SB-101 7'-8'							X									X									
3. SB-101 11'-12'							X									X									
4. SB-101 15'-16'							X									X									
5. SB-102 3'-4'		12:50					X									X									
6. SB-102 7'-8'							X									X									
7. SB-102 11'-12'							X									X									
8. SB-102 15'-16'							X									X									
9. SB-103 3'-4'		2:00					X									X									
10. SB-103 7'-8'							X									X									

Project Info.

Project Name: Western Forge

Project#:

PO#: 102730

Credit Card#:

Sample Receipt

of Containers:

Head Space:

Temp: 3.7°C

Conforms to record:

TAT: (5 Day) 72h 48h 24h Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF

Special Instructions / Comments: ☐ Global ID

Hold til Monday (confirm on silica gel)

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 5:35 PM	Signature: Time:	Signature: Time:
Printed Name: FELICIA ARISTAKUMARA Date: 11/14/08	Printed Name: Date:	Printed Name: Date:
Company: CDMS	Company:	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 17:35	Signature: Time:	Signature: Time:
Printed Name: T Bulkca Date: 11/14/08	Printed Name: Date:	Printed Name: Date:
Company: TAL-SF	Company:	Company:

Rev 08/04

720-16931

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 11341

Date 11/14/08 Page 2 of 3

11/21/2008

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Report To

Attn: JIM CARRO

Company:

Address:

Phone: Email:

Bill To: Sampled By:

Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Pres erv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other Hyd. oil	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ ☐ TSS ☐ TDS ☐	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
10. SB-103 11'-12'	11/14/08	2:00	S		X		X									X					
11. SB-103 15'-16'		5			X		X									X					
12. SB-111 0'-1'		3:10			X		X									X					
13. SB-111 3'-4'		3:10			X		X									X					
14. SB-111 5'-6'		3:10			X		X									X					
15. SB-111 7'-8'		3:10			X		X									X					
16. SB-111 9'-10'		3:10			X		X									X					
17. SB-112 3'-4'		3:5T			X		X									X					
18. SB-112 7'-8'		3:5T			X		X									X					

Project Info.

Project Name: Western Forge

Project#:

PO#:

Credit Card#:

TAT: (5 Day) 72h 48h 24h Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF

Special Instructions / Comments: ☐ Global ID

* Hold til Monday (confirm on silica gel)

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

Sample Receipt

of Containers:

Head Space:

Temp:

Conforms to record:

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: 5:35 PM Time	Signature Time	Signature Time
Printed Name: FELICIA AGUSTAKUMARA Date: 11/14/08	Printed Name Date	Printed Name Date
Company: CPMS	Company	Company
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: 1735 Time	Signature Time	Signature Time
Printed Name: T Bulloch Date: 11/14/08	Printed Name Date	Printed Name Date
Company: TAL-SF	Company	Company

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720-16931

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113411

Date 11/14/08 Page 3 of 3

11/21/2008

Report To

Attn: JIM CARRO
Company: CPMS
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Pres.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other:	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ ☐ TSS ☐ TDS ☐	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
19. W-101	11/14	12:00	W				X									X					
20. W-102		12:50	W				X									X					
21. W-103		2:45	W				X									X					
22 W-111		3:45	W				X									X					

Project Info.

Project Name: Weber Forge
Project#:
PO#:
Credit Card#:

TAT: 5 Day | 72h | 48h | 24h

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID

Special Instructions / Comments:

* Please filter the samples.
* Hold til Monday (confirm on silica gel)

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_5-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

Sample Receipt

of Containers:
Head Space:
Temp:
Conforms to record:
Other:

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: 5:35PM Time	Signature Time	Signature Time
Printed Name: FELICIA ARISTA 11/14/08 Date	Printed Name Date	Printed Name Date
Company: CPMS	Company	Company
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: 1735 Time	Signature Time	Signature Time
Printed Name: T Bullock 11/14/08 Date	Printed Name Date	Printed Name Date
Company: TAL-SF	Company	Company

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Login Sample Receipt Check List

Client: Chemical Data Management

Job Number: 720-16931-1

Login Number: 16931
List Source: TestAmerica San Francisco
Creator: Bullock, Tracy
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	SEE NARRATIVE
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-17028-1

Job Description: Western Forge, Albany

For:
Chemical Data Management
6515 Trinity Court
Suite 201
Dublin, CA 94568-2665

Attention: Mr. James Carro

Approved for release.
Melissa Brewer
Project Manager I
12/2/2008 9:43 AM

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
12/02/2008

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Job Narrative
720-J17028-1

Comments
No additional comments.

Receipt
The following samples were collected in an improper preserved containers: W-107,W-108,W-09 and W-105. Client requested samples be filtered even though they were collected in preserved containers.

All other samples were received in good condition within temperature requirements.

GC Semi VOA
Method 8015B: Surrogate recovery for the following sample was outside control limits: SB-108 4'-5' (720-17028-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-1	**SB-104 1'-2'**				
Chromium		32	1.0	mg/Kg	6010B
Nickel		35	1.0	mg/Kg	6010B
Lead		10	1.0	mg/Kg	6010B
Zinc		34	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		2.2	1.0	mg/Kg	8015B
720-17028-2	**SB-104 3'-4'**				
Chromium		16	0.98	mg/Kg	6010B
Nickel		11	0.98	mg/Kg	6010B
Lead		75	0.98	mg/Kg	6010B
Zinc		120	0.98	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		6.1	1.0	mg/Kg	8015B
720-17028-3	**SB-104 7'-8'**				
Chromium		12	1.0	mg/Kg	6010B
Nickel		8.3	1.0	mg/Kg	6010B
Lead		13	1.0	mg/Kg	6010B
Zinc		17	1.0	mg/Kg	6010B
720-17028-4	**SB-105 1'-2'**				
Chromium		70	1.0	mg/Kg	6010B
Nickel		82	1.0	mg/Kg	6010B
Lead		9.0	1.0	mg/Kg	6010B
Zinc		62	1.0	mg/Kg	6010B
720-17028-5	**SB-105 3'-4'**				
Chromium		17	0.96	mg/Kg	6010B
Nickel		12	0.96	mg/Kg	6010B
Lead		44	0.96	mg/Kg	6010B
Zinc		62	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		3.4	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-6	**SB-105 7'-8'**				
Chromium		14	0.98	mg/Kg	6010B
Nickel		10	0.98	mg/Kg	6010B
Lead		17	0.98	mg/Kg	6010B
Zinc		35	0.98	mg/Kg	6010B
720-17028-7	**SB-106 1'6"-2'6"**				
Chromium		53	1.1	mg/Kg	6010B
Nickel		64	1.1	mg/Kg	6010B
Lead		11	1.1	mg/Kg	6010B
Zinc		46	1.1	mg/Kg	6010B
720-17028-8	**SB-106 4'-5'**				
Chromium		54	1.0	mg/Kg	6010B
Nickel		79	1.0	mg/Kg	6010B
Lead		31	1.0	mg/Kg	6010B
Zinc		67	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1100	10	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		1900	500	mg/Kg	8015B
C19-C36		2800	500	mg/Kg	8015B
720-17028-9	**SB-106 7'-8'**				
Chromium		12	0.97	mg/Kg	6010B
Nickel		24	0.97	mg/Kg	6010B
Lead		210	0.97	mg/Kg	6010B
Zinc		200	0.97	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		2.8	1.0	mg/Kg	8015B
720-17028-10	**SB-109 1'-2'**				
Chromium		14	0.96	mg/Kg	6010B
Nickel		12	0.96	mg/Kg	6010B
Lead		160	0.96	mg/Kg	6010B
Zinc		210	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		7.6	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-11	**SB-109 4'-5'**				
Chromium		19	0.95	mg/Kg	6010B
Nickel		14	0.95	mg/Kg	6010B
Lead		120	0.95	mg/Kg	6010B
Zinc		200	0.95	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		8.4	1.0	mg/Kg	8015B
720-17028-12	**SB-109 7'-8'**				
Chromium		13	0.95	mg/Kg	6010B
Nickel		10	0.95	mg/Kg	6010B
Lead		4.8	0.95	mg/Kg	6010B
Zinc		10	0.95	mg/Kg	6010B
720-17028-13	**SB-110 1'-2'**				
Chromium		25	0.98	mg/Kg	6010B
Nickel		19	0.98	mg/Kg	6010B
Lead		87	0.98	mg/Kg	6010B
Zinc		290	0.98	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1.5	1.0	mg/Kg	8015B
720-17028-14	**SB-110 4'-5'**				
Chromium		17	0.98	mg/Kg	6010B
Nickel		11	0.98	mg/Kg	6010B
Lead		10	0.98	mg/Kg	6010B
Zinc		26	0.98	mg/Kg	6010B
720-17028-15	**SB-110 7'-8'**				
Chromium		13	0.96	mg/Kg	6010B
Nickel		8.4	0.96	mg/Kg	6010B
Lead		5.3	0.96	mg/Kg	6010B
Zinc		7.8	0.96	mg/Kg	6010B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-16	**SB-108 1'-2'**				
Chromium		52	0.96	mg/Kg	6010B
Nickel		59	0.96	mg/Kg	6010B
Lead		12	0.96	mg/Kg	6010B
Zinc		41	0.96	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		2.6	1.0	mg/Kg	8015B
720-17028-17	**SB-108 4'-5'**				
Chromium		25	0.95	mg/Kg	6010B
Nickel		24	0.95	mg/Kg	6010B
Lead		65	0.95	mg/Kg	6010B
Zinc		100	0.95	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		49	1.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		110	50	mg/Kg	8015B
C19-C36		150	50	mg/Kg	8015B
720-17028-18	**SB-108 7'-8'**				
Chromium		14	0.99	mg/Kg	6010B
Nickel		10	0.99	mg/Kg	6010B
Lead		4.8	0.99	mg/Kg	6010B
Zinc		9.3	0.99	mg/Kg	6010B
720-17028-19	**SB-107 1'-2'**				
Cadmium		1.3	0.52	mg/Kg	6010B
Chromium		72	1.0	mg/Kg	6010B
Nickel		72	1.0	mg/Kg	6010B
Lead		260	1.0	mg/Kg	6010B
Zinc		580	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		5500	50	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		11000	2500	mg/Kg	8015B
C19-C36		15000	2500	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-20	**SB-107 3'-4'**				
Chromium		14	1.0	mg/Kg	6010B
Nickel		10	1.0	mg/Kg	6010B
Lead		23	1.0	mg/Kg	6010B
Zinc		49	1.0	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		230	5.0	mg/Kg	8015B
Motor Oil Range Organics [C24-C36]		520	250	mg/Kg	8015B
C19-C36		700	250	mg/Kg	8015B
720-17028-21	**SB-107 7'-8'**				
Chromium		14	0.95	mg/Kg	6010B
Nickel		11	0.95	mg/Kg	6010B
Lead		5.2	0.95	mg/Kg	6010B
Zinc		12	0.95	mg/Kg	6010B
720-17028-22	**W-107**				
Dissolved					
Diesel Range Organics [C10-C28]		62	50	ug/L	8015B
Cadmium		0.0031	0.0020	mg/L	6010B
Chromium		0.022	0.0050	mg/L	6010B
Nickel		0.48	0.0050	mg/L	6010B
Lead		0.12	0.0050	mg/L	6010B
Zinc		1.3	0.010	mg/L	6010B
720-17028-23	**W-108**				
Dissolved					
Diesel Range Organics [C10-C28]		58	50	ug/L	8015B
Cadmium		0.0022	0.0020	mg/L	6010B
Chromium		0.025	0.0050	mg/L	6010B
Nickel		0.076	0.0050	mg/L	6010B
Lead		5.6	0.0050	mg/L	6010B
Zinc		0.97	0.010	mg/L	6010B
720-17028-24	**W-109**				
Dissolved					
Zinc		0.018	0.010	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-25	**W-105**				
Dissolved					
Diesel Range Organics [C10-C28]		52	50	ug/L	8015B
Nickel		0.052	0.0050	mg/L	6010B
Lead		0.0094	0.0050	mg/L	6010B
Zinc		0.93	0.010	mg/L	6010B

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-17028-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Ultrasonic Extraction	TAL SF		SW846 3550B
Metals (ICP)	TAL SF	SW846 6010B	
Preparation, Metals	TAL SF		SW846 3050B
Matrix: Water			
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Sample Filtration	TAL SF		FILTRATION
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC
Metals (ICP)	TAL SF	SW846 6010B	
Sample Filtration	TAL SF		FILTRATION
Preparation, Soluble	TAL SF		Soluble Metals

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Chemical Data Management Job Number: 720-17028-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-17028-1	SB-104 1'-2'	Solid	11/21/2008 1030	11/21/2008 1520
720-17028-2	SB-104 3'-4'	Solid	11/21/2008 1030	11/21/2008 1520
720-17028-3	SB-104 7'-8'	Solid	11/21/2008 1030	11/21/2008 1520
720-17028-4	SB-105 1'-2'	Solid	11/21/2008 1025	11/21/2008 1520
720-17028-5	SB-105 3'-4'	Solid	11/21/2008 1025	11/21/2008 1520
720-17028-6	SB-105 7'-8'	Solid	11/21/2008 1025	11/21/2008 1520
720-17028-7	SB-106 1'6"-2'6"	Solid	11/21/2008 0945	11/21/2008 1520
720-17028-8	SB-106 4'-5'	Solid	11/21/2008 0945	11/21/2008 1520
720-17028-9	SB-106 7'-8'	Solid	11/21/2008 0945	11/21/2008 1520
720-17028-10	SB-109 1'-2'	Solid	11/21/2008 0930	11/21/2008 1520
720-17028-11	SB-109 4'-5'	Solid	11/21/2008 0930	11/21/2008 1520
720-17028-12	SB-109 7'-8'	Solid	11/21/2008 0930	11/21/2008 1520
720-17028-13	SB-110 1'-2'	Solid	11/21/2008 0915	11/21/2008 1520
720-17028-14	SB-110 4'-5'	Solid	11/21/2008 0915	11/21/2008 1520
720-17028-15	SB-110 7'-8'	Solid	11/21/2008 0915	11/21/2008 1520
720-17028-16	SB-108 1'-2'	Solid	11/21/2008 0900	11/21/2008 1520
720-17028-17	SB-108 4'-5'	Solid	11/21/2008 0900	11/21/2008 1520
720-17028-18	SB-108 7'-8'	Solid	11/21/2008 0900	11/21/2008 1520
720-17028-19	SB-107 1'-2'	Solid	11/21/2008 0830	11/21/2008 1520
720-17028-20	SB-107 3'-4'	Solid	11/21/2008 0830	11/21/2008 1520
720-17028-21	SB-107 7'-8'	Solid	11/21/2008 0830	11/21/2008 1520
720-17028-22	W-107	Water	11/21/2008 0945	11/21/2008 1520
720-17028-23	W-108	Water	11/21/2008 1000	11/21/2008 1520
720-17028-24	W-109	Water	11/21/2008 1010	11/21/2008 1520
720-17028-25	W-105	Water	11/21/2008 1145	11/21/2008 1520

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-104 1'-2'

Lab Sample ID: 720-17028-1
Client Matrix: Solid

Date Sampled: 11/21/2008 1030
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/28/2008 2114
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.04 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.2		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-104 3'-4'

Lab Sample ID: 720-17028-2 | Date Sampled: 11/21/2008 1030
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.08 g
Date Analyzed: 11/29/2008 0141 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		6.1		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	71	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-104 7'-8'

Lab Sample ID: 720-17028-3 | Date Sampled: 11/21/2008 1030
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.01 g
Date Analyzed: 11/29/2008 0540 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	84	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-105 1'-2'

Lab Sample ID: 720-17028-4 | Date Sampled: 11/21/2008 1025
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.01 g
Date Analyzed: 11/29/2008 0607 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	80	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-105 3'-4'

Lab Sample ID: 720-17028-5 | Date Sampled: 11/21/2008 1025
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.06 g
Date Analyzed: 11/29/2008 0207 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		3.4		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	79	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-105 7'-8'

Lab Sample ID: 720-17028-6 | Date Sampled: 11/21/2008 1025
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.08 g
Date Analyzed: 11/29/2008 0633 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	83	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-106 1'6"-2'6"

Lab Sample ID: 720-17028-7 | Date Sampled: 11/21/2008 0945
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.05 g
Date Analyzed: 11/29/2008 0700 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	84	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-106 4'-5'

Lab Sample ID: 720-17028-8 | Date Sampled: 11/21/2008 0945
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 10 | Initial Weight/Volume: 30.03 g
Date Analyzed: 12/01/2008 1436 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1100		10
Motor Oil Range Organics [C24-C36]		1900		500
C19-C36		2800		500

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-106 7'-8'

Lab Sample ID: 720-17028-9 | Date Sampled: 11/21/2008 0945
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.07 g
Date Analyzed: 12/01/2008 1221 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.8		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	58	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-109 1'-2'

Lab Sample ID: 720-17028-10 | Date Sampled: 11/21/2008 0930
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.08 g
Date Analyzed: 12/01/2008 1315 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		7.6		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	57	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-109 4'-5'

Lab Sample ID: 720-17028-11 | Date Sampled: 11/21/2008 0930
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.10 g
Date Analyzed: 11/29/2008 0354 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		8.4		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	74	41 - 105

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-109 7'-8'

Lab Sample ID: 720-17028-12 Date Sampled: 11/21/2008 0930
Client Matrix: Solid Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/29/2008 0726
Date Prepared: 11/26/2008 1826
Analysis Batch: 720-44490
Prep Batch: 720-44391
Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.05 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	94	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-110 1'-2'

Lab Sample ID: 720-17028-13 | Date Sampled: 11/21/2008 0915
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.03 g
Date Analyzed: 11/29/2008 0753 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.5		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	78	41 - 105

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-110 4'-5'

Lab Sample ID: 720-17028-14
Client Matrix: Solid

Date Sampled: 11/21/2008 0915
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/29/2008 0820
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.01 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	94	41 - 105

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-110 7'-8'

Lab Sample ID: 720-17028-15
Client Matrix: Solid

Date Sampled: 11/21/2008 0915
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/29/2008 0847
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.04 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-108 1'-2'

Lab Sample ID: 720-17028-16 | Date Sampled: 11/21/2008 0900
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B | Analysis Batch: 720-44490 | Instrument ID: HP DRO5
Preparation: 3550B | Prep Batch: 720-44391 | Lab File ID: N/A
Dilution: 1.0 | Initial Weight/Volume: 30.07 g
Date Analyzed: 11/29/2008 1129 | Final Weight/Volume: 5 mL
Date Prepared: 11/26/2008 1826 | Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.6		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	62	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-108 4'-5'

Lab Sample ID: 720-17028-17 | Date Sampled: 11/21/2008 0900
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-44490	Instrument ID: HP DRO5
Preparation:	3550B	Prep Batch: 720-44391	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.04 g
Date Analyzed:	12/01/2008 1342		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2008 1826		Injection Volume:
			Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		49		1.0
Motor Oil Range Organics [C24-C36]		110		50
C19-C36		150		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	39	X	41 - 105

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-108 7'-8'

Lab Sample ID: 720-17028-18
Client Matrix: Solid

Date Sampled: 11/21/2008 0900
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/29/2008 1156
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.05 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	83	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-107 1'-2'

Lab Sample ID: 720-17028-19 | Date Sampled: 11/21/2008 0830
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-44490		Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-44391		Lab File ID:	N/A
Dilution:	50			Initial Weight/Volume:	30.08 g
Date Analyzed:	12/01/2008 1503			Final Weight/Volume:	5 mL
Date Prepared:	11/26/2008 1826			Injection Volume:	
				Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		5500		50
Motor Oil Range Organics [C24-C36]		11000		2500
C19-C36		15000		2500

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: Chemical Data Management | Job Number: 720-17028-1

Client Sample ID: SB-107 3'-4'

Lab Sample ID: 720-17028-20 | Date Sampled: 11/21/2008 0830
Client Matrix: Solid | Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-44490	Instrument ID: HP DRO5
Preparation:	3550B	Prep Batch: 720-44391	Lab File ID: N/A
Dilution:	5.0		Initial Weight/Volume: 30.02 g
Date Analyzed:	12/01/2008 1409		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2008 1826		Injection Volume:
			Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		230		5.0
Motor Oil Range Organics [C24-C36]		520		250
C19-C36		700		250

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	0	D	41 - 105

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-107 7'-8'

Lab Sample ID: 720-17028-21
Client Matrix: Solid

Date Sampled: 11/21/2008 0830
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 11/29/2008 0207
Date Prepared: 11/26/2008 2006

Analysis Batch: 720-44448
Prep Batch: 720-44354

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.06 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50
C19-C36		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	88	41 - 105

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-107

Lab Sample ID: 720-17028-22
Client Matrix: Water

Date Sampled: 11/21/2008 0945
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/26/2008 2044
Date Prepared: 11/24/2008 1910

Analysis Batch: 720-44424
Prep Batch: 720-44226

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	62		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	2	0 - 5
p-Terphenyl	51	46 - 114

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-108

Lab Sample ID: 720-17028-23
Client Matrix: Water

Date Sampled: 11/21/2008 1000
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/26/2008 2112
Date Prepared: 11/24/2008 1910

Analysis Batch: 720-44424
Prep Batch: 720-44226

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	58		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	2	0 - 5
p-Terphenyl	47	46 - 114

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-109

Lab Sample ID: 720-17028-24
Client Matrix: Water

Date Sampled: 11/21/2008 1010
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/26/2008 2138
Date Prepared: 11/24/2008 1910

Analysis Batch: 720-44424
Prep Batch: 720-44226

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	49	46 - 114

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-105

Lab Sample ID: 720-17028-25
Client Matrix: Water

Date Sampled: 11/21/2008 1145
Date Received: 11/21/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Dissolved

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 11/26/2008 2206
Date Prepared: 11/24/2008 1910

Analysis Batch: 720-44424
Prep Batch: 720-44226

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	52		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	60	46 - 114

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-104 1'-2'

Lab Sample ID: 720-17028-1
Client Matrix: Solid

Date Sampled: 11/21/2008 1030
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1128
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.98 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.51
Chromium		32		1.0
Nickel		35		1.0
Lead		10		1.0
Zinc		34		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-104 3'-4'

Lab Sample ID: 720-17028-2
Client Matrix: Solid

Date Sampled: 11/21/2008 1030
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1131
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		16		0.98
Nickel		11		0.98
Lead		75		0.98
Zinc		120		0.98

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-104 7'-8'

Lab Sample ID: 720-17028-3
Client Matrix: Solid

Date Sampled: 11/21/2008 1030
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1142
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		12		1.0
Nickel		8.3		1.0
Lead		13		1.0
Zinc		17		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-105 1'-2'

Lab Sample ID: 720-17028-4
Client Matrix: Solid

Date Sampled: 11/21/2008 1025
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.98 g
Date Analyzed:	11/26/2008 1146			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1303				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.51
Chromium		70		1.0
Nickel		82		1.0
Lead		9.0		1.0
Zinc		62		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-105 3'-4'

Lab Sample ID: 720-17028-5
Client Matrix: Solid

Date Sampled: 11/21/2008 1025
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1149
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		17		0.96
Nickel		12		0.96
Lead		44		0.96
Zinc		62		0.96

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-105 7'-8'

Lab Sample ID: 720-17028-6
Client Matrix: Solid

Date Sampled: 11/21/2008 1025
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1153
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.02 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		14		0.98
Nickel		10		0.98
Lead		17		0.98
Zinc		35		0.98

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-106 1'6"-2'6"

Lab Sample ID: 720-17028-7
Client Matrix: Solid

Date Sampled: 11/21/2008 0945
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.95 g
Date Analyzed:	11/26/2008 1156			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1303				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.53
Chromium		53		1.1
Nickel		64		1.1
Lead		11		1.1
Zinc		46		1.1

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-106 4'-5'

Lab Sample ID: 720-17028-8
Client Matrix: Solid

Date Sampled: 11/21/2008 0945
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.97 g
Date Analyzed:	11/26/2008 1200			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1303				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.52
Chromium		54		1.0
Nickel		79		1.0
Lead		31		1.0
Zinc		67		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-106 7'-8'

Lab Sample ID: 720-17028-9
Client Matrix: Solid

Date Sampled: 11/21/2008 0945
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Date Analyzed:	11/26/2008 1204			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1303				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		12		0.97
Nickel		24		0.97
Lead		210		0.97
Zinc		200		0.97

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-109 1'-2'

Lab Sample ID: 720-17028-10
Client Matrix: Solid

Date Sampled: 11/21/2008 0930
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1207
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		14		0.96
Nickel		12		0.96
Lead		160		0.96
Zinc		210		0.96

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-109 4'-5'

Lab Sample ID: 720-17028-11
Client Matrix: Solid

Date Sampled: 11/21/2008 0930
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	11/26/2008 1211			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1304				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		19		0.95
Nickel		14		0.95
Lead		120		0.95
Zinc		200		0.95

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-109 7'-8'

Lab Sample ID: 720-17028-12
Client Matrix: Solid

Date Sampled: 11/21/2008 0930
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	11/26/2008 1215			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1304				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		13		0.95
Nickel		10		0.95
Lead		4.8		0.95
Zinc		10		0.95

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-110 1'-2'

Lab Sample ID: 720-17028-13
Client Matrix: Solid

Date Sampled: 11/21/2008 0915
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Date Analyzed:	11/26/2008 1225			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1304				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		25		0.98
Nickel		19		0.98
Lead		87		0.98
Zinc		290		0.98

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-110 4'-5'

Lab Sample ID: 720-17028-14
Client Matrix: Solid

Date Sampled: 11/21/2008 0915
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44353		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44282		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Date Analyzed:	11/26/2008 1229			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 1304				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.49
Chromium		17		0.98
Nickel		11		0.98
Lead		10		0.98
Zinc		26		0.98

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-110 7'-8'

Lab Sample ID: 720-17028-15
Client Matrix: Solid

Date Sampled: 11/21/2008 0915
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1706
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		13		0.96
Nickel		8.4		0.96
Lead		5.3		0.96
Zinc		7.8		0.96

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-108 1'-2'

Lab Sample ID: 720-17028-16
Client Matrix: Solid

Date Sampled: 11/21/2008 0900
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44392		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44334		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Date Analyzed:	11/26/2008 1709			Final Weight/Volume:	50 mL
Date Prepared:	11/26/2008 0855				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		52		0.96
Nickel		59		0.96
Lead		12		0.96
Zinc		41		0.96

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-108 4'-5'

Lab Sample ID: 720-17028-17
Client Matrix: Solid

Date Sampled: 11/21/2008 0900
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44392		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44334		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	11/26/2008 1713			Final Weight/Volume:	50 mL
Date Prepared:	11/26/2008 0855				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		25		0.95
Nickel		24		0.95
Lead		65		0.95
Zinc		100		0.95

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-108 7'-8'

Lab Sample ID: 720-17028-18
Client Matrix: Solid

Date Sampled: 11/21/2008 0900
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1717
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.50
Chromium		14		0.99
Nickel		10		0.99
Lead		4.8		0.99
Zinc		9.3		0.99

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-107 1'-2'

Lab Sample ID: 720-17028-19
Client Matrix: Solid

Date Sampled: 11/21/2008 0830
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44392		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44334		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.96 g
Date Analyzed:	11/26/2008 1720			Final Weight/Volume:	50 mL
Date Prepared:	11/26/2008 0855				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		1.3		0.52
Chromium		72		1.0
Nickel		72		1.0
Lead		260		1.0
Zinc		580		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-107 3'-4'

Lab Sample ID: 720-17028-20
Client Matrix: Solid

Date Sampled: 11/21/2008 0830
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 720-44392		Instrument ID:	Thermo 6500 ICP
Preparation:	3050B	Prep Batch: 720-44334		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	0.98 g
Date Analyzed:	11/26/2008 1724			Final Weight/Volume:	50 mL
Date Prepared:	11/26/2008 0855				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.51
Chromium		14		1.0
Nickel		10		1.0
Lead		23		1.0
Zinc		49		1.0

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: SB-107 7'-8'

Lab Sample ID: 720-17028-21
Client Matrix: Solid

Date Sampled: 11/21/2008 0830
Date Received: 11/21/2008 1520

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 11/26/2008 1727
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.05 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Cadmium		ND		0.48
Chromium		14		0.95
Nickel		11		0.95
Lead		5.2		0.95
Zinc		12		0.95

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-107

Lab Sample ID: 720-17028-22
Client Matrix: Water

Date Sampled: 11/21/2008 0945
Date Received: 11/21/2008 1520

6010B Metals (ICP)-Dissolved

Method: 6010B
Preparation: Soluble Metals
Dilution: 1.07
Date Analyzed: 11/28/2008 1015
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	0.0031		0.0020
Chromium	0.022		0.0050
Nickel	0.48		0.0050
Lead	0.12		0.0050
Zinc	1.3		0.010

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-108

Lab Sample ID: 720-17028-23
Client Matrix: Water

Date Sampled: 11/21/2008 1000
Date Received: 11/21/2008 1520

6010B Metals (ICP)-Dissolved

Method: 6010B
Preparation: Soluble Metals
Dilution: 1.07
Date Analyzed: 11/28/2008 1019
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	0.0022		0.0020
Chromium	0.025		0.0050
Nickel	0.076		0.0050
Lead	5.6		0.0050
Zinc	0.97		0.010

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-109

Lab Sample ID: 720-17028-24
Client Matrix: Water

Date Sampled: 11/21/2008 1010
Date Received: 11/21/2008 1520

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-44410		Instrument ID:	Varian ICP
Preparation:	Soluble Metals	Prep Batch: 720-44395		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	11/28/2008 1023			Final Weight/Volume:	1.0 mL
Date Prepared:	11/28/2008 0528				

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	ND		0.0050
Lead	ND		0.0050
Zinc	0.018		0.010

Client: Chemical Data Management

Job Number: 720-17028-1

Client Sample ID: W-105

Lab Sample ID: 720-17028-25
Client Matrix: Water

Date Sampled: 11/21/2008 1145
Date Received: 11/21/2008 1520

6010B Metals (ICP)-Dissolved

Method: 6010B
Preparation: Soluble Metals
Dilution: 1.07
Date Analyzed: 11/28/2008 1027
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result (mg/L)	Qualifier	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	0.052		0.0050
Lead	0.0094		0.0050
Zinc	0.93		0.010

DATA REPORTING QUALIFIERS

Client: Chemical Data Management Job Number: 720-17028-1

Lab Section	Qualifier	Description
GC Semi VOA		
	X	Surrogate exceeds the control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Client: Chemical Data Management Job Number: 720-17028-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-44226					
LCS 720-44218/2-B	Lab Control Spike	D	Water	3510C SGC	
LCSD 720-44218/3-B	Lab Control Spike Duplicate	D	Water	3510C SGC	
MB 720-44218/1-B	Method Blank	D	Water	3510C SGC	
720-17028-22	W-107	D	Water	3510C SGC	
720-17028-23	W-108	D	Water	3510C SGC	
720-17028-24	W-109	D	Water	3510C SGC	
720-17028-25	W-105	D	Water	3510C SGC	
Prep Batch: 720-44354					
LCS 720-44354/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-44354/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-44354/1-A	Method Blank	A	Solid	3550B	
720-17028-21	SB-107 7'-8'	A	Solid	3550B	
Prep Batch: 720-44391					
LCS 720-44391/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-44391/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-44391/1-A	Method Blank	A	Solid	3550B	
720-17028-1	SB-104 1'-2'	A	Solid	3550B	
720-17028-1MS	Matrix Spike	A	Solid	3550B	
720-17028-1MSD	Matrix Spike Duplicate	A	Solid	3550B	
720-17028-2	SB-104 3'-4'	A	Solid	3550B	
720-17028-3	SB-104 7'-8'	A	Solid	3550B	
720-17028-4	SB-105 1'-2'	A	Solid	3550B	
720-17028-5	SB-105 3'-4'	A	Solid	3550B	
720-17028-6	SB-105 7'-8'	A	Solid	3550B	
720-17028-7	SB-106 1'6"-2'6"	A	Solid	3550B	
720-17028-8	SB-106 4'-5'	A	Solid	3550B	
720-17028-9	SB-106 7'-8'	A	Solid	3550B	
720-17028-10	SB-109 1'-2'	A	Solid	3550B	
720-17028-11	SB-109 4'-5'	A	Solid	3550B	
720-17028-12	SB-109 7'-8'	A	Solid	3550B	
720-17028-13	SB-110 1'-2'	A	Solid	3550B	
720-17028-14	SB-110 4'-5'	A	Solid	3550B	
720-17028-15	SB-110 7'-8'	A	Solid	3550B	
720-17028-16	SB-108 1'-2'	A	Solid	3550B	
720-17028-17	SB-108 4'-5'	A	Solid	3550B	
720-17028-18	SB-108 7'-8'	A	Solid	3550B	
720-17028-19	SB-107 1'-2'	A	Solid	3550B	
720-17028-20	SB-107 3'-4'	A	Solid	3550B	

Client: Chemical Data Management Job Number: 720-17028-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-44424					
LCS 720-44218/2-B	Lab Control Spike	D	Water	8015B	720-44226
LCSD 720-44218/3-B	Lab Control Spike Duplicate	D	Water	8015B	720-44226
MB 720-44218/1-B	Method Blank	D	Water	8015B	720-44226
720-17028-22	W-107	D	Water	8015B	720-44226
720-17028-23	W-108	D	Water	8015B	720-44226
720-17028-24	W-109	D	Water	8015B	720-44226
720-17028-25	W-105	D	Water	8015B	720-44226
Analysis Batch:720-44448					
LCS 720-44354/2-A	Lab Control Spike	A	Solid	8015B	720-44354
LCSD 720-44354/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-44354
MB 720-44354/1-A	Method Blank	A	Solid	8015B	720-44354
720-17028-21	SB-107 7'-8'	A	Solid	8015B	720-44354
Analysis Batch:720-44490					
LCS 720-44391/2-A	Lab Control Spike	A	Solid	8015B	720-44391
LCSD 720-44391/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-44391
MB 720-44391/1-A	Method Blank	A	Solid	8015B	720-44391
720-17028-1	SB-104 1'-2'	A	Solid	8015B	720-44391
720-17028-1MS	Matrix Spike	A	Solid	8015B	720-44391
720-17028-1MSD	Matrix Spike Duplicate	A	Solid	8015B	720-44391
720-17028-2	SB-104 3'-4'	A	Solid	8015B	720-44391
720-17028-3	SB-104 7'-8'	A	Solid	8015B	720-44391
720-17028-4	SB-105 1'-2'	A	Solid	8015B	720-44391
720-17028-5	SB-105 3'-4'	A	Solid	8015B	720-44391
720-17028-6	SB-105 7'-8'	A	Solid	8015B	720-44391
720-17028-7	SB-106 1'6"-2'6"	A	Solid	8015B	720-44391
720-17028-8	SB-106 4'-5'	A	Solid	8015B	720-44391
720-17028-9	SB-106 7'-8'	A	Solid	8015B	720-44391
720-17028-10	SB-109 1'-2'	A	Solid	8015B	720-44391
720-17028-11	SB-109 4'-5'	A	Solid	8015B	720-44391
720-17028-12	SB-109 7'-8'	A	Solid	8015B	720-44391
720-17028-13	SB-110 1'-2'	A	Solid	8015B	720-44391
720-17028-14	SB-110 4'-5'	A	Solid	8015B	720-44391
720-17028-15	SB-110 7'-8'	A	Solid	8015B	720-44391
720-17028-16	SB-108 1'-2'	A	Solid	8015B	720-44391
720-17028-17	SB-108 4'-5'	A	Solid	8015B	720-44391
720-17028-18	SB-108 7'-8'	A	Solid	8015B	720-44391
720-17028-19	SB-107 1'-2'	A	Solid	8015B	720-44391
720-17028-20	SB-107 3'-4'	A	Solid	8015B	720-44391

Report Basis
D = Dissolved
A = Silica Gel Cleanup

Client: Chemical Data Management Job Number: 720-17028-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-44282					
LCS 720-44282/2-A	Lab Control Spike	T	Solid	3050B	
LCSD 720-44282/3-A	Lab Control Spike Duplicate	T	Solid	3050B	
LCSSRM 720-44282/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-44282/1-A	Method Blank	T	Solid	3050B	
720-17028-1	SB-104 1'-2'	T	Solid	3050B	
720-17028-2	SB-104 3'-4'	T	Solid	3050B	
720-17028-3	SB-104 7'-8'	T	Solid	3050B	
720-17028-4	SB-105 1'-2'	T	Solid	3050B	
720-17028-5	SB-105 3'-4'	T	Solid	3050B	
720-17028-6	SB-105 7'-8'	T	Solid	3050B	
720-17028-7	SB-106 1'6"-2'6"	T	Solid	3050B	
720-17028-8	SB-106 4'-5'	T	Solid	3050B	
720-17028-9	SB-106 7'-8'	T	Solid	3050B	
720-17028-10	SB-109 1'-2'	T	Solid	3050B	
720-17028-11	SB-109 4'-5'	T	Solid	3050B	
720-17028-12	SB-109 7'-8'	T	Solid	3050B	
720-17028-13	SB-110 1'-2'	T	Solid	3050B	
720-17028-14	SB-110 4'-5'	T	Solid	3050B	
Prep Batch: 720-44334					
LCS 720-44334/2-A	Lab Control Spike	T	Solid	3050B	
LCSD 720-44334/3-A	Lab Control Spike Duplicate	T	Solid	3050B	
LCSSRM 720-44334/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-44334/1-A	Method Blank	T	Solid	3050B	
720-17028-15	SB-110 7'-8'	T	Solid	3050B	
720-17028-16	SB-108 1'-2'	T	Solid	3050B	
720-17028-17	SB-108 4'-5'	T	Solid	3050B	
720-17028-18	SB-108 7'-8'	T	Solid	3050B	
720-17028-19	SB-107 1'-2'	T	Solid	3050B	
720-17028-20	SB-107 3'-4'	T	Solid	3050B	
720-17028-21	SB-107 7'-8'	T	Solid	3050B	

Client: Chemical Data Management Job Number: 720-17028-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-44353					
LCS 720-44282/2-A	Lab Control Spike	T	Solid	6010B	720-44282
LCSD 720-44282/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-44282
LCSSRM 720-44282/25-A	LCS-Standard Reference Material	T	Solid	6010B	720-44282
MB 720-44282/1-A	Method Blank	T	Solid	6010B	720-44282
720-17028-1	SB-104 1'-2'	T	Solid	6010B	720-44282
720-17028-2	SB-104 3'-4'	T	Solid	6010B	720-44282
720-17028-3	SB-104 7'-8'	T	Solid	6010B	720-44282
720-17028-4	SB-105 1'-2'	T	Solid	6010B	720-44282
720-17028-5	SB-105 3'-4'	T	Solid	6010B	720-44282
720-17028-6	SB-105 7'-8'	T	Solid	6010B	720-44282
720-17028-7	SB-106 1'6"-2'6"	T	Solid	6010B	720-44282
720-17028-8	SB-106 4'-5'	T	Solid	6010B	720-44282
720-17028-9	SB-106 7'-8'	T	Solid	6010B	720-44282
720-17028-10	SB-109 1'-2'	T	Solid	6010B	720-44282
720-17028-11	SB-109 4'-5'	T	Solid	6010B	720-44282
720-17028-12	SB-109 7'-8'	T	Solid	6010B	720-44282
720-17028-13	SB-110 1'-2'	T	Solid	6010B	720-44282
720-17028-14	SB-110 4'-5'	T	Solid	6010B	720-44282
Analysis Batch:720-44392					
LCS 720-44334/2-A	Lab Control Spike	T	Solid	6010B	720-44334
LCSD 720-44334/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-44334
LCSSRM 720-44334/25-A	LCS-Standard Reference Material	T	Solid	6010B	720-44334
MB 720-44334/1-A	Method Blank	T	Solid	6010B	720-44334
720-17028-15	SB-110 7'-8'	T	Solid	6010B	720-44334
720-17028-16	SB-108 1'-2'	T	Solid	6010B	720-44334
720-17028-17	SB-108 4'-5'	T	Solid	6010B	720-44334
720-17028-18	SB-108 7'-8'	T	Solid	6010B	720-44334
720-17028-19	SB-107 1'-2'	T	Solid	6010B	720-44334
720-17028-20	SB-107 3'-4'	T	Solid	6010B	720-44334
720-17028-21	SB-107 7'-8'	T	Solid	6010B	720-44334
Prep Batch: 720-44395					
LCS 720-44395/2-A	Lab Control Spike	S	Water	Soluble Metals	
LCSD 720-44395/3-A	Lab Control Spike Duplicate	S	Water	Soluble Metals	
MB 720-44326/1-C	Method Blank	D	Water	Soluble Metals	
720-17028-22	W-107	D	Water	Soluble Metals	
720-17028-22MS	Matrix Spike	D	Water	Soluble Metals	
720-17028-22MSD	Matrix Spike Duplicate	D	Water	Soluble Metals	
720-17028-23	W-108	D	Water	Soluble Metals	
720-17028-24	W-109	D	Water	Soluble Metals	
720-17028-25	W-105	D	Water	Soluble Metals	

Client: Chemical Data Management Job Number: 720-17028-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-44410					
LCS 720-44395/2-A	Lab Control Spike	S	Water	6010B	720-44395
LCSD 720-44395/3-A	Lab Control Spike Duplicate	S	Water	6010B	720-44395
MB 720-44326/1-C	Method Blank	D	Water	6010B	720-44395
720-17028-22	W-107	D	Water	6010B	720-44395
720-17028-22MS	Matrix Spike	D	Water	6010B	720-44395
720-17028-22MSD	Matrix Spike Duplicate	D	Water	6010B	720-44395
720-17028-23	W-108	D	Water	6010B	720-44395
720-17028-24	W-109	D	Water	6010B	720-44395
720-17028-25	W-105	D	Water	6010B	720-44395

Report Basis
D = Dissolved
S = Soluble
T = Total

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44226

Method: 8015B
Preparation: 3510C SGC
Dissolved

Lab Sample ID: MB 720-44218/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/26/2008 1707
Date Prepared: 11/24/2008 1549

Analysis Batch: 720-44424
Prep Batch: 720-44226
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		500
C19-C36	ND		500

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	76	46 - 114

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44226

Method: 8015B
Preparation: 3510C SGC
Dissolved

LCS Lab Sample ID: LCS 720-44218/2-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/26/2008 1613
Date Prepared: 11/24/2008 1549

Analysis Batch: 720-44424
Prep Batch: 720-44226
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44218/3-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/26/2008 1640
Date Prepared: 11/24/2008 1549

Analysis Batch: 720-44424
Prep Batch: 720-44226
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	59	53	41 - 103	11	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	64	67	46 - 114

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44354

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-44354/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/27/2008 0546
Date Prepared: 11/26/2008 1252

Analysis Batch: 720-44448
Prep Batch: 720-44354
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.09 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C36]	ND		50
C19-C36	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	94	41 - 105

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44354

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-44354/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/27/2008 0452
Date Prepared: 11/26/2008 1252

Analysis Batch: 720-44448
Prep Batch: 720-44354
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.08 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44354/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/27/2008 0519
Date Prepared: 11/26/2008 1252

Analysis Batch: 720-44448
Prep Batch: 720-44354
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.09 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	77	74	50 - 130	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	89	89	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44391

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

Lab Sample ID: MB 720-44391/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/28/2008 2354
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.02 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C36]	ND		50
C19-C36	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	90	41 - 105

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44391

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-44391/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/28/2008 2301
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.04 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44391/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/28/2008 2327
Date Prepared: 11/26/2008 1826

Analysis Batch: 720-44490
Prep Batch: 720-44391
Units: mg/Kg

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.03 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	80	74	50 - 130	7	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	83	78	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44391

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

MS Lab Sample ID:	720-17028-1	Analysis Batch: 720-44490	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44391	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.01 g
Date Analyzed:	11/28/2008 2140		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2008 1826		Injection Volume:
			Column ID: PRIMARY
MSD Lab Sample ID:	720-17028-1	Analysis Batch: 720-44490	Instrument ID: HP DRO5
Client Matrix:	Solid	Prep Batch: 720-44391	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 30.07 g
Date Analyzed:	11/28/2008 2207		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2008 1826		Injection Volume:
			Column ID: PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Diesel Range Organics [C10-C28]	70	58	50 - 130	17	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
p-Terphenyl	82	70	41 - 105

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44282

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-44282/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1042
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.96 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.52
Chromium	ND		1.0
Nickel	ND		1.0
Lead	ND		1.0
Zinc	ND		1.0

LCS-Standard Reference Material - Batch: 720-44282

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-44282/25-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1232
Date Prepared: 11/25/2008 1304

Analysis Batch: 720-44353
Prep Batch: 720-44282
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	42.2	39.5	94	67 - 118	
Chromium	246	227	92	67 - 121	
Nickel	96.8	90.7	94	65 - 117	
Lead	44.1	40.0	91	62 - 113	
Zinc	44.0	39.0	89	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44282

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID: LCS 720-44282/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1046
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.95 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-44282/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1058
Date Prepared: 11/25/2008 1303

Analysis Batch: 720-44353
Prep Batch: 720-44282
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	96	95	80 - 120	6	20		
Chromium	96	95	80 - 120	6	20		
Nickel	97	96	80 - 120	6	20		
Lead	96	96	80 - 120	6	20		
Zinc	97	96	80 - 120	7	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44334

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 720-44334/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1618
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.48
Chromium	ND		0.96
Nickel	ND		0.96
Lead	ND		0.96
Zinc	ND		0.96

LCS-Standard Reference Material - Batch: 720-44334

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCSSRM 720-44334/25-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1800
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.00 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cadmium	42.2	40.1	95	67 - 118	
Chromium	246	248	101	67 - 121	
Nickel	96.8	91.5	95	65 - 117	
Lead	44.1	41.4	94	62 - 113	
Zinc	44.0	38.6	88	62 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44334

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID: LCS 720-44334/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1621
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 1.04 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-44334/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/26/2008 1625
Date Prepared: 11/26/2008 0855

Analysis Batch: 720-44392
Prep Batch: 720-44334
Units: mg/Kg

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume: 0.97 g
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	90	92	80 - 120	9	20		
Chromium	91	95	80 - 120	11	20		
Nickel	91	93	80 - 120	8	20		
Lead	90	92	80 - 120	9	20		
Zinc	91	92	80 - 120	8	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Method Blank - Batch: 720-44395

Method: 6010B
Preparation: Soluble Metals Dissolved

Lab Sample ID: MB 720-44326/1-C
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/28/2008 0952
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Cadmium	ND		0.0020
Chromium	ND		0.0050
Nickel	ND		0.0050
Lead	ND		0.0050
Zinc	ND		0.010

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44395

Method: 6010B
Preparation: Soluble Metals Soluble

LCS Lab Sample ID: LCS 720-44395/2-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/28/2008 1000
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

LCSD Lab Sample ID: LCSD 720-44395/3-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 11/28/2008 1004
Date Prepared: 11/28/2008 0528

Analysis Batch: 720-44410
Prep Batch: 720-44395
Units: mg/L

Instrument ID: Varian ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	98	98	80 - 120	0	20		
Chromium	100	100	80 - 120	0	20		
Nickel	97	97	80 - 120	0	20		
Lead	99	99	80 - 120	0	20		
Zinc	98	98	80 - 120	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Chemical Data Management

Job Number: 720-17028-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-44395

Method: 6010B
Preparation: Soluble Metals Dissolved

MS Lab Sample ID:	720-17028-22	Analysis Batch: 720-44410	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-44395	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	11/28/2008 1008		Final Weight/Volume: 1.0 mL
Date Prepared:	11/28/2008 0528		

MSD Lab Sample ID:	720-17028-22	Analysis Batch: 720-44410	Instrument ID: Varian ICP
Client Matrix:	Water	Prep Batch: 720-44395	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	11/28/2008 1012		Final Weight/Volume: 1.0 mL
Date Prepared:	11/28/2008 0528		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cadmium	90	90	75 - 125	0	20		
Chromium	95	95	75 - 125	0	20		
Nickel	88	88	75 - 125	0	20		
Lead	90	90	75 - 125	0	20		
Zinc	85	85	75 - 125	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113492

720-17028

Date 11/21/08 Page 1 of 3

12/02/2008

Page 77 of 80

Report To

Attn: JIM CARRO
Company: CDMS
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

	Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☑ Silica Gel ☑ Diesel ☑ Motor Oil ☐ Other: Hydraulic oil	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☑ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
1	SB-104 1'-2'	11/21/08	10:30	S				X									X					
2	SB-104 3'-4'		10:30					X									X					
3	SB-104 7'-8'		10:30					X									X					
4	SB-105 1'-2'		10:25					X									X					
5	SB-105 3'-4'		10:25					X									X					
6	SB-105 7'-8'		10:45					X									X					
7	SB-106 1'6"-2'6"		9:45					X									X					
8	SB-106 4'-5'		9:45					X									X					
9	SB-106 7'-8'		9:45					X									X					
10	SB-109 1'-2'		9:30					X									X					

Project Info.

Project Name: Western Forge, Albany
Project#: 102730
PO#:
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp: 0.8 ; 1.1
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF
Special Instructions / Comments: ☐ Global ID

Please filter water samples!

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: 3-20PM Time	Signature: Time	Signature: Time
Printed Name: FELICIA ANSTAKUMARA Date: 11/21/08	Printed Name: Date	Printed Name: Date
Company: CDMS	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: 15:30 Time	Signature: Time	Signature: Time
Printed Name: CRISTINA Date: 11/21/08	Printed Name: Date	Printed Name: Date
Company: TASF	Company:	Company:

Rev. 08.04

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113492
720-17028

Date 11/21/08 Page 2 of 3

12/02/2008

Page 78 of 80

Report To

Attn: JIM CARTO
Company: CSMS
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Pres.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other: Hyd	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	Hexavalent Chromium pH (24h hold time for H_2O) ☐ ☐	Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4				
11 SB-109 4'-5'	11/21/08	9:30	S				X									X									
12 SB-109 7'-8'		9:30					X									X									
13 SB-110 1'-2'		9:15					X									X									
14 SB-110 4'-5'		9:15					X									X									
15 SB-110 7'-8'		9:15					X									X									
16 SB-108 1'-2'		9:00					X									X									
17 SB-108 4'-5'		9:00					X									X									
18 SB-108 7'-8'		9:00					X									X									
19 SB-107 1'-2'		8:30					X									X									
20 SB-107 3'-4'		8:30					X									X									

Project Info.

Project Name: Western Forge, Albany
Project#: 102730
PO#:
Credit Card#:

TAT: (5) Day | 72h | 48h | 24h

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Fund EDF ☐ Global ID:

Special Instructions / Comments:

(*) Please filter water samples (

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_8-C_{24} (industry norm). Default for 8015B is C_{10}-C_{28}

Sample Receipt

of Containers:
Head Space:
Temp:
Conforms to record:
Other:

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature			
Time	3:20 PM		
Printed Name	Felicia Nishikawara		
Date	11/21/08		
Company	CSMS		

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	15:20		
Printed Name	CRISELDA		
Date	11/21/08		
Company	TASF		

Rev. 12/2/04

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 113492

720: 17028

Date 11/21/08 Page 3 of 3

12/02/2008

Report To

Attn: JIM CARRC
Company: CDMS
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Pres.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 602 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other: Hydr	Fuel Tests EPA 8260B ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Tota	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	W.E.T (STLC) ☐ TCLP	Hexavalent Chromium pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4
21 SB-107 7'-8'	11/21/08	8:30	S				X									X					
22 W-107		9:45	W				X									X					
23 W-108		10:00	W				X									X					
24 W-109		10 10	W				X									X					
25 W-105		11:45	W				X									X					

Project Info.

Project Name: Western Forge, Albany
Project#: 102730
PO#
Credit Card#:

Sample Receipt

of Containers:
Head Space:
Temp:
Conforms to record:

TAT: (5 Day) 72h 48h 24h Other.

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ Stats Tank Fund EDF ☐ Global ID

Special Instructions / Comments:

(*) Please filter water samples

See Terms and Conditions on reverse

*TestAmerica SF reports 8015M from C_8 C_{36} (industry norm). Default for 8015B is C_{10}-C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature 3:20 PM Time	Signature Time	Signature Time
Felicia Arisakumara 11/21/08 Printed Name Date	Printed Name Date	Printed Name Date
CDMS Company	Company	Company

1) Received by:	2) Received by:	3) Received by:
Signature 15:20 Time	Signature Time	Signature Time
CRISELDA 11/21/08 Printed Name Date	Printed Name Date	Printed Name Date
TAS Company	Company	Company

Rev 06.01

Login Sample Receipt Check List

Client: Chemical Data Management

Job Number: 720-17028-1

Login Number: 17028

List Source: TestAmerica San Francisco

Creator: Caparas, Criselda

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	See Narrative
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

BROWN AND CALDWELL
CONSULTING ENGINEERS

May 10, 1985

Mr. Erwin Koehler
Department of Health Services
Toxic Substances Control Division
North Coast California Section
2151 Berkeley Way, Annex 7
Berkeley, California 94704-9980

11-39-1928-08/14

Subject: Western Forge & Flange Company
Albany Site Correction
Documentation Report

Dear Mr. Koehler:

On behalf of Western Forge & Flange Company, we hereby transmit the correction documentation report for the Western Forge & Flange Company, Albany, California, facility. Please contact Mr. Brian Bracken at Brown and Caldwell or Mr. Vernon Mallinson at Western Forge & Flange Company if you have any questions regarding this report.

Very truly yours,

BROWN AND CALDWELL

Brian D. Bracken
Project Manager

Hilary Theisen
Hilary M. Theisen
Vice President
Principal-in-Charge

BDB:jrs

cc/enc: Mr. William Cosden, District Attorney, Alameda County
Mr. Philip Mellen, Regional Water Quality Control Board
Mr. Vernon Mallinson, Western Forge & Flange Company
Ms. Nancy Symons, Miller, Morton, Caillat & Nevis
Mr. Peter Zaklan, Western Forge & Flange Company
Mr. Tom Kasnick, California Department of Fish and Game
Mr. Mark Ransom, Southern Pacific Transportation Company
Mr. Max Weinryb, City of Albany

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Brian Bracken
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CONTENTS

WESTERN FORGE & FLANGE COMPANY
ALBANY SITE PROJECT
CORRECTION DOCUMENTATION REPORT

This report documents the cleanup of the Western Forge & Flange Company (WFF) Albany site that occurred during the period March 4, 1985, through April 30, 1985. In September 1983, the state identified a contamination problem at the site due to heavy metals and oil and grease. A field investigation was conducted in May and July 1984, and a Problem Definition Report issued July 10, 1984. Additional problem definition work occurred in August in response to agency concerns over potential groundwater contamination and to further define soil areas and depths to be excavated. Results of this post Problem Definition Report work were transmitted to the state on November 2, 1984.

A site correction plan was submitted to the state on July 10, 1984, concurrent with the Problem Definition Report. Cleanup requirements were discussed in subsequent meetings and cleanup rationale were transmitted to the state by letter on November 2, 1984. The correction plan was approved by the Department of Health Services on July 19, 1984, and by the Regional Water Quality Control Board on November 15, 1984, subject to certain conditions being met. Design of the correction plan occurred in the period December 1984 through February 1985. A summary of the problem, correction plan, design, construction activities, sampling program, monitoring program, and remaining work to be done is contained herein.

PROBLEM SUMMARY

The Albany facility contained inside and outside soil contamination by heavy metals and oil and grease resulting from the manufacture of flanges. Oily residue had accumulated in soil areas around hammers inside the building, while steam condensate from boiler steam roof discharge vents had contaminated outside soils with oil. Stormwater runoff through part of the facility and from the roof of the plant next door had spread contaminants from inside the plant onto adjoining Southern Pacific Transportation Company (SPTCo) property and into a storm drain along SPTCo railroad tracks.

The inside soils contained copper and nickel levels above total threshold limit concentrations (TTLC) (22 CAC 66699) and copper, lead, and nickel levels above 10 times soluble threshold limit concentrations (STLC) at generally shallow depths up to

3. Separation of clean stormwater drainage from contaminated process water and stormwater, discharge of clean stormwater off site, and treatment of contaminated water.

4. Collection of contaminated water into a new sump, separation of solids and oil from the water in the sump, and treatment of the sump effluent in an oil-water separator.

5. Installation of a steam vent discharge trap on the building roof to collect oily condensate for treatment in the oil-water separator.

6. New roof gutters and leaders to separate clean stormwater from contaminated stormwater and to minimize the quantity of contaminated water generated.

7. Installation of a sand box to receive hot flanges during manufacture.

8. A drum storage area for oil skimmed from the new sump and oil-water separator.

9. New roof gutter system for Curoco building next door to eliminate the stormwater contribution to the manufacturing area.

10. Miscellaneous electrical work and pumps for water collection and treatment system and backup provisions.

DESIGN

Design of the approved correction plan occurred in December 1984. Prior to construction, three revisions were made. Figure 1 is the fourth and final revision to the design. This drawing, completed after construction, is the "as-built" drawing for the Albany Site. The as-built specifications are included as Appendix A to this report. Figure 1 shows the changes to the December 20, 1984, design that were incorporated into the cleanup project due to (1) SPTCo requirements, (2) agency concerns, (3) WFF requests, (4) soil sample verification analytical results, and (5) conditions encountered during construction. Figure 1 can be considered a "record drawing" of correction work that actually occurred. Signficant changes to the December 20, 1984, design are summarized as follows:

1. A steel sump rather than concrete was used. The sump design was modified and the sump fabricated by WFF.

Major Activities

Major construction activities included contaminated soils removal, backfilling, surface drainage controls, and roof drainage controls. The major activities completed as of April 26, 1985, are described below and are shown on Figure 1.

Contaminated Soils Removal. The contaminated soils surrounding equipment inside the building, as shown on Figure 1, were excavated and disposed off site. A total of 33 cubic yards was hauled to the IT Class I Waste Management Unit in Benicia, California, on March 15, 1985. An additional 4 cubic yards were disposed of on March 25, 1985.

Contaminated soils outside the building, and on SPTCo property, were excavated from three areas shown on Revision 3 to the original plans. Additional soils were excavated from three smaller areas shown on the as-built drawing: the storm drain inlet area, an area near the southwest corner of the building observed to contain visible oil, and an area within the 6-inch excavation that was extended to a 20-inch depth due to visible oil. From March 19 until March 22, 1985, 153 cubic yards of outside contaminated soil were hauled to the IT Class I Waste Management Unit in Benicia.

Backfilling. The areas surrounding equipment inside the building were backfilled with aggregate and covered with a 6-inch concrete base. The inside areas were generally backfilled within 1 to 3 days after they were excavated. Prior to backfilling, verification samples were taken and analyzed, additional excavation was done as necessary, and excavation depths were checked by Brown and Caldwell.

The areas excavated outside the building were replaced to grade with 3/4-inch aggregate base as approved by the on-site SPTCo inspector. The clean aggregate was imported and graded March 20 through March 25, 1985.

Surface Drainage Controls. Surface drainage controls consist of an asphalt concrete dike, dispersion basin, concrete curb and gutter, and drainage sump. An asphalt-concrete dike between the plant and the adjacent Curoco building collects clean stormwater from the Curoco roof and east section of the WFF building roof and property. The dike routes clean stormwater to a rock-filled dispersion basin; stormwater then flows to the storm drain inlet grate. The asphalt-concrete dike was constructed on March 21, 1985; the dispersion basin was completed on the following day with 5 tons of drain rock.

Process water and stormwater accumulated on the plant floor flows to a concrete curb and gutter. The curb and gutter were extended an additional 30 feet to contain oily wastewater overflows

sampling was performed. Sampling consisted of collecting and analyzing soil samples inside and outside of the building after soil had been removed to the depths specified on the construction drawing. If concentrations of copper, lead, nickel, or oil and grease were detected above the established cleanup levels, additional soil was removed and vertification sampling and analysis were repeated at the lower excavated depth. The sampling methods, sample locations, and results of analyses are presented below.

Sampling Methods. Verification samples were obtained from the uppermost 6 inches of each excavation in a manual soil sampler lined with a clean brass tube. Following collection, the brass tube was removed and the ends were covered with plastic caps. Prior to use, all sampling equipment was washed with tap water and Alconox, rinsed with tap water, and dried.

Sampling Locations. Each verification sample location is shown on Figure 2. At two inside locations more than one sample number is shown. Additional excavation was required at these locations due to verification sample analytical results. Inside sampling locations were selected to provide a representative sample of an excavation area. In larger areas, more than one sampling location was selected. Additionally, sample V12 was collected from a dirt area identified during construction. The area indicated on Figure 2 was excavated to a depth of 10 inches. The five outside sampling locations were selected to represent the entire outside excavation area and to identify areas that appeared to be contaminated.

Analytical Results. The results of copper, lead, nickel, and oil and grease analyses performed on each verification sample are included in Table 1. The established cleanup level for these constituents and sample collection depths are also included.

Based on the analytical results of the initial sampling, additional excavation and sampling were required at the inside locations V5 and V11, because one or more constituents exceeded the cleanup level. At location V11, only one additional excavation event was required. At location V5, four excavation events to a final depth of 24 inches were required because oil and grease were detected above the cleanup level in the first three samples collected (V5, V8, and V9). In sample V17, nickel and oil and grease were detected at concentrations above the cleanup levels. Excavation and sampling were not repeated at this location because the soil depth sampled (up to 12 inches) was already at the top of the hammer foundation.

As shown in Table 1, none of the outside verification samples exhibited concentrations of copper, lead, nickel, or cil and grease above the cleanup levels. These areas were excavated to the depths shown on the construction drawings.

Table 1 Western Forge & Flange Albany Site Verification Sample Results, Concentration in Milligrams per Kilogram

Sample number	Sample depth, inches	Copper	Lead	Nickel	Oil and grease
Inside soils					
V1	18 - 24	20	17	15	<50
V2	6 - 12	66	240	48	240
V3	12 - 18	62	14	95	<50
V4	6 - 12	75	38	88	380
V5	6 - 12	42	64	51	2,180
V8	12 - 18	470	100	820	3,510
V9	16 - 22	140	97	350	1,290
V13	24 - 30	-	-	-	170
V6	6 - 12	110	150	130	640
V7	6 - 12	240	99	560	<50
V10	10 - 16	320	87	210	120
V11	10 - 16	2,000	82	2,100	10,700
V15	18 - 24	150	37	460	240
V12	10 - 16	580	50	190	<50
V14	10 - 16	380	180	250	240
V16	18 - 24	27	<13	100	120
V17	6 - 12	110	18	1,900	2,470
Outside soils					
SV1	12 - 18	8.7	13	32	270
SV2	12 - 18	22	23	63	94
SV3	17 - 23	32	22	210	<50
SV4	6 - 12	29	40	58	<50
SV5	24 - 30	26	15	62	133
TTLC[a]		2,500	1,000	2,000	-
Cleanup level[b]		1,250	500	1,000	1,000

[a]Total threshold limit concentration in milligrams per kilogram 22 CAC 66699 January 11, 1985.
[b]Approved by State.

Note: Underline indicates concentration exceeding cleanup level.

Drum Sample

Soils excavated from around equipment foundations were temporarily stored in drums prior to off-haul to the IT site in Benicia. IT required a PCB analysis of the drummed material prior to acceptance for disposal. A composite sample was formed from three discrete samples collected from randomly selected drums. The sample was analyzed for PCBs and results showed nondetectable concentrations. The laboratoy report is included in Appendix B.

Ditch Sample

At the request of the Regional Water Quality Control Board, two soil samples were taken in the drainage ditch, within 2 feet of the storm drain behind Curoco and next to SPTCo tracks. These samples were analyzed for copper, lead, nickel, and oil and grease. Results are shown on the analytical report included in Appendix B

REMAINING ACTIVITIES

The following correction activities remain:

1. Removal of barrels from the site containing skimmed oil from the separator. Note that arrangements are currently being made with a recycler for haul-off of this material.

2. Connection of the second stream line vent to the steam trap on the roof.

3. Completion of excavation and removal of contaminated soil around the 14,000-pound hammer at sample WFF 12. Note that this hammer foundation is cracked. Since WFF plans to rebuild the foundation in June, soils around the hammer were not removed during the inside cleanup described in this report. Operational considerations have now allowed excavation of these soils, which is currently under way.

4. Transmittal of groundwater monitoring results for the May 1985 sample and collection of a secord sample at the end of the dry season.

APPENDIX A

SPECIFICATIONS

APPENDIX A

REVISION NO. 2
TO
SPECIFICATIONS

WESTERN FORGE & FLANGE COMPANY ALBANY SITE
CORRECTION PROJECT

Pumps, Electrical, and Mechanical

Owner will furnish and install all pumps, electrical, and mechanical (piping) equipment.

Earthwork, Base and Paving

Imported clean fill shall be dirt or aggregate with a maximum size of 2 inches in diameter any dimension.

Additional excavation of contaminated material shall be as directed by Brown and Caldwell. Such excavation shall include loading, hauling, disposal, disposal tax, and import and compaction of new clean fill. This work shall be done on an in-place yard basis with the volume of material removed jointly determined by Brown and Caldwell and Underground Construction.

Additional haul-off above 70 cubic yards of soil excavated by Owner inside building shall be paid on an in-drum yard basis. The cost shall include loading, hauling, disposal, and disposal tax. Owner shall dump drums in an area convenient for truck loading of contents by subcontractor. The volume of material in the drums shall be calculated by Brown and Caldwell based on drum capacity and degree of fullness.

Performance Bond

Underground Construction shall provide a faithful performance bond to Brown and Caldwell for 100 percent of the contract amount.

Business License

Underground Construction shall secure a business license from the City of Albany and all required permits to complete the contract work.

rod, and adjustable stops mounted on a guide stand bolted to the sump cover. Furnish a combination magnetic starter, with overload protection and under voltage release, and circuit breakers, in single enclosure, for wall mounting. Pump and motor shall be installed inside the building against the west wall just south of the doorway.

Owner shall provide a 20 A, 120 VAC, 1 phase circuit breaker to feed the sump pump starter. Wire and conduit shall be sized to limit voltage drop to 3 percent. Installation shall comply with 1984 National Electrical Code and any applicable state and local codes.

Provide sump cover as necessary to span opening. Pump discharge piping shall be connected to the oil/water separator with 1-1/4-inch-PVC pipe with solvent weld joints. Pipe shall run vertically up the west wall, then along the west wall to the oil/water separator, and then drop down vertically to discharge into the oil/water separator. The pipe shall be braced and supported along its length.

Rainwater Gutters and Leaders

Install a new gutter between points 1 and 2 discharging to the roof area at point 2. Install gutter 4/6 with a watertight divider at point 5 and a leader discharging water from gutter 4/5 to the inlet of the oil/water separator. Gutter 5/6 discharges to the ground through a leader at point 6. The exact location of points 1 and 5 will be determined in the field.

APPENDIX B

LABORATORY REPORTS

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

LOG NO: E85-02-091

Received: 07 FEB 85
Reported: 04 MAR 85

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

ATTN: Mr. Brian Bracken CC: Mary Lucas Project: 1928-08/4

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
02-091-1	WM-Composite	07 FEB 85

PARAMETER	02-091-1
Polychlorinated Biphenyls	
Date Extracted	02.22.85
Date Analyzed	02.22.85
Aroclor 1016, mg/kg	<0.5
Aroclor 1221, mg/kg	<0.5
Aroclor 1232, mg/kg	<0.5
Aroclor 1242, mg/kg	<0.5
Aroclor 1248, mg/kg	<0.5
Aroclor 1254, mg/kg	<0.5
Aroclor 1260, mg/kg	<0.5
Aroclor 1262, mg/kg	<0.5
Total PCB's, mg/kg	<0.5

James Hatfield, Laboratory Director

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

LOG NO: E85-03-247

Received: 19 MAR 85
Reported: 21 MAR 85

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

Requisition: 1928-08/4

ATTN: Mr. Brian Bracken

CC: Ms. Mary Lucas

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
03-247-1	SV-1; 12-18"	19 MAR 85
03-247-2	SV-2; 12-18"	19 MAR 85
03-247-3	V-17; 6-12"	19 MAR 85

PARAMETER	03-247-1	03-247-2	03-247-3	
pper, mg/kg	8.7	22	110	
ad, mg/kg	13	23	18	
Nickel, mg/kg	32	63	1900	
Nitric Acid Digestion, Date	03.19.85	03.19.85	03.19.85	
Oil and Grease, mg/kg	270	94	2470	

James Hatfield, Laboratory Director

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

LOG NO: E85-02-224

Received: 19 FEB 85
Reported: 04 MAR 85

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

ATTN: Mr. Brian Bracken CC: Ms. Mary Lucas Project: 1928-08

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
02-224-2	V-14	19 FEB 85
02-224-3	V-15	19 FEB 85

PARAMETER	02-224-2	02-224-3
Oil and Grease, mg/kg	240	240
Nitric Acid Digestion, Date	02.19.85	02.19.85
Lead, mg/kg	180	37
Nickel, mg/kg	250	460
Copper, mg/kg	380	150

James Hatfield, Laboratory Director

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

LOG NO: E85-02-150

Received: 12 FEB 85
Reported: 19 FEB 85

Project: 1928-08/4

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

ATTN: Mr. Brian Bracken

CC: Ms. Mary Lucas

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
02-150-1	V-9	12 FEB 85
02-150-2	V-10	12 FEB 85
02-150-3	V-11	12 FEB 85
02-150-4	V-12	12 FEB 85

PARAMETER	02-150-1	02-150-2	02-150-3	02-150-4
itric Acid Digestion, Date	02.12.85	02.12.85	02.12.85	02.12.85
Copper, mg/kg	140	320	2000	580
Lead, mg/kg	97	87	82	50
Nickel, mg/kg	350	210	2100	190
Oil and Grease, mg/kg	1290	120	10700	<50

James Hatfield, Laboratory Director

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

LOG NO: E85-01-324

Received: 28 JAN 85
Reported: 31 JAN 85

Project: 1928-08/4

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

ATTN: Mr. Brian Bracken CC: Ms. Mary Lucas

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-324-1	V-5	28 JAN 85
01-324-2	V-6	28 JAN 85

PARAMETER	01-324-1	01-324-2
pper, mg/kg	42	110
Lead, mg/kg	64	150
Nickel, mg/kg	51	130
Oil and Grease, mg/kg	2810	640

James Hatfield, Laboratory Director

BROWN AND CALDWELL
ANALYTICAL LABORATORIES

1928-08/4

LOG NO: E84-12-140

Received: 12 DEC 84
Reported: 04 JAN 85

Project: 1928-08 (Western Forge)

Brown and Caldwell
3480 Buskirk Avenue
Pleasant Hill, California 94523

ATTN: Brian Bracken

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
12-140-1	S-16; 0-6 inches	12 DEC 84
12-140-2	S-16; 6-9 inches	12 DEC 84

PARAMETER	12-140-1	12-140-2
tric Acid Digestion, Date	12.13.84	12.13.84
pper, mg/kg	1500	210
Lead, mg/kg	650	18000
Nickel, mg/kg	2200	200
Oil and Grease, mg/kg	188000	3960

James Hatfield, Laboratory Director

APPENDIX C

ANALYTICAL METHODS

APPENDIX C-1

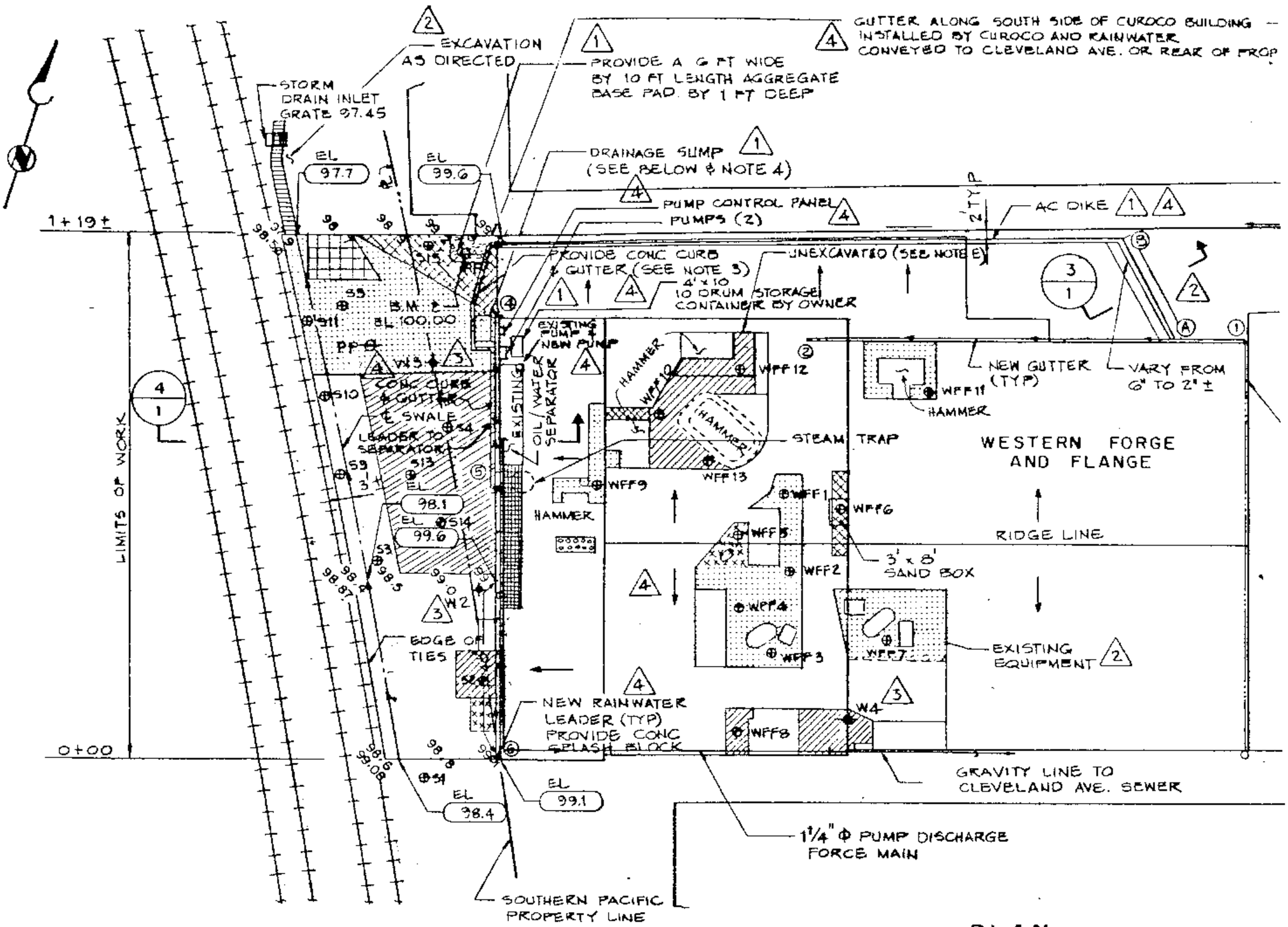
Table C-1 summarizes laboratory methods used in analyzing aqueous and soil samples collected during the correction phase of the investigation. Soil sample analysis for oil and grease, copper, lead, nickel, and PCBs were completed using the appropriate test methods described in "Test Methods for Evaluation of Solid Wastes," U.S. Environmental Protection Agency (EPA) publication SW-846.

Analysis of the storm drain (aqueous) sample for oil and grease, copper, lead, and nickel are described in EPA "Methods for Chemical Analysis of Water and Wastes," EPA publication 600/4-79-020.

Table C-1 Laboratory Procedures Used in Analyzing Aqueous and Soil Samples

Analysis	Analytical method
Soils[a]	
Priority pollutant metals	
Copper	Atomic absorption/direct aspiration method (7210)
Lead	Atomic absorption/direct aspiration method (7420)
Nickel	Atomic absorption/direct aspiration method (7520)
PCB's	Florisil column chromatography (8080)
Oil and grease	Dissolution procedure (3040)
Aqueous[b]	
Oil and grease	Gravimetric, separatory funnel extraction (413.1)

[a]U.S. Environmental Protection Agency (EPA) Test Methods for Evaluating Solid Waste. SW846, July 1982.
[b]Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, March 1983.



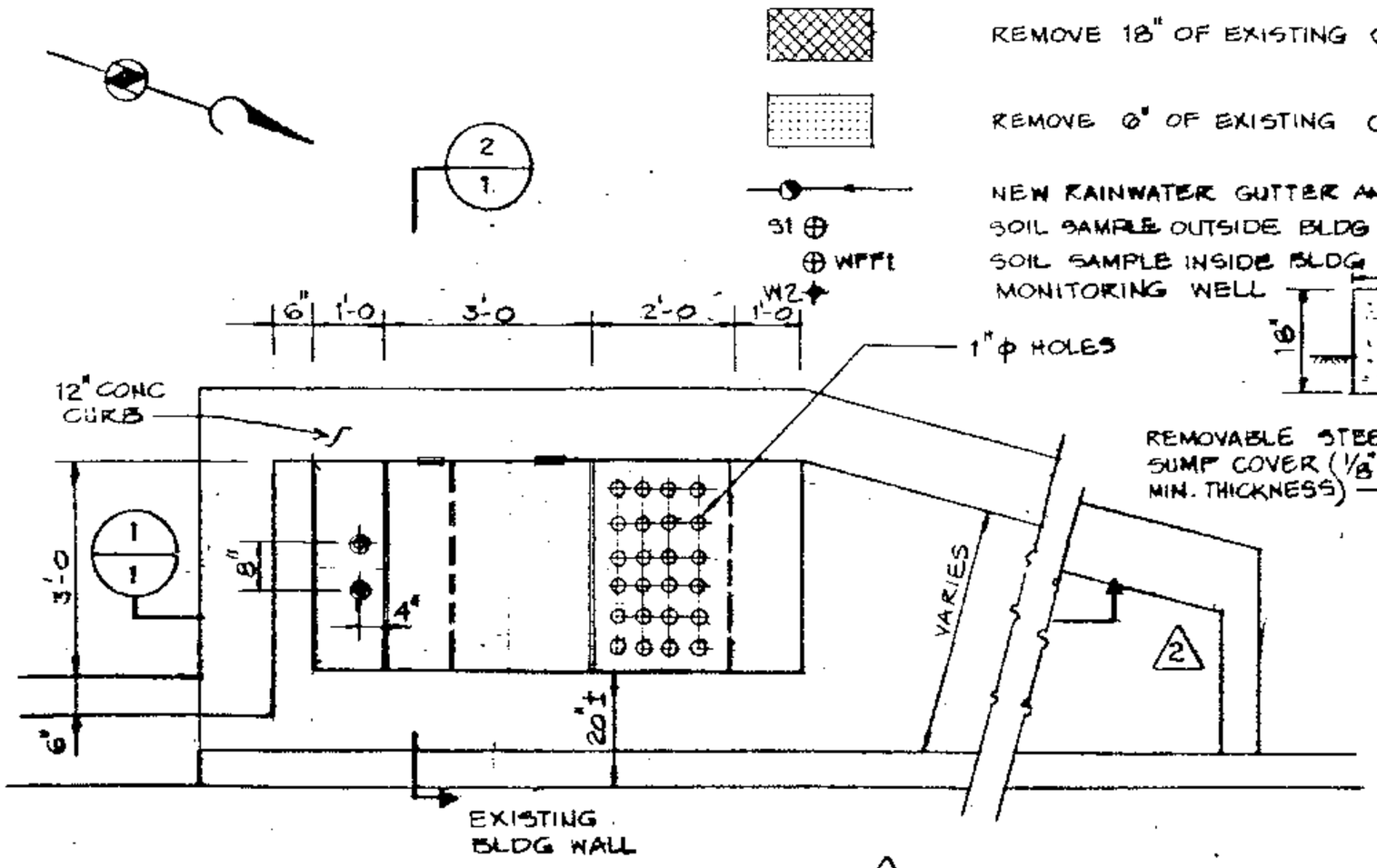
PLAN

SCALE: 0 20 40

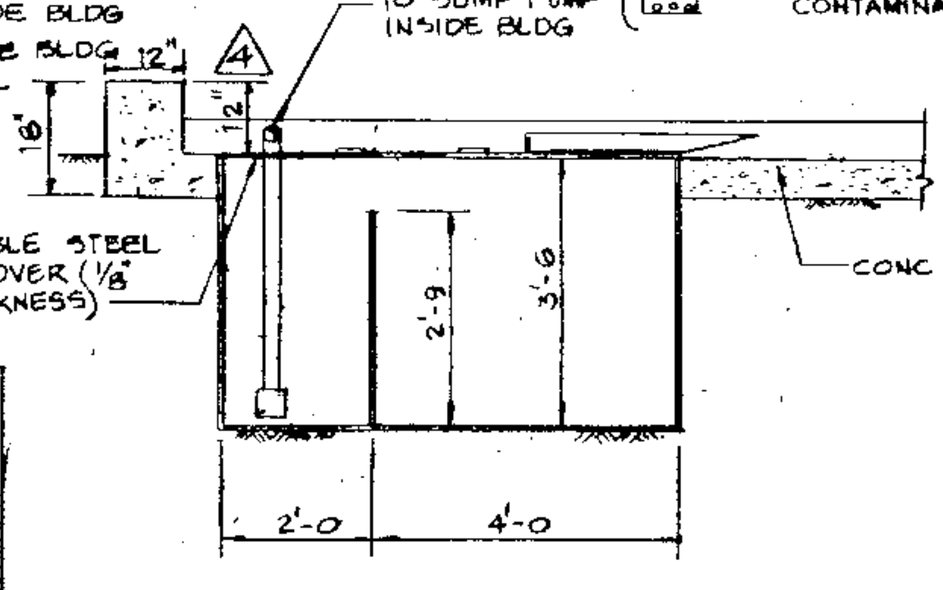
LEGEND:

- 98.4 — FINISH GRADE
- REMOVE 12" OF EXISTING CONTAMINATED SOIL
- REMOVE 18" OF EXISTING CONTAMINATED SOIL
- REMOVE Ø" OF EXISTING CONTAMINATED SOIL
- NEW RAINWATER GUTTER AND LEADER
- S1 ⊕ — SOIL SAMPLE OUTSIDE BLDG
- ⊕ WFF1 — SOIL SAMPLE INSIDE BLDG
- MONITORING WELL

4 — REMOVE 20 CONTAMINAT / REMOVE 10" CONTAMINAT / REMOVE 9" CONTAMINAT / REMOVE 24' CONTAMINAT / REMOVE 3" CONTAMINATE



DRAINAGE SUMP - PLAN 1/1 4/1



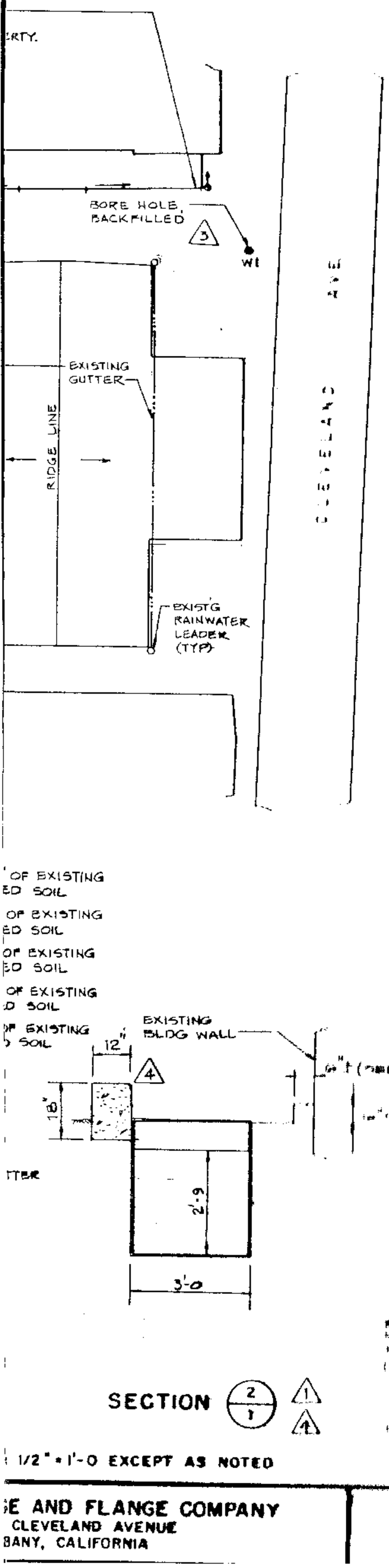
SECTION 1/1 1/4

ONE INCH AT FULL SIZE IF NOT ONE INCH SCALE ACCORDINGLY

SCALE

BROWN AND CALDWELL CONSULTING ENGINEERS	FILE 1928-08	DESIGNED MLH	SUBMITTED ____ DATE ____	WESTERN FOR 540 A Al
	DATE 12-20-84	CHECKED ____	APPROVED Joseph A Cotter Jr DATE 12/20/84	
	DRAWN FRP	CHECKED ____	APPROVED ____ DATE ____	

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP
	1	GENERAL OVERALL REVISION	MLH	9/12/85	
	2	PUMP DELETION & GENERAL REVISION	JAC	2/19/86	
	3	GENERAL REVISION	JAC	2/24/86	
	4	AS BUILT CORRECTIONS	MLH	4/14/88	



NOTES

1. B.M. 2 IS A SMALL SCREW ON SOUTH SIDE OF POWER POLE, ELEVATION OF 100.00 IS ASSUMED.
2. THE EXISTING EQUIPMENT INSIDE THE BUILDING IS SHOWN FOR CLARITY AS IF THE ROOF WERE REMOVED.
3. INSTALL AS CLOSE TO BUILDING AS POSSIBLE WITHOUT DAMAGING BUILDING OR BUILDING FOOTING.
4. INSTALL STEEL PLATE DRAINAGE SUMP FURNISHED BY OWNER.
5. ALL RAINWATER GUTTER AND LEADER WORK DONE BY OTHERS.

CONSTRUCTION BY OWNER 1

(A) EXCAVATE CONTAMINATED MATERIAL INSIDE BUILDING AND STOCKPILE MATERIAL ON SITE FOR REMOVAL BY CONTRACTOR TO AN APPROVED DISPOSAL SITE 3

(B) BACKFILL THE AREAS EXCAVATED IN (A) ABOVE

(C) CONSTRUCT DRUM STORAGE CONTAINER AND SAND BOX INSIDE BUILDING.

(D) PUMP, CONTROLS AND ELECTRICAL AND PLUMBING WORK SHALL BE BY OWNER. 4

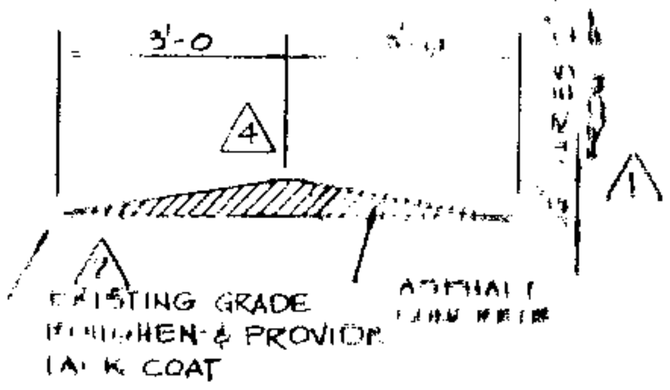
(E) TO BE EXCAVATED WHEN CRACKED HAMMER IS REMOVED AND REPAIRED. (UNDER EXCAVATION)

(F) STEAM TRAP TO BE INSTALLED BY OWNER ON ROOF BUILDING. 4

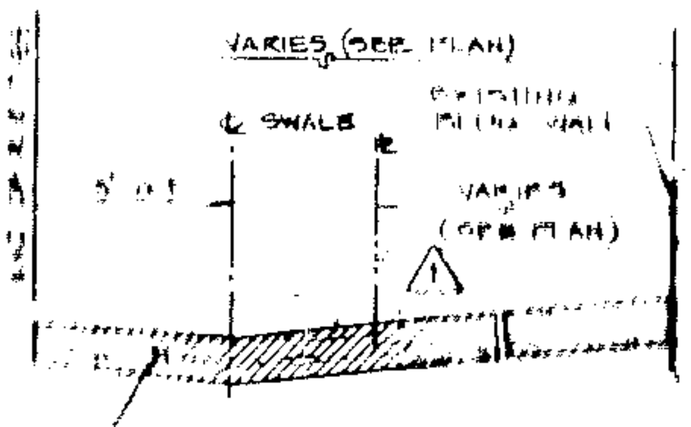
OF EXISTING
ED SOIL
OF EXISTING
ED SOIL
OF EXISTING
ED SOIL
OF EXISTING
D SOIL
F EXISTING
SOIL

SECTION 2/1 1 4

1/2" = 1'-0 EXCEPT AS NOTED

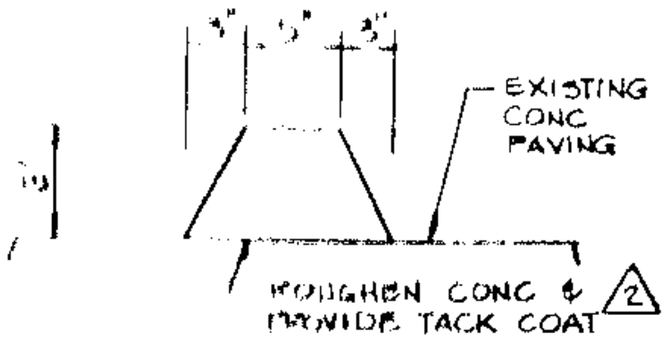


SECTION 3/1
NO SCALE

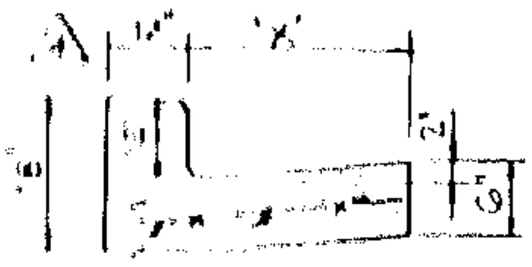


SECTION 4/1
NO SCALE

NOTE A:
4 EXCAVATED MATERIAL REPLACED TO DRAIN WITH UNCONTAMINATED AGGREGATE BASE (MATERIAL FROM OFF SITE)



AC DIKE 1
NTS



CONCRETE CURB AND GUTTER 1
NTS

NOTE:
DIMENSION 'X' VARIES W/ A MIN. OF 14". VARY 'X' AS NECESSARY TO DRAIN WATER FROM LOW SPOT ON FLOOR TO DRAINAGE SUMP.

AS BUILT
4

GE AND FLANGE COMPANY
CLEVELAND AVENUE
BANY, CALIFORNIA

ALBANY SITE CORRECTION PROJECT
PLAN AND SECTIONS

DRAWING NUMBER
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SHEET 1 OF 1 D

Data Evaluation of Materials Related to the Subsurface Environmental Closure of Western Forge & Flange, 540 Cleveland Ave., Albany CA

Prepared for Chemical Data Management Systems, Inc., Dublin, CA (CDMS)
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This evaluation is based on the review of documentation of a 1985 investigation and cleanup of the Western Forge and Flange (WFF) facility in Albany, CA found on the California Department of Toxic Substances Control (CADTSC) Envirostor Website, a Brown and Caldwell report from 1984, and on the geologic and chemical information from 17 hydropunch borings performed in October and November 2008.

Executive Summary

In the early 1980s Western Forge and Flange process cooling water and storm water runoff containing metals and oils contaminated the shallow subsurface and was discharging to a nearby storm drain. In response and in consort with the environmental regulatory agencies, WFF sampled and removed 200 cubic yards of contaminated sediment from inside and outside the facility and instituted engineering controls at the surface and on their roof to prevent a reoccurrence. (CADOHS. 1987) Verification sampling in January 1985 demonstrated that remaining contaminants in the sediments were below residential standards. (CADTSC. 2002).

In October and November of 2008, CDMS sampled the shallow subsurface both inside and outside the building at 17 locations approved by the Alameda County Environmental Health Department. This investigation found that there is a shallow perched water bearing clay zone beginning between 4 and 6 feet below ground surface (bgs) perched on a dense clay at 10 to 12 feet bgs. This clay is underlain by a dry poorly cemented sand at approximately15 feet bgs. Samples of soil and the perched water were analyzed for metals and total petroleum hydrocarbons (residual fuels) and were found to be very similar to the verification levels found in 1985. There is one relatively small shallow area in the southwestern portion of the building where single samples in two borings exceed the SFRWQCB Environmental Screening Levels in soil for TPH and is a candidate for additional cleanup.

1983 Environmental Release

In September 1983, a Department of Fish and Game Pollution Warden reported oil on the ground at WFF and in water discharging to a storm drain. The CA Department of Health Services (CADOHS), the predecessor of the CADTSC, began an enforcement action and Western Forge contracted with Brown and Caldwell to conduct their investigation. Sampling at the site revealed elevated concentrations of lead, nickel, copper, zinc, and oil and grease in soils outside the building and on the floor of the interior. WFF was fined for the discharge, agreed to cleanup the site, and agreed to a corrective action plan that included cleanup and engineering controls on its process. (CADOHS. 1987).

The Brown and Caldwell subsurface investigation found that the local stratigraphy beneath the site consists of a sandstone that slopes from the east to the west and is overlain by a one foot thick clay bed east of the site and thickening to 14 feet to the west. Water levels, beneath the western part of the facility, were at 5 to 6 feet below ground surface. (Brown and Caldwell. 1984).

Cleanup consisted of the sampling, excavation, and removal of 200 cubic yards of contaminated sediments. Engineering controls included surface and roof collection of contaminated process water and berms and gutters to segregate clean storm runoff from process water. A steam trap and condenser was mounted on the roof, condensate was directed to a separator, and waste oil was collected for disposal. (CADOHS. 1987)

Following the cleanup, sediment verification sampling was conducted in January 1985. The results of this sampling are included in Table 1, which was extracted from (CADOHS. 1987).

Table 1 Western Forge & Flange Albany Site Verification Sample Results, Concentration in Milligrams per Kilogram

Sample number	Sample depth, inches	Copper	Lead	Nickel	Oil and grease
Inside soils					
V1	18 - 24	20	17	15	<50
V2	6 - 12	66	240	48	240
V3	12 - 18	62	14	95	<50
V4	6 - 12	75	38	88	380
V5	6 - 12	42	64	51	2,180
V8	12 - 18	470	100	820	3,510
V9	16 - 22	140	97	350	1,290
V13	24 - 30	-	-	-	170
V6	6 - 12	110	150	130	640
V7	6 - 12	240	99	560	<50
V10	10 - 16	320	87	210	120
V11	10 - 16	2,000	82	2,100	10,700
V15	10 - 24	150	37	460	240
V12	10 - 16	580	50	190	<50
V14	10 - 16	300	180	250	240
V16	18 - 24	27	<13	100	120
V17	6 - 12	110	18	1,900	2,470
Outside soils					
SV1	12 - 18	8.7	13	32	270
SV2	12 - 18	22	23	63	94
SV3	17 - 23	32	22	210	<50
SV4	6 - 12	29	40	58	<50
SV5	24 - 30	26	15	62	133
TTLC[a]		2,500	1,000	2,000	-
Cleanup level[b]		1,250	500	1,000	1,000

[a]Total threshold limit concentration in milligrams per kilogram 22 CAC 66699 January 11, 1985.
[b]Approved by State.

Note: Underline indicates concentration exceeding cleanup level.

On August 16, 1985, upon review of the verification sampling report, the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) expressed their satisfaction with the soil cleanup activities. In addition, their review of ground water data

from up and down-gradient monitor wells concluded that WFF had not had a significant impact on the underlying shallow aquifer and therefore no further ground water monitoring was needed. In the same letter, the Regional Board also commended WFF for its plan to prevent future releases of waste oil and other contaminants. (CADOHS. 1987)

In a letter dated January 15, 1986, to WFF, the SFRWQCB reiterated their conclusion that the shallow perched groundwater at the site is too saline to be of beneficial use, that the low permeability of the clays containing the ground water would limit the spread of any pollutants, that the pollution problem has been adequately mitigated, and that the site does not pose a significant threat to the beneficial uses of the waters of the State. (SFRWQCB. 1984). In 1987, the CADOHS also concluded that no further removal/remedial action is necessary. (CADOHS. 1987).

Finally, in 2002, in what appears to be a review of the cleanup and ongoing operations by WFF, CADTSC specified the cleanup levels for the site at that time as 1250 ppm for copper, 500 ppm for lead, 1000 ppm for nickel, 2500 ppm for zinc, and 1000ppm for oil and grease. They also indicated that these cleanup levels were below residential standards. This report also indicated that the site then generated waste oil and sludge with metals and was regularly inspected by the Alameda County Environmental Health Department. (CADTSC. 2002).

Current (2008) Investigation

Within the past year, WFF suspended its operations at its Albany facility and removed all of its equipment from the building and the site. The Alameda County Environmental Health Department is currently overseeing the investigation of the site to determine is suitability for sale.

WFF has contracted with CDMS to manage the environmental investigation, mange any necessary cleanup, and to shepherd the site through the environmental certification process. At the time of this writing, CDMS has conducted some cleaning of the building and has completed the subsurface investigation.

The sampling locations were established in collaboration with representatives of the Alameda County Environmental Health Department (Figure 1). There are several concrete and steel lined pits at the facility that extend to 10 feet below the ground surface, and served as foundations for large hydraulic metal working hammers, rollers, and presses. The County was concerned that the pits could be a source of release of hydraulic fluids. Sample locations were established around each of the pits jointly by a representative of Alameda County Environmental Health Department and CDMS, and at additional locations selected by CDMS based upon surface staining and the locations of other operations. Four inch holes were sawn through the 6 – 9 inches of concrete, and the samples were taken with a hydropunch rig. Core tubes were lined with clear liners and were advanced three feet at a time. At water sampling locations, slotted PVC well screens were inserted into the borehole, and water samples were taken with a bailer. Cement grout was tremied through the well screens to seal the holes upon completion.

The first two borings were made around the pit on the north side of the building (SB101 & SB102). The initial intent was to advance the borings to below the bottom of the pits. After penetrating the initial 6 -9 inches of concrete, the cone penetrometer moved through unsaturated sediment and encountered ground water in a dark gray plastic clay 4-6 feet below ground surface (bgs). At 12 to 14 bgs a dense dry clay marked the

bottom of the perched water zone. The clay was underlain at 14 to 16 feet by a dry poorly cemented tan-colored sand. The third boring was pushed in the southwest corner of the building (SB103) and the same materials were encountered at about the same depths. Water samples were bailed from these three borings and in each case, water level recovery was very slow indicating that the saturated clay has a low hydraulic conductivity.

From the data from these three borings and the information from the Brown and Caldwell investigation (Brown and Caldwell. 1984), it is clear that the site is underlain by a low permeability clay saturated above a dry dense clay above a poorly cemented sand. The clay contains a thin perched ground water zone between 6 to 12 feet below the ground surface in the southwestern portion of the facility. Since the concrete and steel lined pits are all dry, extend well below the perched water bearing zone, and no water is seeping into the pits, it is also reasonable to conclude that no liquid contaminants would have seeped out of the pits to the subsurface environment.

The remaining borings were advanced only to nine feet bgs to avoid any further penetration of the dry clay responsible for the perched water zone and for the protection of the deeper aquifer.

Soil sample analyses are included in Table 2A and water sample analyses are in Table 2B. (TestAmerica. 2008a, 2008b, and 2008c).

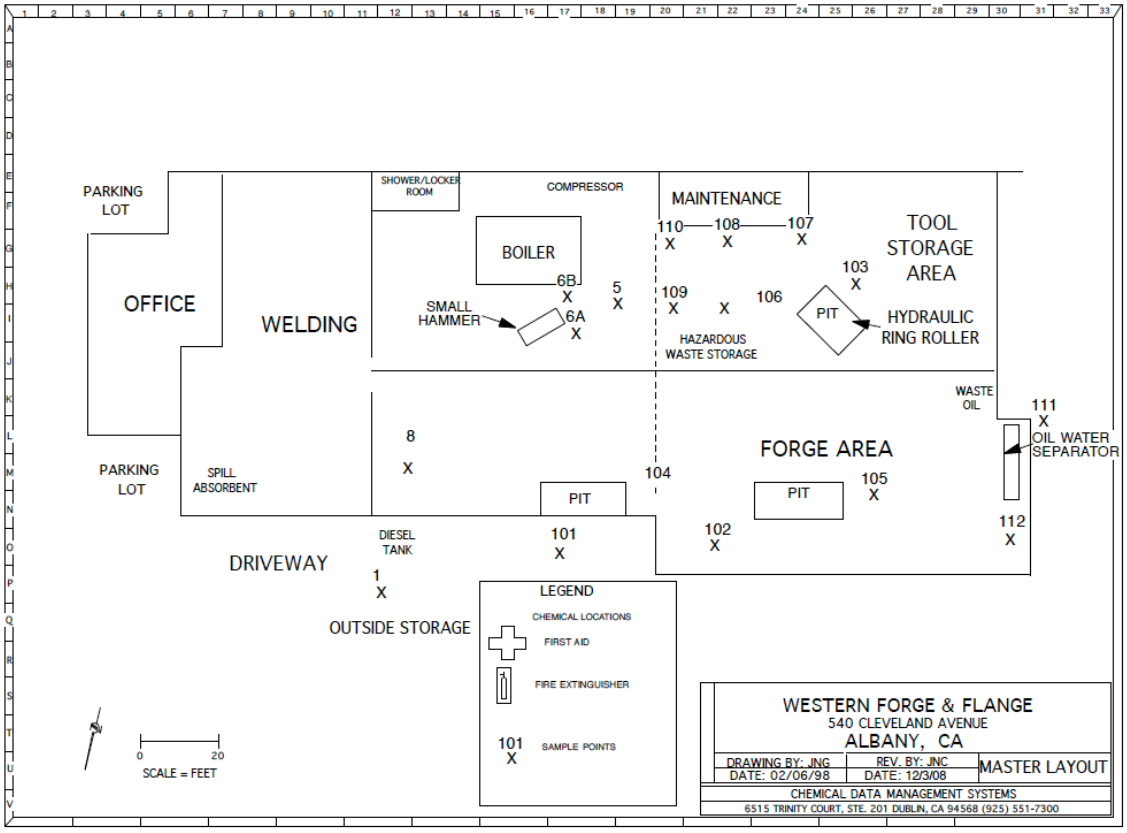

Figure 1. Location of 2008 subsurface sampling events.

Table 2A WFF Data		**Soil in mg/kg**				
Boring #	Depth (Center) ft	Cr	Ni	Pb	Zn	TPH (Residual Fuels)
SB101	3.5	17	22	12	26	150
	7.5	14	8.2	5.2	9.4	ND
	11.5	8.8	10	3.7	14	ND
	15.5	16	20	6.2	23	ND
SB102	3.5	45	60	15	33	ND
	7.5	16	7.8	110	70	52
	11.5	13	9.4	5.0	13	ND
	15.5	11	15	7.1	26	ND
SB103	3.5	67	85	11	52	210
	7.5	18	9.7	150	110	110
	11.5	18	23	3.7	12	ND
	15.5	18	23	3.9	12	ND
SB104	1.5	32	35	10	34	ND
	3.5	16	11	75	120	ND
	7.5	12	8.3	13	17	ND
SB105	1.5	70	82	9.0	62	ND
	3.5	17	12	44	62	ND
	7.5	14	10	17	35	ND
SB106	2	53	64	11	46	ND
	4.5	54	79	31	67	2800
	7.5	12	24	210	200	ND
SB107	1.5	72	72	260	580	15000
	3.5	14	10	23	49	700
	7.8	14	11	5.2	12	ND
SB108	1.5	52	59	12	41	ND
	4.5	25	24	65	100	150
	7.5	14	10	4.8	9.3	ND
SB109	1.5	14	12	160	210	ND
	4.5	19	14	120	200	ND
	7.5	13	10	4.8	10	ND
SB110	1.5	25	19	87	290	ND
	4.5	17	11	10	26	ND
	7.5	13	8.4	5.3	7.8	ND
SB111	0.5	37	180	19	920	360
	3.5	50	69	6.6	44	60
	5.5	26	21	29	62	ND
	7.5	15	12	49	50	87
	9.5	14	8.8	10	13	ND
SB112	3.5	13	26	13	29	63
	7.5	70	86	7.7	42	ND
#5	0.75	51	140	30	73	
	3.5	16	20	81	110	

Table 2A (cont) WFF Data	**Soil in mg/kg**					
Boring #	Depth (Center) ft	Cr	Ni	Pb	Zn	TPH (Residual Fuels)
#6A	2.75	54	67	110	140	
	3.5	14	8.3	7.1	16	
#6B	2	5.2	83	7.9	81	
	3.75	15	9.2	56	76	
#8	1.25	18	14	180	130	
	3.5	73	180	140	90	
#9	1	15	14	23	56	
	3.5	20	24	15	29	

Table 2B WFF Perched Water Data ug/L Boring #	Cr	Ni	Pb	Zn	TPH (Residual Fuels)
SB101	ND	120	6.5	56	ND
SB102	14	140	770	1200	ND
SB103	26	380	61	1400	ND
SB105	ND	52	9.4	930	ND
SB107	22	480	120	1300	ND
SB108	25	76	5600	970	ND
SB109	ND	ND	ND	18	ND
SB111	ND	420	ND	8400	ND
1-6 (unfiltered)	1100	5800	1100	1900	

Interpretation of Chemical Data

With the exception of the two shallow soil samples in SB106 and SB107 all of the soil samples are very similar and in most cases lower than the concentrations that were certified as being below residential standards in 1985. This would indicate that the engineering controls WFF installed in 1985 were successful in preventing any further releases of contaminants to the ground. While there is no information as to the origin of the contaminants in the soil in the small area of the southwest corner of the building where SB106 and SB107 are located, this area is a candidate for some additional contaminated soil removal.

In addition to comparing the 2008 analytical results to the 1985 verification results and cleanup standards, the results were also compared to the 2008 Environmental Screening Levels (ESL) established by the SFRWQCB and accepted by the California State Water Resources Control Board. To select the appropriate ESL, the land use was considered Commercial or Industrial, the Depth to Impacted Soil was Shallow Soil, and the Groundwater use of the regional Aquifer was considered a Drinking Water Resource. Because the exterior soil had been replaced with clean soil in 1985 and the interior of the building has 6 to 9 inches of concrete over the soil, there is an assumption of no direct exposure, and no terrestrial ecological impacts. Given these assumptions the appropriate Soil Tier 1 ESL is the Gross Contamination ESL. For water, the contaminants are in a shallow perched zone, are not in the regional shallow aquifer, and there are no impacts to aquatic organisms. For Groundwater Tier 1 the Gross Contamination is the appropriate ESL. The selected appropriate ESLs for the contaminants of concern are shown in Table 3. (SFRWQCB. 2008).

Table 3 Environmental Screening Levels for Gross Contamination

	Soil mg/kg	Water ug/L
Cr (Total)	2,500	50,000
Ni	2,500	50,000
Pb	2,500	50,000
Zn	2,500	5,000
TPH (Residual Fuels)	2,500	1,000

Conclusions

With the exception of the two shallow soil samples taken from SB106 and SB107 in the southwest portion of the building, all soil and water samples taken in the 2008 subsurface investigation are below the SFRWQCB's 2008 Environmental Screening Levels and below the more stringent cleanup levels prescribed in 1985. The soil concentrations are also very similar to the concentrations that caused the regulatory agencies to declare the pollution at the site adequately mitigated in the mid 1980s. Upon cleanup of the area including the SB106 and SB107 locations and verification sampling, the WFF Albany site will be ready for certification as meeting the appropriate environmental conditions for no further cleanup action.

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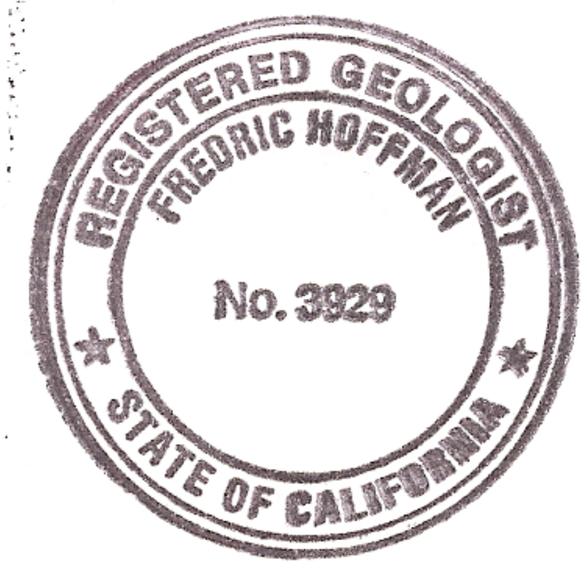

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