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Alameda County
Environmental Health

Executive Report for the Western Forge and Flange Company Closure at 540 Cleveland Ave Albany CA 94706

June 2009

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i. Executive Summary

This report presents the details of the hazardous material facility closure Chemical Data Management Systems (CDMS) conducted on behalf of Western Forge and Flange Co. at 540 Cleveland Ave, Albany California.

Western Forge and Flange was in operation at the Albany site from 1944 until the company began relocating its manufacturing operation to their Texas facility in 2007. By early 2008, all of the equipment and materials used during the manufacturing operations, including hazardous materials, were moved to the Texas facility.

Since the relocation of the Western Forge and Flange Co. facility from Albany to Texas, there have been extensive decontamination/clean up activities. Clean up activities have included: cleaning the rafters using wire brushes, hot pressurized water, and industrial vacuums; sweeping the floors; triple rinsing the floors with hot pressurized water; triple rinsing the clarifier using hot pressurized water; removing back fill from the pits used to house the footings of the hammers and roller rings; removing all piping containing hazardous materials; removing some soil containing contaminants above the environmental screening levels; removing oil from the open exploratory excavation near the ring roller pit; and removing all hazardous waste.

In addition to the clean up activities, several sampling events also occurred under the direction of the Alameda County Department of Environmental Health (ACDEH), including, wipe sampling, soil sampling and water sampling. The analytical parameters used for the analysis of soil and water were: TPH-Diesel, TPH-Motor Oil, TPH-Carbon Range C19-C36, cadmium, chromium, nickel, lead, and zinc.

Sample analyses for all wipe samples were completed for: cadmium, chromium, nickel, lead and zinc. Wipe sampling results indicated elevated levels of metals in several locations, all of which are between 15-40 feet above ground level. One wipe sample, S-3, showed marginal elevated levels for nickel at a location of approximately 8 feet. As a result of the elevated levels of metals, the rafters were cleaned after each sampling event to remove trace contaminants. A total of three wipe sampling events and three aboveground cleaning events occurred.

Water sampling results indicated elevated levels of metals in several locations but not in others. Elevated levels of petroleum hydrocarbons were detected in soil samples from various sampling locations but not in others.

As a response to the elevated levels of petroleum hydrocarbons found in various soil-sampling locations, a soil cleanup plan was developed to remediate the areas in close proximity to these sample locations (sample locations 5, 6B, SB106, SB107).

Cleanup in sample locations 5, 6B, and SB 107 continued until all contaminated soil had been removed. During the cleanup of sample location SB106 (adjacent to the ring roller pit), oil began to seep from a point source in the wall of the trench closest to the ring roller pit at 2.5 feet below ground surface, and began to accumulate on top of a perched layer of water at the bottom of the pit.

Following this event, Consulting Geologist Fred Hoffman and CDMS representatives further evaluated the excavation and the decision was made to conduct subsurface investigations around of each of the other two pits on site. The purpose of this investigation was to confirm the presence or absence of oil in the area surrounding the pits. No contamination was observed during this subsurface investigation.

Currently, bio and chemical remediation has been implemented along with several oil-skimming events to assist in the removal of oil in the water and soil in the excavation at SB106, adjacent to the ring roller pit.

Case worker Susan Hugo and Sukla De of the ACDEH, have recommended that this case be transferred to the Alameda County Site Mitigation/Local Oversight Program for all subsurface issues and concerns.

Further evaluation of the aboveground issues and the transfer of this case to the Site Mitigation/Local Oversight Program for an evaluation of the subsurface issues are pending as of this writing.

CLOSURE PLAN

FOR

Western Forge & Flange Co. - Albany

540 Cleveland Avenue Albany, CA

April 2008

CLOSURE PLAN

Prepared for:

Western Forge & Flange Co. - Albany

To be submitted to:

Alameda County Department of Environmental Health

This Closure Plan is being submitted under the following conditions:

Facility is closing down

Sampling: Sampling will be based on the recommendations in this plan and

supplemented with the requirements outlined by the Alameda

County Department of Environmental Health

Inspection: Inspections will be scheduled after the submittal of the plan.

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I. FACILITY DESCRIPTION

A. LOCATION

Site Address

Business Name: Western Forge & Flange Co. - Albany

Business Address: 540 Cleveland Avenue

City, State, Zip: Albany, CA 94706

County: Alameda

Telephone Number: (281) 727-7001

Operator or Owner: Walter Pierce

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: 10 Areas

Containment Area Description:

All hazardous material are in portable secondary container units.

Adjacent Properties:

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

C. BUILDING LAYOUT

Please refer to the facility drawings found in the Appendix.

II. HAZARDOUS MATERIALS

Western Forge and Flange has been relocating its manufacturing operation to their Texas facility of the course of one year (2007). 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, were decommission 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 the location. Once the Texas facility was operational a decision was made to close the Albany, California facility.

All chemicals listed below were not on site when the decision was made to close the Albany facility. However, the list below was prepared to provided an indication were these chemicals were stored during the time when the Albany facility was operational. The numbers for the items listed below correspond to the numbers on the facility site drawing, which is in the Appendix.

A. TYPES AND USES OF HAZARDOUS MATERIALS.

- 1.) Canola Frying Shortening: Used to in the forging operation during die shaping to prevent melding shaped piece to the die
- 2.) Propane: Used as a fuel source to power onsite forklifts.
- 3.) Oxygen: Used during the welding process of melding flanges.
- 4.) Diesel fuel#2: Used to fuel onsite vehicles.
- 5.) Chevron ISO 32 Hydraulic Oil: Used during the forging operation for lubricating the hydraulics of the press and hammer.
- 6.) Cheveron ISO Cylinder Oil: Used during the forging operation to provide lubrication to the cylinders of the press and hammer.
- 7.) Universal Gear Oil 80/90 Weight: Used during the forging operation to provide lubrication to the gears of the press and hammer.
- 8.) Chevron Soluble Oil B: Used during the forging operation to cool the flanges after they had been but through the furnace.
- 9.) Carbon Dioxide/ Argon gas mixture: Used during the welding process of melding flanges.

- 10.) Chevron Quenching Oil 70: Used during the forging process to cool steel for steel hardening.
 - 11.) Chevron Black Pearl Grease: Used during the forging process to provide Lubricartion to the bearing surfaces of both the press and hammer.
 - 12.) Bolier Treat 6000: Used is in the boiler to help reduce scaling.
 - 13.) Acetylene: Used during the welding process of melding billets and flanges.
 - 14.) Oil and Water seperator (one tank): Used during the forging process in another process known as quenching, which involves the cooling off of forged parts.
 - 15.) Waste: Waste metals form the bi-product from the quenching process.

A copy of the Hazardous Materials Inventory has been included in Appendix, which will provide more detailed information on the hazardous material inventory.

III. HEALTH AND SAFETY PLAN

A. Employees working at the Albany facility have received 40 Hour Hazwoper training and are qualified to work with all hazardous material on site.

B. SAFETY AND HEALTH HAZARD ANALYSIS

The Albany site clean-up will involve the clean of the following hazardous materials/wastes:

Hazardous Material	Hazard Identified
Lubrication oil	Combustible
Metals (Traces)	None

C. EMPLOYEE TRAINING

In addtion to the 40-Hour training that the workers have been trained in the Supervisor ahs been trained in the following elements:

1. Right to Know training

All employees have been trained in the contents of the Hazardous Materials Management Plan, OSHA Hazard Communication, and the Hazardous Material Emergency Response Plan and Procedures. Subjects included:

MSDS

Hazardous Symbols

Protective Equipment

Hazardous Materials/Handling

Proposition 65

Basic Emergency Information

Emergency Response Procedures

Notification Procedures - Internal/External Reporting

Evacuation Procedures/Meeting Point

2. Hazardous Waste Training per Title 22 §66265.16

> All employees involved in the management of hazardous waste have been trained within six months of hire and will not manage hazardous wastes in unsupervised positions until they have been trained. This training consists of classroom instruction containing information regarding contingency plan implementation and in-house waste management policies. Employees have also received on-the-job training by Western Forge & Flange Co. - Albany. Subjects included:

Safe handling of hazardous wastes

Emergency Response Procedures

Emergency equipment and systems, where applicable

Procedures for using, inspecting, repairing and replacing emergency and monitoring equipment

Operation of automatic waste-feed-cutoff systems

Use of communication and alarm systems

Response to fires and explosions

Response to groundwater contamination incidents

Procedures for shutting down operations

D. PERSONAL PROTECTIVE EQUIPMENT

- 1. Site workers will be provided with the following personal protective equipment for their personal protection:
 - Gloves
 - safety glasses
 - goggles
 - boots
 - Dust Masks in Shipping and Plant
 - Tivac suites
- 2. A safety shower/eyewash station and fresh running water are also available in the following locations:

- Refer to drawings. These are not plumbed, they are disposable bottles
- 3. A First Aid Kit is also available.

E. EMERGENCY RESPONSE PLAN

The emergency response/contingency plan is available onsite in the Hazardous Material Business and Management Plan and includes the following:

Basic Emergency Information and Emergency Response Procedures:

Body Contact with Chemicals

Other Spill

Unplanned Release of Hazardous Materials or Waste

Notification Procedures

Evacuation Procedures

IV. CLOSURE PLAN

A. REMOVAL OF HAZARDOUS MATERIALS

1. Western Forge and Flange has been relocating its manufacturing operation to their Texas facility of the course of one year (2007). During this process chemicals used at this facility were gradually moved to the Texas facility. All chemicals were shipped using hazardous material transporters. All the chemicals that were relocated to Texas were put into service at that location. Once the Texas facility was operational a decision was made to close the Albany, California facility.

Remove all process chemicals from equipment and storage areas that have not been depleted during operation, shipped off-site, or returned to vendors will be pumped into 55 gallons drums and shipped as hazardous material.

2. All hazardous materials will be transported by a licensed hazardous material hauler to a proper disposal site.

B. REMOVAL OF EQUIPMENT

1. Western Forge and Flange has been relocating it's manufacturing operation to the Texas facility of the course of one year (2007). During the relocation process this facility gradually moved equipment to the Texas facility. The equipment; the forges, were decommission at the Albany site and shipped to the Texas site. All the equipment that were relocated to Texas were put into service at that location. Once the Texas facility was operational a decision was made to close the Albany, California facility. For a summary of all equipment removal refer to the despostion in the appendix.

C. DECONTAMINATION OF BUILDING MATERIALS

 Floors that are visibly stained, or otherwise suspected of being contaminated with oil and grease, will be triple-cleaned using a floor scrubber or hot water power washers. All cleaning liquids generated from the process will be collected in a containment tank and disposed of as hazardous waste.

- 2. The walls of the building that were exposed to hazardous materials or waste will be decontaminated by removing all hazardous waste and residues with industrial vacuums and scraping tools. All waste will be disposed of as hazardous waste.
- 3. The sumps will be power washed and cleaned to remove any debris and hazardous materials.
- 4. All pits around the forging hammers will have the anvils removed. The anvils are located in large pits (At least 10 feet deep by 10 foot by 10 foot sides) and may have some oils that have seeped into the pits and possibly into the ground. Sampling will be conducted at each of these locations.

All disposal, removal, and cleaning will be performed by Chemical Data Management Systems.

D. WASTEWATER TREATMENT AND WASTE DISPOSAL

1. Waste Water

There is a waste waster permit with the East Bay MUD under permit number 10619471. The facility did discharge wastewater from the oil/water separator into a clarifier. The clarifier will be pumped out and pressure washed. All waste removed from the clarifier will be disposed of as hazardous waste.

2. Hazard Waste

All hazardous waste will be disposed of in accordance with the rules and regulations of the Department of Health Services, Cal/EPA, the San Francisco Regional Water Quality Control Board, the Bay Area Air Quality Management District, U.S. EPA, and any other local, State, or Federal agency requirements. All receipts for the disposal of hazardous waste will be kept and made available for inspection.

E. FACILITY DESCRIPTION/EQUIPMENT LOCATIONS

The following are descriptions of the each of the areas at the site with a list of what may needed to be decontaminated or may represent contaminate areas.

Location	Description	Clean Up Actions
Facility Office	Main office	None
Shipping	Shipping floors	Hot power washing
Machine Shop	Machine Shop floors	Hot power washing and sampling. Waste oil to be removed
Plant Office & Storage Bldg	Non hazardous	None
Forge Building	Contaminated walls, associated beams, floors and waste oil	Hot power washing and sampling. Waste oil to be removed
Ceiling/Roof Scaffolding	Contaminated steel rafters and trusses.	Vacuum and scraping of debris from all scaffolding elements with scraping tools and industrial vacuum. Sampling will also be conducted.

F. STORMWATER SEWERS

All stormwater drains will be inspected for the presences of contamination. If there is the presence of any contamination the stormwater sewer lines, they will be cleaned out using industrial steam cleaning methods.

G. ASBESTOS

There is no known asbestos at this facility.

H. STORAGE TANKS

The oil/water separator was shipped to Texas and the Diesel Tank was returned to the vendor.

Please refer to disposition found in the Appendix.

I. AIR PERMITS

The facility has a BAAQMD permit for five sources. Each of these sources was for gas-fired furnaces used in the forging process. See the Appendix for a more detailed description of the permit and the sources.

J. REPORTING

- 1. Any additional recommendations by the Department of Toxic Substances Control or the lead agency will be promptly addressed.
- 2. The EPA will be contacted to deactivate the current Hazardous Waste Generators permit for the present site.
- 3. The Air Quality Management District will be contacted to deactivate any current permits.
- 4. The Eaast Bay MUD POTW will be contacted to deactivate the current permit.
- 5. A final Closure Report will be prepared and submitted with supporting documentation after all closure activities have been completed.

Please refer to the appendix for copies of the deactivation requests.

V.SAMPLING PLAN

A. PROPOSED SAMPLE LOCATIONS

- 1. Core sampling will be performed with attention to hazardous material storage areas, process areas, and areas where cracks or etching is found. Core sample locations will be identified using the EPA method of randomized sampling where sampling should be performed for oil and grease. Core sampling will also be performed in all the hammer/press pits using the guidlines of the EPA randomized sampling method. See the Appendix for proposed sampling locations. Additional sampling will be added to the sampling plan based on the inputs from the administrative ageny. Samples will be collected at 1 foot and 3 foot depths.
- 2. Ground water samples shall be collected in the areas were previous equipment or activities where located:
 - Oil Water Separator
 - Diesel Tank
 - Waste Storage
- 2. Bulk samples will be collected using the EPA method of randomized sampling from structural components located throughout the facility, such as wall, beams, rafters, etc.

B. SAMPLE COLLECTION AND PRESERVATION

- Core and bulk samples will be taken by Chemical Data Management Systems. Samplers' names will be so noted in the sample logbook. EPA QA/QC procedures are followed.
- 2. Sampling procedure:
 - a. Core samples
 - 1. Core samples will be taken with clean Teflon or brass sleeves
 - 2. The sleeves will be put into a clean plastic sample bag and placed into an ice chest; no preservation required

b. Bulk samples

- 1. Bulk samples will be collected in clean glass jars provided by Test America using a spatula; triple rinsed each time after sampling.
- The jars will be placed into a clean plastic sample bag and placed into. ice chest; no preservation required.
- c. The sample containers will be capped and labeled with the sample description, date and time of the collection.

A State registered geologist will oversee all sampling and will sign-off on all core and bulk samples.

C. CHAIN-OF-CUSTODY

This record includes the following:

- 1. Name of the company
- 2. Samplers' signatures
- 3. Receivers' signatures
- 4. Unique identification number
- 5. Sample location
- 6. Date and time of collection
- 7. Type of sample
- 8. Number of containers and particular container's sequence number
- 9. Analyses required

When custody of a sample is transferred, the person relinquishing the samples must sign the record. The person receiving the sample acknowledges receipt by signing the record also.

A sample chain-of-custody form is contained at the end of this section.

D. ANALYSIS

1. Analysis Parameters

Core samples will use Method 8260

Ground water samples will use Method 8260

2. Samples

Bulk sampling will use Method 6010B and conduct analysis for Cd, Cr, Pb, and Zn for the metals, and Method 9070 for oil and grease.

All waste generated during the sampling process will meet all Federal EPA and DTSC requirements.

E. CLEAN UP STANDARDS

The clean up standards that will be used to evaluate the sampling results will be based on the San Francisco Bay Regional Water Quality Control Boards Shallow Soil Screening Levels for Commercial / Industrial Land Use tables dated February 2005, and are listed below:

Chemical Parameter	Soil - ESL (mg/kg)	Groundwater (mg/kg)
Cadmium	7.4 E+00	NA
Chrome (Total)	5.8 E+01	NA
Lead	7.5 E+02	NA
Nickel	1.5 E+02	NA
Zinc	6.0 E+02	NA
TPH (Middle Distillates)	NA	1.0 E+02

F. PERSON RESPONSIBLE FOR SAMPLE COLLECTION

Name: Jamie Hernandez

Job title: Environmental Specialist

Firm: Chemical Data Management Systems

Address: 6515 Trinity Court, Suite 201, Dublin, CA 94568

Phone: (925) 551-7300

G. LABORATORY INFORMATION

Test America- San Francisco 1220 Quarry Lane Pleasanton, CA 94566 (925) 484-1919

H. AGENCY OVERSIGHT

All sampling activities will be coordinated with Alameda County Health Care Services.

Western Forge & Flange Co. - Albany

CHAIN OF CUSTODY RECORD

	ERS (Signature			SAMPLE TYPE					
SAMPLE NUMBER	SAMPLE LOCATION	DATE	TIME	СОМР	GRAB	NO. OF CONTAINER S	ANALYS	ES RE	QUIREL
Relinquis	hed by: (Signature)		R	eceived by	y: (Signat	ure)		Date	Time
Relinquis	hed by: (Signature)		R	eceived by	y: (Signat	ure)		Date	Time
Relinguis	hed by: (Signature)		R	eceived by	v: (Signat	ure)		Date	Time
								Date	Time
Relinquis	hed by: (Signature)		K	eceivea to	r Labora	atory by: (Signatu	ire)	Date	Tille
Method	d of Shipment:								
Distributio	n: Original - Accompany	Samples							
1 copy - K	eep on File								

VI. PROPOSED CLOSURE SCHEDULE

- A. DATE OF REMOVAL OF INVENTORY: FEBRUARY 2008
- B. DATE OF REMOVAL OF EQUIPMENT: FEBRUARY 2008
- C. DATE OF FACILITY DECONTAMINATION: MAY 2008
- D. DATE OF FACILITY SAMPLING: MAY 2008
- E. DATE OF CLOSURE OF THE FACILITY: JUNE 2008

VII. CONTRACTORS

Firm contracted to perform decontamination:

Chemical Data Management Systems
6515 Trinity Court, Suite #201, Dublin, CA 94568
James N. Carro
(925) 551-7300

Firm contacted to prepare the Closure Plan:

Chemical Data Management Systems
6515 Trinity Court, Suite #201, Dublin, CA 94568
James N. Carro
(925) 551-7300

Firm contracted to transport hazardous materials and equipment (will not transport any hazardous waste):

To be Determined

Destination of materials and equipment:

Please refer to the appendix for the dispostion.

VIII. COORDINATION WITH OTHER AGENCIES

A. LOCAL AGENCY WITH JURISDICTION

Western Forge and Flange will coordinate all closure activities through the Alameda County Department of Environmental Health, Hazardous Materials Division.

B. BUILDING DEPARTMENT

The Building Department requires property owner and/or demolishing contractor to obtain a building permit for the demolition.

C. OTHER AGENCIES

The following agencies will be notified of the closure by letter or other document as required:

Alameda County Department of Environmental Health Hazardous Material Division 1131 Harbor Bay Parkway, Room 250 Alameda, CA 94502

Easy Bay Municipal Utilities District P.O. Box 24055 Oakland, CA 94623 (510) 287-1409

City of Albany

Street Department - if the spill may affect storm drains.

US EPA Region 9
PRC-RCRA Notification Section
75 Hawthorne Street
WST-6 Tetra Tech

San Francisco, CA 94105 (415) 495-8895

Cal EPA Headquarters
Department of Toxic Substances Control
P.O. Box 806
Sacramento, CA 95812-0806
(916) 324-1826

Region 2
Department of Toxic Substances Control
Site Mitigation Branch
2151 Berkeley Way, Anx 9
Berkeley, CA 94704
(510) 540-2122

State Board of Equalization
Excise Tax Division
P.O. Box 942879
Sacramento, CA 94279-0001
MIC 57
(916) 299-6930

Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 (415) 771-6000

Regional Water Quality Control Board (to close Storm Water permit) File Notice of Termination form	

IX. CERTIFICATIONS

Owner Certification

I certify that no evidence of a release of hazardous waste or hazardous substances has been found and none of the signatories has any knowledge of any release of hazardous waste or hazardous constituents at the facility.

I declare under penalty of perjury that the above information is correct to the best of my knowledge. If there is any change, which would materially affect the above information, I will notify the Alameda County Department of Environmental Health.

Western Forge & Flange Co Albany	
Walter Pierce, President	Date
Registered Environmental Assessors Certific	ation
	April 25, 2008
James N. Carro, REA I-03698	Date

X. NOTIFICATION LETTERS

Date:	

US EPA Region 9 PRC-RCRA Notification Section 75 Hawthorne Street WST-6 Tetra Tech San Francisco, CA 94105

Subject: Closure of Western Forge & Flange Co. - Albany

We hereby notify your agency that Western Forge & Flange Co. - Albany is ceasing operations at their current location effective October 1, 2007.

Their current location is:

Western Forge & Flange Co. - Albany 540 Cleveland Avenue Albany, CA 94706

Their EPA Identification Number is CAD 981 371 396.

Their State Board of Equalization Account Number is HAHQ 36-011944.

Please advise them of any additional forms or notification that need to be submitted.

Please return the enclosed letter as proof of receipt of this letter.

Sincerely,

Walter Pierce, President Western Forge & Flange Co.

Date:
Walter Pierce Western Forge & Flange Co.
687 County Road 2201 Cleveland, TX 77327
Dear Walter Pierce:
We are sending you this letter to verify that we have received your letter datedregarding the closure of:
Western Forge & Flange Co Albany
540 Cleveland Avenue
Albany, CA 94706
Sincerely,
Stamp or Name

US EPA Region 9 PRC-RCRA Notification Section 75 Hawthorne Street WST-6 Tetra Tech San Francisco, CA 94105

Cal EPA Headquarters Department of Toxic Substances Control P.O. Box 806 Sacramento, CA 95812-0806
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Please return the enclosed letter as proof of receipt of this letter.
Sincerely,

Walter Pierce, President Western Forge & Flange Co. Date: _____

Date:
Walter Pierce Western Forge & Flange Co. 687 County Road 2201 Cleveland, TX 77327
Dear Walter Pierce:
We are sending you this letter to verify that we have received your letter dated
Western Forge & Flange Co Albany 540 Cleveland Avenue Albany, CA 94706
Sincerely,
Stamp or Name

Cal EPA Headquarters

Sacramento, CA 95812-0806

P.O. Box 806

Department of Toxic Substances Control

Date:
Region 2
Department of Toxic Substances Control
Site Mitigation Branch
2151 Berkeley Way, Anx 9
Berkeley, CA 94704
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Date:
Valter Pierce Vestern Forge & Flange Co. 87 County Road 2201 Eleveland, TX 77327
Dear Walter Pierce:
We are sending you this letter to verify that we have received your letter datedegarding the closure of:
Western Forge & Flange Co Albany 540 Cleveland Avenue Albany, CA 94706
incerely,
tamp or Name
degion 2
Department of Toxic Substances Control
ite Mitigation Branch
151 Berkeley Way, Anx 9
erkeley, CA 94704

Date:
State Board of Equalization Excise Tax Division P.O. Box 942879 Sacramento, CA 94279-0001 MIC 57
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Sincerely,	
Stamp or Name	

State Board of Equalization Excise Tax Division P.O. Box 942879 Sacramento, CA 94279-0001 MIC 57

Date:
East Bay Municipal Utilities District P.O. Box 24055 Oakland, CA 94623
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	Western Forge & Flange Co Albany 540 Cleveland Avenue Albany, CA 94706
Sincerely,	
Stamp or Name	
East Bay Municipal Utilities P.O. Box 24055 Oakland, CA 94623	s District

Date:
Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Room 250 Alameda, CA 94502
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We hereby notify your agency that Western Forge & Flange Co Albany is ceasing operations at their current location effective October 1, 2007.
Their current location is:
Western Forge & Flange Co Albany 540 Cleveland Avenue Albany, CA 94706
Their EPA Identification Number is CAD 981 370 396.
Their State Board of Equalization Account Number is HAHQ 36-011944.
Please advise them of any additional forms or notification that need to be submitted.
Please return the enclosed letter as proof of receipt of this letter.
Sincerely,

Walter Pierce, President Western Forge & Flange Co.

Date:
Walter Pierce Western Forge & Flange Co. 687 County Road 2201 Cleveland, TX 77327
Dear Walter Pierce:
We are sending you this letter to verify that we have received your letter dated regarding the closure of:
Western Forge & Flange Co Albany 540 Cleveland Avenue Albany, CA 94706
Sincerely,
Stamp or Name
Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Room 250 Alameda, CA 94502

Appendix

- I. Facility and Hazardous Material Storage Drawing & Sampling Areas
- II. Hazardous Material Inventory
- III. Proposed Sampling Drawing
- IV. Disposition of Materials and Equipment
- V. Closure Notification Form
- VI. Wipe Sampling Protocol
- VII. Protocol for Soil Boring Investigations and Groundwater Sampling

I. Facility and Hazardous Material Storage Drawing							

II. Hazardous Material Inventory

Please refer to the following pages.

IV. Proposed Sampling Drawing

V. Closure Notification Form

VI – Wipe Sampling Protocol

Equipment

- 1. Appropriate filter media to wipe down surfaces
- 2. A plastic, reusable template (with a 100 cm², or 1 ft²) space within it to allow the filter to be wiped across the template
- 3. Distilled water and sterile cloths to clean the area template between samples
- 4. Appropriately sized vials to contain sampling filters or media
- 5. Tweezers (with rounded ends)
- 6. Plastic surgical gloves (or equivalent)
- 7. Carrying case to carry sampling supplies and sample vials
- 8. Blank Wipe Sampling Form
- 9. Blank Chain of Custody/Sample Request Form
- 10. Sample number labels and plastic bags
- Marking pen
- 12. Safety glasses.

Procedure

When performing wipe sampling onsite, identify and document all areas to be sampled. Use building maps or an equally detailed description of the area, including the room number, surface location, and surface texture area. Also, if allowed, photographs are useful for documenting sampling site.

Put on disposable gloves to minimize contamination of the wipe by metal or other materials on the fingers or hands. Be aware that additional personal protective equipment may be required. In some cases rounded-end tweezers may be needed to collect the sample.

While using safety glasses, remove the wipe filter from the vial and, after wetting it with distilled de-ionized water or solvent, place two (wetted) blank wipes in individual vials and label the vials with a marking pen.

Begin sampling in an area with the least likelihood of contamination and proceed to other areas in order of increasing likelihood of greater contamination (this also determines the extent of the contamination).

Place the wipe flat on the measured or templated surface (100 cm²) to be sampled. Using consistent speed and even pressure with fingertips move the wipe in an X pattern being sure to wipe along the perimeter of the area sampled.

NOTE: Do not scrub the surface with the wipe.

Use a continuous motion so the material is collected on the wipe in one direction.

Fold the filter again and, using rounded-end tweezers, place the filter into the labeled vial.

Mark the vial with field sample number and identify where the sample was taken on form.

Change surgical gloves to minimize cross-contamination of samples or the sampling area. Repeat the procedure until adequate representation of the sampling site is achieved.

VI - PROTOCOL FOR SOIL BORING INVESTIGATIONS & GROUNDWATER SAMPLING

This protocol presents standard field methods for drilling and sampling soil borings and collecting grab groundwater samples. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

LOCATION OF SAMPLES

The samples will be located in the general areas as outlined in the January 2008 Closure Plan and as requested by the Alameda County Health Services Agency in their letter dated March 11, 2008. Approximately 4 borings will be advanced to 3 feet below grade (fbg) to collect soil samples. Soil samples will be collected at approximately one and 3 fbg. Samples will be analyzed for the recommended analyses as shown in the "Recommended Minimum Verification Analyses for Underground Tank Leaks" document that follows this protocol. In addition, one boring will be advanced to groundwater in the area of the former diesel UST. A soil sample will also be collected and analyzed from just above the groundwater table.

SOIL BORINGS

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Professional Geologist (PG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. All soil borings will be drilled under supervision of a C-57 drilling contractor licensed by the State of California. Soil samples will be collected at one and three feet to characterize the subsurface sediments and for chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected by inserting temporary slotted casing into the boring and collecting the water using a bailer, pump, or tubing affixed with a check valve. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves as required, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with bentonite-cement grout poured or pumped through a tremie pipe.

RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND TANK LEAKS

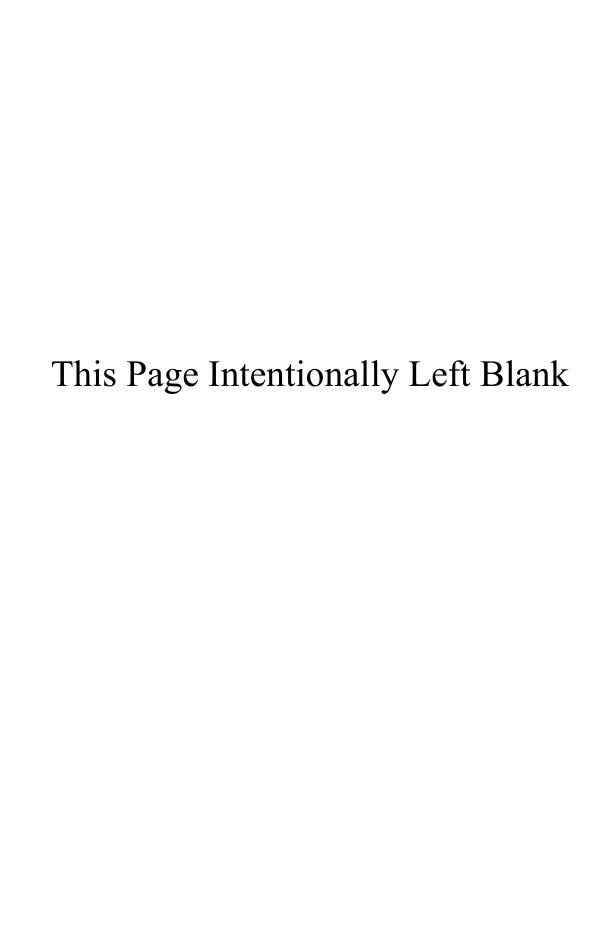
For Use by Unidocs Member Agencies or where approved by your Local Jurisdiction

TABLE #2 REVISED 1 MARCH 1999

HYDROCARBON LEAK	SOIL ANALYSIS (SW-846 METHOD)		WATER ANALYSIS (Water/Waste Water Method)			
Gasoline	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)		
(Leaded and Unleaded)	BTEX	8260	BTEX	524.2/624 (8260)		
Deaded and Onicaded)	EDB and EDC	8260	EDB and EDC			
				524.2/624 (8260) 524.2/624 (8260) for water		
	TOTAL LEAD	AA	TOTAL LEAD			
	TOTAL LEAD	Optional	TOTAL LEAD	AA		
	Organic Lead	DHS-LUFT	O	DUGLIET		
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT		
Unknown Fuel	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)		
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)		
	BTEX	8260	BTEX	524.2/624 (8260)		
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)		
	MTBE, TAME,	ETBE, DIPE, and TBA	A by 8260 for soil and	524.2/624 (8260) for water		
	TOTAL LEAD	AA	TOTAL LEAD			
*		Optional				
	Organic Lead	DHS-LUFT	Organic Lead	DHS-LUFT		
Diesel, Jet Fuel, Kerosene,	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)		
and Fuel/Heating Oil	BTEX	8260	BTEX	524.2/624 (8260)		
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)		
				524.2/624 (8260) for water		
Chlorinated Solvents	CL HC	8260	CL HC	524.2/624 (8260)		
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or		
			8	502.2/602 (8021)		
Nonchlorinated Solvents	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)		
	BTEX	8260 or 8021	BTEX	524.2/624 (8260) or		
		0200 01 0021	2,21	502.2/602 (8021)		
	Marcoll .	200000000000000000000000000000000000000				
Waste, Used, or Unknown Oil	TPHG	8015M or 8260	TPHG	8015M or 524.2/624 (8260)		
	TPHD	8015M or 8260	TPHD	8015M or 524.2/624 (8260)		
	O&G	9070	O&G	418.1		
	BTEX	8260	BTEX	524.2/624 (8260)		
	CL HC	8260	CL HC	524.2/624 (8260)		
	EDB and EDC	8260	EDB and EDC	524.2/624 (8260)		
	MTBE, TAME, ETBE, DIPE, and TBA by 8260 for soil and 524.2/624 (8260) for water					
	METALS (Cd, Cr, Pb, Ni, Zn) by ICAP or AA for soil water					
	PCB*, PCP*, PNA, CREOSOTE by 8270 for soil and 524/625 (8270) for water					
			for dibenzofurans (PC)			

NOTES:

- 8021 replaces old methods 8020 and 8010
 8260 replaces old method 8240
 Reference: Table B-1 in Appendix B of "Expedited Site Assessment Tools for Underground Storage Tank Sites: A Guide for Regulators" (EPA 510-B-97-001).



CLOSURE REPORT

FOR

Western Forge & Flange Co. - Albany

540 Cleveland Avenue Albany, CA

> June 2009 (Amended)

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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	F.	March 26, 2009 (Sampling Event March 18, 2009)					
VIII	Refere	ences					

Brown and Caldwell Report. 1984.

Fred Hoffman Geological Evaluation. 2008.

A B

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.

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)	2500	7.4	2500	150	750
Groundwater (ug/L)	100 ug/l	.25 ug/l	50 ug/l	8.2 ug/l	2.5 ug/l

Western Forge and Flange Co.

540 Cleveland Ave

Sampling and Analysis

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	Cr	Ni	Pb	Zn	O&G
	(ug/100cm ²)	(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.

PARKING LOT MAINTENANCE TOTAL P -108--₁₀₇-BOILER OFFICE WELDING X 106 X OIL WATER SEPARATOR 8 FORGE AREA X PARKING PIT 102 X 101 DIESEL DRIVEWAY LEGEND OUTSIDE STORAGE WESTERN FORGE & FLANGE ALBANY, CA MASTER LAYOUT

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.

Western Forge and Flange Co. 540 Cleveland Ave Sampling and Analysis

May 2009 Albany, CA 12

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)
U	(11.)	(IIIg/kg)	(IIIg/kg)	(IIIg/kg)	(IIIg/kg)	(IIIg/kg)	(IIIg/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"	3700	ND	52	83	7.9	81
1'10"-2'4"							
#6B	3.5"-3'9"	780	ND	15	9.2	56	76
3'-3.5"-3' 9.5"							
#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	Depth	TPH	Cd	Cr	Ni	Pb	Zn
ID	(ft.)	(ug/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(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	Cd	Cr	Ni	Pb	Zn
ID	(mg/wipe)	(mg/wipe)	(mg/wipe)	(mg/wipe)	(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 <u>without</u> 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	Cd	Cr	Ni	Pb	Zn
ID	(mg/wipe)	(mg/wipe)	(mg/wipe)	(mg/wipe)	(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	Depth	TPH (D)	TPH (MO)	TPH (CR)	Cd	Cr	Ni	Pb	Zn
ID	(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(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	Χ
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	Depth	TPH	TPH	TPH (CR)	Cd	Cr	Ni	Pb	Zn
ID	(ft.)	(D) (ug/L)	(MO) (ug/L)	(UG/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(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

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	Depth	TPH (D)	TPH (MO)	TPH (CR)	Cd	Cr	Ni	Pb	Zn
ID	(ft.)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(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

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Sampling and Analysis

^{*}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	Depth	TPH (D)	TPH (MO)	TPH (CR)	Cd	Cr	Ni	Pb	Zn
ID	(ft.)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(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

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	Cr	Ni	Pb	Zn	O&G
	(mg/100	cm²) (mg/100	cm²) (mg/100c	m ²) (mg/100c	m ²) (mg/100c	m ²) (mg/100cm)
S-1	ND	0.3	3.4	0.24	0.68	ND
S-2	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.

17

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

Table 8. Summary of Results Above ESLs

Sample	Depth	O&G	TPH Total	TPH (D)	TPH (MO)	TPH (CR)	Cd	Cr	Ni	Pb	Zn
ID	(ft.)			()	(- /	(-)					
#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'	-	(mg/kg) -	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	1.1	5.8	1.1	1.9
W 105	-	-	-	-	-	-	(mg/L) -	(mg/L) -	(mg/L) 0.052 (mg/L)	(mg/L) 0.0094 (mg/L)	(mg/L) 0.93 (mg/L)
W 107	-	-	-	-	-	-	0.0031	0.022	0.48	0.12	1.3
W 400							(mg/L) 0.0022	(mg/L) 0.025	(mg/L) 0.076	(mg/L) 5.6	(mg/L) 0.97
W 108	-	•	-	-	-	•	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
W 109	-	-	-	-	-	-	-	-	-	-	0.018 (mg/L)
W101	-	-	-	-	-	-	-	-	0.12 (mg/L)	-	-
W102	-	-	-	-	-	-	-	-	0.14	0.77	-
W103	-	-	-	-	-	-	-	-	(mg/L) 0.38	(mg/L) 0.061	
W111									(mg/L) 0.42	(mg/L) -	_
									(mg/L)		
#1 Hoist A	-	-	-	-	-	-	-	0.29 (mg/wipe)	1.6	0.22 (mg/wipe)	-
#2	_	_	_	_	_	_	_	(mg/wipe) 0.46	(mg/wipe) 7.6	(mg/wipe) 0.054	_
#2 Electrical								(mg/wipe)	(mg/wipe)	(mg/wipe)	
Box											
#3 Ring Roller	-	-	-	-	-	-	-	0.39 (mg/wipe)	2.3 (mg/wipe)	0.28 (mg/wipe)	-
Electrical	-	-	-	-	-	-	-	0.16	2.2	0.052	-
Box A											
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)- Diocol (N	MO) - Moto	r Oil (CD)	- Carbon E	ango C10	C26				,gp)		

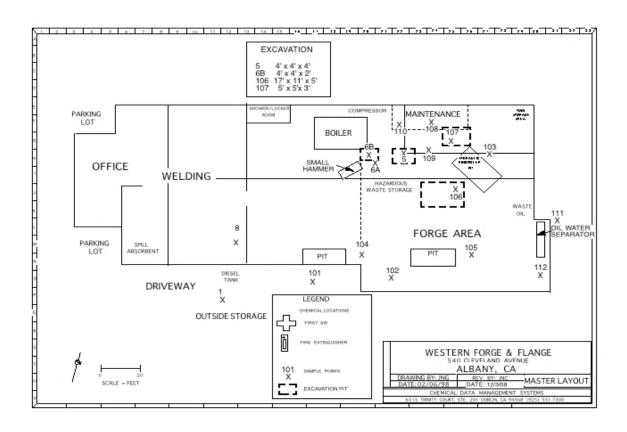
(D)= Diesel, (MO)= Motor Oil, (CR)= Carbon Range C19-C36

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



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Subsurface Investigations

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.

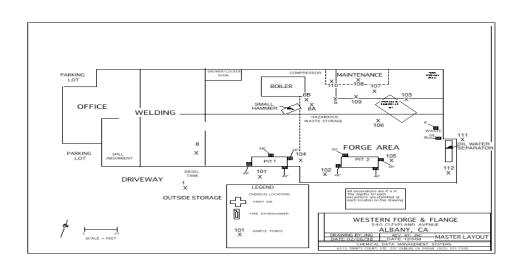


Figure 2. Additional Subsurface Investigations

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

(Please refer to the hard copy of this report)

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.

TestAmerica. 2009f. Analytical Report, Job Number 720-18578-1, Job Description: Western Forge, Albany. March 26, 2009.



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

Job Narrative 720-J16304-1

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

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	11 OF 2.0 -0	E 4	0.94	ma/l/a	6010B	
Nickel		54 67	0.94	mg/Kg mg/Kg	6010B	
Lead		110	0.94	mg/Kg	6010B	
Zinc		140	0.94	mg/Kg	6010B	
720-16304-5	#6A-3'-4'					
	#0A-3 -4	4.4	4.0		0040D	
Chromium		14	1.0	mg/Kg	6010B	
Nickel Lead		8.3 7.1	1.0 1.0	mg/Kg mg/Kg	6010B 6010B	
Zinc		16	1.0	mg/Kg	6010B	
720-16304-6	#6B-1' 10"-2' 4"					
	#VD-1 1V -Z T	E 2	0.05	ma /// =-	60100	
Chromium		52	0.95	mg/Kg	6010B	
Nickel		83	0.95	mg/Kg	6010B	
Lead Zinc		7.9 81	0.95 0.95	mg/Kg	6010B 6010B	
HEM		3700	100	mg/Kg mg/Kg	9071B	
L. IVI		0700	100	mg/itg	507 ID	

EXECUTIVE SUMMARY - Detections

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		20 24	0.98	mg/Kg mg/Kg	6010B 6010B
Lead		15	0.98	mg/Kg	6010B
Zinc		29	0.98	mg/Kg	6010B
ZIIIC		29	0.90	ilig/Ng	OUTUD

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

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	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 10/03/2008 1625 Client Matrix: Water Date Received:

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: Initial Weight/Volume: 1.0

35 mL 10/10/2008 1337 Final Weight/Volume: Date Analyzed: 2 mL

Date Prepared: 10/08/2008 1124 Injection Volume: Column ID: **PRIMARY**

Qualifier Analyte Result (ug/L) 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 Date Sampled: 10/03/2008 1415 Water Client Matrix: Date Received: 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-42350 Instrument ID: Varian ICP Preparation: 3010A Prep Batch: 720-42267 Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 30 mL Date Analyzed: 10/10/2008 1139 Final Weight/Volume: 30 mL Date Prepared: 10/09/2008 0912

Analyte Result (mg/L) Qualifier RLCadmium 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
 Date Sampled:
 10/03/2008 1145

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-42348 Instrument ID: Thermo 6500 ICP

Preparation:3050BPrep Batch: 720-42261Lab File ID:N/ADilution:1.0Initial Weight/Volume:0.99 gDate Analyzed:10/10/2008 1201Final Weight/Volume:50 mL

Date Analyzed: 10/10/2008 1201 Date Prepared: 10/09/2008 0808

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.51 Chromium 51 1.0 140 Nickel 1.0 30 Lead 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
 Date Sampled:
 10/03/2008 1145

 Client Matrix:
 Solid
 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
 Date Sampled:
 10/03/2008 1130

 Client Matrix:
 Solid
 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 RLCadmium ND 0.47 Chromium 54 0.94 67 0.94 Nickel 110 0.94 Lead 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
 Date Sampled:
 10/03/2008 1130

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-42348 Instrument ID: Thermo 6500 ICP

Preparation:3050BPrep Batch: 720-42261Lab File ID:N/ADilution:1.0Initial Weight/Volume:0.97 gDate Analyzed:10/10/2008 1211Final Weight/Volume:50 mL

Date Prepared: 10/09/2008 0808

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.52 Chromium 14 1.0 8.3 Nickel 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
 Date Sampled:
 10/03/2008 1210

 Client Matrix:
 Solid
 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 RLCadmium ND 0.48 Chromium 52 0.95 83 0.95 Nickel 7.9 0.95 Lead 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
 Date Sampled:
 10/03/2008 1210

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-42348 Instrument ID: Thermo 6500 ICP

Preparation:3050BPrep Batch: 720-42261Lab File ID:N/ADilution:1.0Initial Weight/Volume:0.95 gDate Analyzed:10/10/2008 1225Final Weight/Volume:50 mL

Date Prepared: 10/09/2008 0808

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.53 Chromium 15 1.1 9.2 Nickel 1.1 56 Lead 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
 Date Sampled:
 10/03/2008 1105

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-42348 Instrument ID: Thermo 6500 ICP

Preparation:3050BPrep Batch: 720-42261Lab File ID:N/ADilution:1.0Initial Weight/Volume:1.02 gDate Analyzed:10/10/2008 1229Final 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
 Date Sampled:
 10/03/2008 1105

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-42325Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-42268Lab 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 Analyzed: 10/09/2008 1943 Date Prepared: 10/09/2008 0918

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.50 Chromium 73 0.99 180 0.99 Nickel 140 0.99 Lead 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
 Date Sampled:
 10/03/2008 1320

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-42325Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-42268Lab File ID:N/A

 Dilution:
 1.0
 Initial Weight/Volume:
 1.04 g

 Date Analyzed:
 10/09/2008 1947
 Final Weight/Volume:
 50 mL

 Date Prepared:
 10/09/2008 0918

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.48 Chromium 15 0.96 14 0.96 Nickel 23 Lead 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
 Date Sampled:
 10/03/2008 1320

 Client Matrix:
 Solid
 Date Received:
 10/03/2008 1625

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-42325Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-42268Lab File ID:N/A

Dilution: 1.0 Initial Weight/Volume: 1.02 g
Date Analyzed: 10/09/2008 1951 Final Weight/Volume: 50 mL

Date Analyzed: 10/09/2008 1951 Date Prepared: 10/09/2008 0918

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

General Chemistry						
Client Sample ID:	#5-6"-12"					
_ab Sample ID: Client Matrix:	720-16304-2 Solid			008 1145 008 1625		
Analyte	Result	Qual Units	RL Dil M	/lethod		
HEM	6500 Anly Batch: 720-42254 Prep Batch: 720-42211	mg/Kg Date Analyzed 10/08/2008 1759 Date Prepared: 10/08/2008 1134		071B Corrected: N		
Client Sample ID:	#5-3'-3' 10"					
_ab Sample ID: Client Matrix:	720-16304-3 Solid			008 1145 008 1625		
Analyte	Result	Qual Units	RL Dil M	/lethod		
HEM	4900 Anly Batch: 720-42254 Prep Batch: 720-42211	mg/Kg Date Analyzed 10/08/2008 1759 Date Prepared: 10/08/2008 1134		071B Corrected: N		
Client Sample ID:	#6A-2.5'-3'					
_ab Sample ID: Client Matrix:	720-16304-4 Solid			008 1130 008 1625		
Analyte	Result	Qual Units	RL Dil M	/lethod		
HEM	ND Anly Batch: 720-42254 Prep Batch: 720-42211	mg/Kg Date Analyzed 10/08/2008 1759 Date Prepared: 10/08/2008 1134		071B Corrected: N		
Client Sample ID:	#6A-3'-4'					
Lab Sample ID: Client Matrix:	720-16304-5 Solid		= 0.00 = 0p. 0.0	008 1130 008 1625		
Analyte	Result	Qual Units	RL Dil M	/lethod		
HEM	ND Anly Batch: 720-42254 Prep Batch: 720-42211	mg/Kg Date Analyzed 10/08/2008 1759 Date Prepared: 10/08/2008 1134		071B Corrected: N		
Client Sample ID:	#6B-1' 10"-2' 4"					
ab Sample ID: Client Matrix:	720-16304-6 Solid		Date campion.	008 1210 008 1625		
Analyte	Result	Qual Units	RL Dil M	/lethod		
HEM	3700 Anly Batch: 720-42254 Prep Batch: 720-42211	mg/Kg Date Analyzed 10/08/2008 1759 Date Prepared: 10/08/2008 1134		071B Corrected: N		

	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			

DATA REPORTING QUALIFIERS

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.

QC Association Summary

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

Report Basis

T = Total

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	Т	Solid	3050B	
LCSD 720-42261/3-A	Lab Control Spike Duplicate	Т	Solid	3050B	
LCSSRM 720-42261/25-A	LCS-Standard Reference Material	Т	Solid	3050B	
MB 720-42261/1-A	Method Blank	Т	Solid	3050B	
720-16292-G-7-A MS	Matrix Spike	Т	Solid	3050B	
720-16292-G-7-B MSD	Matrix Spike Duplicate	Т	Solid	3050B	
720-16304-2	#5-6"-12"	Т	Solid	3050B	
720-16304-3	#5-3'-3' 10"	Т	Solid	3050B	
720-16304-4	#6A-2.5'-3'	Т	Solid	3050B	
720-16304-5	#6A-3'-4'	Т	Solid	3050B	
720-16304-6	#6B-1' 10"-2' 4"	Т	Solid	3050B	
720-16304-7	#6B-3' 3.5"-3' 9.5"	Т	Solid	3050B	
720-16304-8	#8-1'-1.5'	T	Solid	3050B	
Prep Batch: 720-42267					
LCS 720-42267/2-A	Lab Control Spike	Т	Water	3010A	
_CSD 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	Т	Solid	3050B	
_CSD 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 T	Solid	3050B	
720-16304-9	#8-3'-4'	T.	Solid	3050B	
720-16304-10	#9-9"-15"	T 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	Т	Solid	6010B	720-42268
LCS 720-42268/2-A LCSD 720-42268/3-A	Lab Control Spike Lab Control Spike Duplicate	T	Solid	6010B	720-42268
_CSSRM 720-42268/25-A	LCS-Standard Reference Material	T T	Solid	6010B	720-42268
MB 720-42268/1-A	Method Blank	T	Solid	6010B	720-42268
720-16304-9	#8-3'-4'	T T	Solid	6010B	720-42268
720-16304-9 720-16304-10	#6-3 - 4 #9-9"-15"	T	Solid	6010B	720-42268
720-16304-10 720-16304-11	#9-9 - 13 #9-3'-3' 10"	T T	Solid	6010B	720-42268
720-16304-11 720-16370-A-4-E MS		T	Solid		720-42268 720-42268
	Matrix Spike	T		6010B	
720-16370-A-4-F MSD	Matrix Spike Duplicate	ı	Solid	6010B	720-42268

QC Association Summary

Report **Basis Client Sample ID Client Matrix** Lab Sample ID Method **Prep Batch** Metals Analysis Batch:720-42348 LCS 720-42261/2-A Т 6010B 720-42261 Lab Control Spike Solid Т LCSD 720-42261/3-A Lab Control Spike Duplicate Solid 6010B 720-42261 Т LCSSRM 720-42261/25-A LCS-Standard Reference Material Solid 6010B 720-42261 MB 720-42261/1-A Method Blank Τ Solid 6010B 720-42261 Т Solid 720-16292-G-7-A MS Matrix Spike 6010B 720-42261 720-16292-G-7-B MSD Т Solid Matrix Spike Duplicate 6010B 720-42261 Т 720-16304-2 #5-6"-12" Solid 6010B 720-42261 Т 720-16304-3 #5-3'-3' 10" Solid 6010B 720-42261 Т 720-16304-4 #6A-2.5'-3' Solid 6010B 720-42261 720-16304-5 #6A-3'-4' Т Solid 6010B 720-42261 Т 720-16304-6 #6B-1' 10"-2' 4" Solid 6010B 720-42261 Т Solid 720-16304-7 #6B-3' 3.5"-3' 9.5" 6010B 720-42261 720-16304-8 Т Solid 6010B 720-42261 #8-1'-1.5' Analysis Batch:720-42350 Т LCS 720-42267/2-A Lab Control Spike Water 6010B 720-42267 LCSD 720-42267/3-A Lab Control Spike Duplicate Т Water 6010B 720-42267 MB 720-42267/1-A Method Blank Т Water 6010B 720-42267 720-16296-F-8-A MS Matrix Spike Т Water 6010B 720-42267 720-16296-F-8-B MSD Matrix Spike Duplicate Т Water 6010B 720-42267 Т Water 6010B 720-16304-1 1-6 720-42267

Report Basis

T = Total

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 720-42211					
LCS 720-42211/2-A	Lab Control Spike	Т	Solid	9071B	
LCSD 720-42211/3-A	Lab Control Spike Duplicate	Т	Solid	9071B	
MB 720-42211/1-A	Method Blank	Т	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"	Т	Solid	9071B	
720-16304-8	#8-1'-1.5'	Т	Solid	9071B	
720-16304-9	#8-3'-4'	Т	Solid	9071B	
720-16304-10	#9-9"-15"	T	Solid	9071B	
720-16304-11	#9-3'-3' 10"	Т	Solid	9071B	
Analysis Batch:720-4225	4				
LCS 720-42211/2-A	Lab Control Spike	Т	Solid	9071B	720-42211
LCSD 720-42211/3-A	Lab Control Spike Duplicate	Т	Solid	9071B	720-42211
MB 720-42211/1-A	Method Blank	Т	Solid	9071B	720-42211
720-16304-2	#5-6"-12"	Т	Solid	9071B	720-42211
720-16304-3	# 5-3'-3' 10"	Т	Solid	9071B	720-42211
720-16304-4	#6A-2.5'-3'	Т	Solid	9071B	720-42211
720-16304-5	#6A-3'-4'	Т	Solid	9071B	720-42211
720-16304-6	#6B-1' 10"-2' 4"	Т	Solid	9071B	720-42211
720-16304-6MS	Matrix Spike	Т	Solid	9071B	720-42211
720-16304-6MSD	Matrix Spike Duplicate	Т	Solid	9071B	720-42211
720-16304-7	#6B-3' 3.5"-3' 9.5"	Т	Solid	9071B	720-42211
720-16304-8	#8-1'-1.5'	Т	Solid	9071B	720-42211
720-16304-9	#8-3'-4'	Т	Solid	9071B	720-42211
720-16304-10	#9-9"-15"	Т	Solid	9071B	720-42211
720-16304-11	# 9-3'-3' 10"	Т	Solid	9071B	720-42211

Report Basis

T = Total

Quality Control Results

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

Method Blank - Batch: 720-42208 Method: 8015B
Preparation: 3511

Fieparation. 33

Lab Sample ID: MB 720-42208/1-A Analysis Batch: 720-42366 Instrument ID: Varian DRO2 Client Matrix: Water Prep Batch: 720-42208 Lab File ID: N/A

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 35 mL

 Date Analyzed:
 10/10/2008 1311
 Final Weight/Volume:
 2 mL

 Date Prepared:
 10/08/2008 1124
 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/ Method: 8015B
Lab Control Spike Duplicate Recovery Report - Batch: 720-42208 Preparation: 3511

LCS Lab Sample ID: LCS 720-42208/2-A Analysis Batch: 720-42366 Instrument ID: Varian DRO2

Client Matrix: Water Prep Batch: 720-42208 Lab File ID: N/A

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 35 mL

 Date Analyzed:
 10/10/2008 1220
 Final Weight/Volume:
 2 mL

 Date Prepared:
 10/08/2008 1124
 Injection Volume:
 Column ID:
 PRIMARY

LCSD Lab Sample ID: LCSD 720-42208/3-A Analysis Batch: 720-42366 Instrument ID: Varian DRO2 Client Matrix: Water Prep Batch: 720-42208 Lab File ID: N/A

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 35 mL
Date Analyzed: 10/10/2008 1245 Final Weight/Volume: 2 mL

Date Prepared: 10/08/2008 1124 Injection Volume:

Column ID: PRIMARY

 Analyte
 Kec. 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

Quality Control 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 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: 0.96 g

Date Analyzed: 10/10/2008 1044 Final Weight/Volume: 50 mL

Date Prepared: 10/09/2008 0808

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 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: 0.

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 0.97 g
Date Analyzed: 10/10/2008 1232 Final Weight/Volume: 50 mL

Date Prepared: 10/09/2008 0808

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/ Method: 6010B
Lab Control Spike Duplicate Recovery Report - Batch: 720-42261 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

% Rec. **RPD** Analyte LCS LCSD Limit RPD Limit LCS Qual LCSD Qual Cadmium 97 80 - 120 20 99 4 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

Date Prepared:

10/09/2008 0808

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

Matrix Spike/ Method: 6010B

Matrix Spike Duplicate Recovery Report - Batch: 720-42261 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

Date Prepared:

10/09/2008 0808

Dilution: 1.0 Initial Weight/Volume: 1.00 g
Date Analyzed: 10/10/2008 1104 Final Weight/Volume: 50 mL

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

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

Method Blank - Batch: 720-42267 Method: 6010B Preparation: 3010A

Lab Sample ID: MB 720-42267/1-A Analysis Batch: 720-42350 Instrument ID: Varian ICP

Client Matrix: Prep Batch: 720-42267 Lab File ID: N/A Water

Dilution: 1.0 Units: mg/L Initial Weight/Volume: 50 mL 10/10/2008 1102 Date Analyzed: Final Weight/Volume: 50 mL Date Prepared: 10/09/2008 0912

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

Lab Control Spike/ Method: 6010B Lab Control Spike Duplicate Recovery Report - Batch: 720-42267 Preparation: 3010A

Analysis Batch: 720-42350 LCS Lab Sample ID: LCS 720-42267/2-A Instrument ID: Varian ICP

Client Matrix: Water Prep Batch: 720-42267 Lab File ID: N/A

Dilution: 1.0 Units: mg/L Initial Weight/Volume: 50 mL 10/10/2008 1105 Date Analyzed: Final Weight/Volume: 50 mL

10/09/2008 0912 Date Prepared:

LCSD Lab Sample ID: LCSD 720-42267/3-A Analysis Batch: 720-42350 Instrument ID: Varian ICP

Client Matrix: Water Prep Batch: 720-42267 Lab File ID: N/A

Dilution: Units: mg/L Initial Weight/Volume: 50 mL 10/10/2008 1109 Date Analyzed: 50 mL

Final Weight/Volume: 10/09/2008 0912 Date Prepared:

% 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 80 - 120 Nickel 99 101 3 20 3 20 Lead 100 102 80 - 120 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/ Method: 6010B

Matrix Spike Duplicate Recovery Report - Batch: 720-42267 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. RPD Analyte MS MSD Limit **RPD Limit** MS Qual MSD Qual 75 - 125 Cadmium 1 25 93 93 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 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 1828 Final Weight/Volume: 50 mL

Date Analyzed: 10/09/2008 1828 Final Weight/Volume: 50 mL

Date Prepared: 10/09/2008 0918

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

44.0

Lab Sample ID: LCSSRM 720-42268/25-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:
 1.00
 g

 Date Analyzed:
 10/09/2008
 2018
 Final Weight/Volume:
 50
 mL

 Date Prepared:
 10/09/2008
 0918
 50
 mL

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

38.8

88

62 - 110

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

Zinc

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

Lab Control Spike/ Method: 6010B
Lab Control Spike Duplicate Recovery Report - Batch: 720-42268 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. **RPD** Analyte LCS LCSD Limit RPD Limit LCS Qual LCSD Qual Cadmium 99 80 - 120 7 20 100 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

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

Matrix Spike/ Method: 6010B

Matrix Spike Duplicate Recovery Report - Batch: 720-42268 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
 50 mL

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

 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. RPD Analyte MS MSD Limit **RPD Limit** MS Qual MSD Qual 75 - 125 Cadmium 85 20 84 3 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

10.01 g

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 Analysis Batch: 720-42254 Instrument ID: No Equipment Assigned

Client Matrix: Solid Prep Batch: 720-42211 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume:

Date Analyzed: 10/08/2008 1759 Final Weight/Volume: 10.01 mL

Date Prepared: 10/08/2008 1134

Analyte Result Qual RL

HEM ND 100

Lab Control Spike/ Method: 9071B
Lab Control Spike Duplicate Recovery Report - Batch: 720-42211 Preparation: 9071B

LCS Lab Sample ID: LCS 720-42211/2-A Analysis Batch: 720-42254 Instrument ID: No Equipment Assigned

Client Matrix: Solid Prep Batch: 720-42211 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 10.01 g

Date Analyzed: 10/08/2008 1759 Final Weight/Volume: 10.01 mL

Date Prepared: 10/08/2008 1134

LCSD Lab Sample ID: LCSD 720-42211/3-A Analysis Batch: 720-42254 Instrument ID: No Equipment Assigned

Client Matrix: Solid Prep Batch: 720-42211 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 10.01 g

Date Analyzed: 10/08/2008 1759 Final Weight/Volume: 10.01 mL Date Prepared: 10/08/2008 1134

% Rec.

Analyte LCS LCSD Limit RPD RPD Limit LCS Qual LCSD Qual

HEM 86 84 79 - 120 3 18

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

Matrix Spike/ Method: 9071B

Matrix Spike Duplicate Recovery Report - Batch: 720-42211 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

 $\frac{\text{\% Rec.}}{\text{Analyte}} \hspace{1cm} \text{MS} \hspace{1cm} \text{MSD} \hspace{1cm} \text{Limit} \hspace{1cm} \text{RPD} \hspace{1cm} \text{RPD Limit} \hspace{1cm} \text{MS}$

 Analyte
 MS
 MSD
 Limit
 RPD
 RPD Limit
 MS Qual
 MSD Qual

 HEM
 24
 -165
 79 - 120
 48
 20
 4
 4

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	

B. October 16, 2008 (Sampling Event October 3, 2008)



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

milissa Bruver

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 Nickel Lead Zinc		0.29 1.6 0.22 0.64	0.0050 0.0050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B
720-16328-2	#2, ELECTRIC BOX				
Chromium Nickel Lead Zinc		0.46 7.6 0.054 1.0	0.0050 0.050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B
720-16328-3	#3, RING ROLLER				
Chromium Nickel Lead Zinc		0.39 2.3 0.28 0.48	0.0050 0.0050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 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 Date Sampled: 10/03/2008 1015 Client Matrix: Wipe Date Received: 10/06/2008 1424

6010B Metals (ICP)

Analysis Batch: 720-42530 Method: 6010B Instrument ID: Varian ICP Prep Batch: 720-42445 Preparation: 3050B Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume:

1 Wipe Final Weight/Volume: Date Analyzed: 10/15/2008 0659 50 mL Date Prepared: 10/13/2008 1432

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
 Date Sampled:
 10/03/2008 1017

 Client Matrix:
 Wipe
 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 RLCadmium ND 0.0050 Chromium 0.46 0.0050 0.054 0.0050 Lead Zinc 1.0 0.0050 Method: 6010B Analysis Batch: 720-42530 Instrument ID: Varian ICP Prep Batch: 720-42445 Preparation: 3050B Lab File ID: N/A Dilution: 10 Initial Weight/Volume: 1 Wipe Final Weight/Volume: Date Analyzed: 10/15/2008 0731 50 mL Date Prepared: 10/13/2008 1432

Analyte Result (mg/wipe) Qualifier RL

Nickel 7.6 0.050

0.0050 0.0050

0.0050

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

Client Sample ID: #3, RING ROLLER

Nickel

Lead

Zinc

 Lab Sample ID:
 720-16328-3
 Date Sampled:
 10/03/2008 1020

 Client Matrix:
 Wipe
 Date Received:
 10/06/2008 1424

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-42530Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-42445Lab File ID:N/ADilution:1.0Initial Weight/Volume:1 Wipe

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

2.3

0.28

0.48

 Analyte
 Result (mg/wipe)
 Qualifier
 RL

 Cadmium
 ND
 0.0050

 Chromium
 0.39
 0.0050

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

		General Chemistry	
Client Sample ID:	#1, HOIST		
Lab Sample ID:	720-16328-1		Date Sampled: 10/03/2008 101
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 101
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

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

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-42445					
LCS 720-42445/2-A	Lab Control Spike	Т	Wipe	3050B	
LCSD 720-42445/3-A	Lab Control Spike Duplicate	T	Wipe	3050B	
MB 720-42445/1-A	Method Blank	Т	Wipe	3050B	
720-16328-1	#1, HOIST	Т	Wipe	3050B	
720-16328-2	#2, ELECTRIC BOX	Т	Wipe	3050B	
720-16328-3	#3, RING ROLLER	Т	Wipe	3050B	
Analysis Batch:720-425	530				
LCS 720-42445/2-A	Lab Control Spike	Т	Wipe	6010B	720-42445
LCSD 720-42445/3-A	Lab Control Spike Duplicate	Т	Wipe	6010B	720-42445
MB 720-42445/1-A	Method Blank	Т	Wipe	6010B	720-42445
720-16328-1	#1, HOIST	Т	Wipe	6010B	720-42445
720-16328-2	#2, ELECTRIC BOX	Т	Wipe	6010B	720-42445
720-16328-3	#3, RING ROLLER	Т	Wipe	6010B	720-42445
Report Basis T = Total					
General Chemistry					
Prep Batch: 720-42435		-	NAC .	00745	
LCS 720-42435/2-A	Lab Control Spike	T T	Wipe	9071B	
LCSD 720-42435/3-A	Lab Control Spike Duplicate	T 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 T	Wipe	9071B	
720-16328-3	#3, RING ROLLER	Т	Wipe	9071B	
Analysis Batch:720-424					
LCS 720-42435/2-A	Lab Control Spike	Т	Wipe	9071B	720-42435
Analysis Batch:720-424 LCS 720-42435/2-A LCSD 720-42435/3-A		T T	Wipe Wipe	9071B 9071B	720-42435
LCS 720-42435/2-A LCSD 720-42435/3-A	Lab Control Spike	T T			
LCS 720-42435/2-A	Lab Control Spike Lab Control Spike Duplicate	Т	Wipe	9071B	720-42435
LCS 720-42435/2-A LCSD 720-42435/3-A MB 720-42435/1-A	Lab Control Spike Lab Control Spike Duplicate Method Blank	T T	Wipe Wipe	9071B 9071B	720-42435 720-42435

Report Basis T = Total

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

Method Blank - Batch: 720-42445 Method: 6010B Preparation: 3050B

Lab Sample ID: MB 720-42445/1-A Analysis Batch: 720-42530 Instrument ID: Varian ICP

Client Matrix: Prep Batch: 720-42445 Wipe Lab File ID: N/A

Units: mg/wipe Initial Weight/Volume: 1 Wipe Dilution: 1.0

Date Analyzed: 10/15/2008 0644 Final Weight/Volume: 50 mL Date Prepared: 10/13/2008 1432

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/ Method: 6010B Lab Control Spike Duplicate Recovery Report - Batch: 720-42445 Preparation: 3050B

LCS Lab Sample ID: LCS 720-42445/2-A Analysis Batch: 720-42530 Instrument ID: Varian ICP

Lab File ID: N/A Client Matrix: Prep Batch: 720-42445 Wipe

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe

Date Analyzed: 10/15/2008 0652 Final Weight/Volume: 50 mL Date Prepared: 10/13/2008 1432

LCSD Lab Sample ID: LCSD 720-42445/3-A Analysis Batch: 720-42530 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-42445 Lab File ID: N/A

Initial Weight/Volume: 1 Wipe Dilution: Units: mg/wipe 1.0 Date Analyzed: 10/15/2008 0656

Final Weight/Volume: 50 mL Date Prepared: 10/13/2008 1432

	<u>%</u>	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.

5.0

N/A

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

Analysis Batch: 720-42457

Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-42435 Lab File ID:

Date Prepared: 10/13/2008 1333

HEM

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 g
Date Analyzed: 10/13/2008 1611 Final Weight/Volume: 1 mL

Analyte Result Qual RL

ND

Lab Control Spike/ Method: 9071B
Lab Control Spike Duplicate Recovery Report - Batch: 720-42435 Preparation: 9071B

LCS Lab Sample ID: LCS 720-42435/2-A Analysis Batch: 720-42457 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-42435 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 g

Date Analyzed: 10/13/2008 1611 Final Weight/Volume: 1 mL

Date Prepared: 10/13/2008 1333

LCSD Lab Sample ID: LCSD 720-42435/3-A Analysis Batch: 720-42457 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-42435 Lab File ID: N/A
Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 g

Date Analyzed: 10/13/2008 1611 Final Weight/Volume: 1 mL

Date Prepared: 10/13/2008 1333

 Analyte
 % Rec. LCS
 LCSD
 Limit
 RPD
 RPD Limit
 LCS Qual
 LCSD Qual

 HEM
 95
 94
 70 - 120
 1
 25
 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

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Jim Carro

15

720-16328 Date 13/6/8 Page Lot 1

Report To			-								-	Analysis	Requeste	d			10.0						T		
Altn: James Carro	Congress					T	1	100						T											1
Company: Chemical Data Mgmt Sys)8015/8021 ()82608 ()8TEX ()MTBE omatica			Anno				stroleum) 608 508													
Address: 6525 Trinity Court, Saite 201					9	ollica Gel	uel Tests EPA 8260B. () Gas () BTEX) Five Oxyestates () DCA, EDB () Ethanol						() 608 () 608 () 8310	98310	Metals: () Lead () LUFT () RCRA () Other:	9.				ır.					
City, State, Zip: Dutilin, CA 94568								rs 7 8260B	MS (VOCs)							Low Level Metals by EPA 200.8/6020 (ICP-MS);		lum for H2O)	() Alkelinity () TDS	()CL()SO4()N03()F ()Br()N02()P04					
Emait jin@cdms.com					8260																				
Email:					0							180													
Bill To (Attn): Lon Der			1/4		15/8	a 英	÷ 00 %	8 C S	ripou	21 P)	MAS 825 825	MAS 625 UPy otal	2A 80	7A 80 0082	7471	2	by B	_	hrom	J. C.	SO				
0					TPH EPA-()80	Purgeable Aromatics BTEX EPA - () 8TEX () 82608	TEPH EPA 8015M* (Silica Gol () Diesel () Motor Oil () Other	ests EPA 6, re Oxyenate	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs)	Semivolatiles GC/MS () EPA 8270 () 625	Oil and Grease () Petroleum (EPA 1664) () Total	Pesticides () EPA 8081 () PCBs () EPA 8082 () 608	PHAs by () 8270 () 8310	CAM17 Metals (EPA 6010/7470/7471)	s: () Lead ther:	.evel Metals MS):	() WET (STLC)) Hexavatent Chromium) pH (24 h hold time for H2O)) Spec Cond. () TSS	15 () CL (Cd,Cr.Pb,NI,Zn			of Londaniana
Sample ld	Date	Time	Matrix	Preservative	HE C	Purge BTEX	TEPH (OC)	Fuel)	Purp	Volati () Ef	Semb () EF	Oil ar	Pestion	PHAS	CAM (EPA	Metals: (Low I	20	00	22	Anions:	Cd.C			Stumber
W1, Hoist	10/3/08	10:15 AM							12			3										2			
3190 Demonstrator	300000	10:17 AM										a a										4			
#2, Electric Box	10/3/08	/ 10250193																				177			
#3, Ring Roller	10/3/08	10:20 AM				_						1.			+						\vdash	- V			t
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		Project Info								-	_				Sam	ple Rece	pt:		-		_	-	-		
Project Name:				# of Contains	15 -4-T	STICBASS J CASTA			Ronda Slack				3) Relinquishes by:												
Project # Head Space:					Signature ()				Ronda Seack				Sgrater												
PO# Tempocrature ZQ. C			0	- 8	Printed Harm J. Carro				Printed Name: Fection Lietto.				Prirsed Name												
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TAT 5 Day	720	48h	24h	Other	to Konda Slack			Es Buth					3) Received by:												
Report: () Routine () Level 3 () Level 4 () EDD () State Tank Fund EDF () Glot Spetial Instructions/Comments:				Global ID Berry GOOD SLOCK			Control of the last of the las			9. Bulloca				Sgrature	Sgrieture										
							Promy Name AL-SF 1919 Corners 92511911/1919				Printed No	Printed Name													
											Consumy	Company													
8015M reported from C9-C24 (industry norm). Default for 8015 is C10-C28							-	10				70	10	~ ~	10	1.70	2/	Phone							
							10	60	8	911	Ipr	n_	100	16	10-8	15	tias	4	1						_

Chemical Data Management Systems Chain of Custody 6515 Trinity Cl Suite 201 Dublin, CA I4568 (925) 551-7300

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	
f 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	

C. November 4, 2008 (Sampling Event October 28, 2008)



ANALYTICAL REPORT

Job Number: 720-16651-1

Job Description: Western Forge Flange

For:

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

Attention: Mr. James Carro

milissa Bruver

Approved for release Melissa Brewer Project Manager I 11/4/2008 12:47 PM

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
11/04/2008

Job Narrative 720-J16651-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

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: 720-16651-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-16651-1	ELECTRICAL BOX A	A			
Cadmium Chromium Nickel Lead Zinc		0.0052 0.16 2.2 0.052 5.2	0.0050 0.0050 0.0050 0.0050 0.050	mg/wipe mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B 6010B
720-16651-3	HOIST A				
Chromium Nickel Lead Zinc		0.36 2.3 0.51 1.8	0.0050 0.0050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B
720-16651-5	RING ROLLER A				
Chromium Nickel Lead Zinc		0.29 3.0 0.27 0.60	0.0050 0.050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-16651-1

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: 720-16651-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-16651-1	ELECTRICAL BOX A	Wipe	10/28/2008 1430	10/28/2008 1600
720-16651-2	ELECTRICAL BOX B	Wipe	10/28/2008 1430	10/28/2008 1600
720-16651-3	HOIST A	Wipe	10/28/2008 1435	10/28/2008 1600
720-16651-4	HOIST B	Wipe	10/28/2008 1435	10/28/2008 1600
720-16651-5	RING ROLLER A	Wipe	10/28/2008 1445	10/28/2008 1600
720-16651-6	RING ROLLER B	Wipe	10/28/2008 1445	10/28/2008 1600
720-16651-7	BLANK SAMPLE	Wipe	10/28/2008 0000	10/28/2008 1600
720-16651-8	BLANK SAMPLE	Wipe	10/28/2008 0000	10/28/2008 1600

Client: Chemical Data Management Job Number: 720-16651-1

Client Sample ID: ELECTRICAL BOX A

 Lab Sample ID:
 720-16651-1
 Date Sampled:
 10/28/2008 1430

 Client Matrix:
 Wipe
 Date Received:
 10/28/2008 1600

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-43345 Instrument ID: Varian ICP

Preparation: 3050B Prep Batch: 720-43295 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 1 Wipe

Dilution: 1.0 Initial Weight/Volume: 1 Wipe Date Analyzed: 11/04/2008 0951 Final Weight/Volume: 50 mL Date Prepared: 11/03/2008 1105

Qualifier RLAnalyte Result (mg/wipe) Cadmium 0.0052 0.0050 Chromium 0.0050 0.16 2.2 0.0050 Nickel Lead 0.052 0.0050

Method:6010BAnalysis Batch: 720-43345Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-43295Lab File ID:N/A

Dilution: 10 Initial Weight/Volume: 1 Wipe

Date Analyzed: 11/04/2008 1032 Final Weight/Volume: 50 mL

Date Prepared: 11/03/2008 1105

Analyte Result (mg/wipe) Qualifier RL

Zinc 5.2 0.050

Client: Chemical Data Management Job Number: 720-16651-1

Client Sample ID: HOIST A

 Lab Sample ID:
 720-16651-3
 Date Sampled:
 10/28/2008 1435

 Client Matrix:
 Wipe
 Date Received:
 10/28/2008 1600

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-43345Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-43295Lab File ID:N/ADilution:1.0Initial Weight/Volume:1 Wipe

Dilution: 1.0 Initial Weight/Volume: 1 Wipe
Date Analyzed: 11/04/2008 0955 Final Weight/Volume: 50 mL
Date Prepared: 11/03/2008 1105

Analyte Result (mg/wipe) Qualifier RLCadmium ND 0.0050 Chromium 0.36 0.0050 Nickel 2.3 0.0050 0.51 0.0050 Lead 0.0050 Zinc 1.8

Client: Chemical Data Management Job Number: 720-16651-1

Client Sample ID: RING ROLLER A

 Lab Sample ID:
 720-16651-5
 Date Sampled:
 10/28/2008 1445

 Client Matrix:
 Wipe
 Date Received:
 10/28/2008 1600

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-43345Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-43295Lab File ID:N/ADilution:1.0Initial Weight/Volume:1 Wipe

Dilution: 1.0 Initial Weight/Volume: 1 Wipe
Date Analyzed: 11/04/2008 0959 Final Weight/Volume: 50 mL
Date Prepared: 11/03/2008 1105

Analyte Result (mg/wipe) Qualifier RLCadmium ND 0.0050 Chromium 0.29 0.0050 0.0050 Lead 0.27 Zinc 0.60 0.0050 Method: 6010B Analysis Batch: 720-43345 Instrument ID: Varian ICP Prep Batch: 720-43295 Preparation: 3050B Lab File ID: N/A Dilution: 10 Initial Weight/Volume: 1 Wipe Final Weight/Volume: Date Analyzed: 11/04/2008 1036 50 mL Date Prepared: 11/03/2008 1105

 Analyte
 Result (mg/wipe)
 Qualifier
 RL

 Nickel
 3.0
 0.050

Client: Chemical Data Management Job Number: 720-16651-1

Client Sample ID: BLANK SAMPLE

 Lab Sample ID:
 720-16651-8
 Date Sampled:
 10/28/2008 0000

 Client Matrix:
 Wipe
 Date Received:
 10/28/2008 1600

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-43345Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-43295Lab File ID:N/ADilution:1.0Initial Weight/Volume:1 Wipe

Dilution: 1.0 Initial Weight/Volume: 1 Wipe Date Analyzed: 11/04/2008 1002 Final Weight/Volume: 50 mL Date Prepared: 11/03/2008 1105

Analyte Result (mg/wipe) Qualifier RLCadmium ND 0.0050 Chromium ND 0.0050 Nickel ND 0.0050 ND 0.0050 Lead 0.0050 Zinc ND

		General Chemistry	
Client Sample ID:	ELECTRICAL BOX B		
Lab Sample ID: Client Matrix:	720-16651-2 Wipe		Date Sampled: 10/28/2008 1430 Date Received: 10/28/2008 1600
Analyte	Result	Qual Units	RL Dil Method
HEM	ND Anly Batch: 720-43202 Prep Batch: 720-43194	mg/wipe Date Analyzed 10/30/2008 1447 Date Prepared: 10/30/2008 1412	5.0 1.0 9071B
Client Sample ID:	HOIST B		
Lab Sample ID: Client Matrix:	720-16651-4 Wipe		Date Sampled: 10/28/2008 1435 Date Received: 10/28/2008 1600
Analyte	Result	Qual Units	RL Dil Method
HEM Client Sample ID:	ND Anly Batch: 720-43202 Prep Batch: 720-43194 RING ROLLER B	mg/wipe Date Analyzed 10/30/2008 1447 Date Prepared: 10/30/2008 1412	5.0 1.0 9071B
-			
Lab Sample ID: Client Matrix:	720-16651-6 Wipe		Date Sampled: 10/28/2008 1445 Date Received: 10/28/2008 1600
Analyte	Result	Qual Units	RL Dil Method
HEM	ND Anly Batch: 720-43202 Prep Batch: 720-43194	mg/wipe Date Analyzed 10/30/2008 1447 Date Prepared: 10/30/2008 1412	5.0 1.0 9071B
Client Sample ID:	BLANK SAMPLE		
Lab Sample ID: Client Matrix:	720-16651-7 Wipe		Date Sampled: 10/28/2008 0000 Date Received: 10/28/2008 1600
Analyte	Result	Qual Units	RL Dil Method
HEM	ND Anly Batch: 720-43202 Prep Batch: 720-43194	mg/wipe Date Analyzed 10/30/2008 1447 Date Prepared: 10/30/2008 1412	5.0 1.0 9071B

DATA REPORTING QUALIFIERS

Lab Section Qualifier Description

Client: Chemical Data Management Job Number: 720-16651-1

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-43295					
LCS 720-43295/2-A	Lab Control Spike	Т	Wipe	3050B	
LCSD 720-43295/3-A	Lab Control Spike Duplicate	Т	Wipe	3050B	
MB 720-43295/1-A	Method Blank	Т	Wipe	3050B	
720-16651-1	ELECTRICAL BOX A	T	Wipe	3050B	
720-16651-3	HOIST A	Т	Wipe	3050B	
720-16651-5	RING ROLLER A	T	Wipe	3050B	
720-16651-8	BLANK SAMPLE	Т	Wipe	3050B	
Analysis Batch:720-433	45				
LCS 720-43295/2-A	Lab Control Spike	T	Wipe	6010B	720-43295
LCSD 720-43295/3-A	Lab Control Spike Duplicate	T	Wipe	6010B	720-43295
MB 720-43295/1-A	Method Blank	T	Wipe	6010B	720-43295
720-16651-1	ELECTRICAL BOX A	T	Wipe	6010B	720-43295
720-16651-3	HOIST A	T	Wipe	6010B	720-43295
720-16651-5	RING ROLLER A	T	Wipe	6010B	720-43295
720-16651-8	BLANK SAMPLE	Т	Wipe	6010B	720-43295
Report Basis T = Total					
General Chemistry					
Prep Batch: 720-43194	Lab Control Spika	т.	Wine	00740	
Prep Batch: 720-43194 _CS 720-43194/2-A	Lab Control Spike	T	Wipe	9071B	
Prep Batch: 720-43194 _CS 720-43194/2-A _CSD 720-43194/3-A	Lab Control Spike Duplicate	Т	Wipe	9071B	
Prep Batch: 720-43194 _CS 720-43194/2-A _CSD 720-43194/3-A MB 720-43194/1-A	Lab Control Spike Duplicate Method Blank	T T	Wipe Wipe	9071B 9071B	
Prep Batch: 720-43194 _CS 720-43194/2-A _CSD 720-43194/3-A MB 720-43194/1-A 720-16651-2	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B	T T T	Wipe Wipe Wipe	9071B 9071B 9071B	
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-4	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B	T T T T	Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B	
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-4 720-16651-6	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B	T T T T	Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B	
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-4 720-16651-6	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B	T T T T	Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B	
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-6 720-16651-7 Analysis Batch:720-432	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE	T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B	
Prep Batch: 720-43194 _CS 720-43194/2-A _CSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-4 720-16651-7 Analysis Batch:720-432 _CS 720-43194/2-A	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE 102 Lab Control Spike	T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B	720-43194
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-6 720-16651-7 Analysis Batch:720-432 LCS 720-43194/2-A LCSD 720-43194/3-A	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE Lab Control Spike Lab Control Spike Duplicate	T T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B	720-43194
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-6 720-16651-7 Analysis Batch:720-432 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE 102 Lab Control Spike Lab Control Spike Duplicate Method Blank	T T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B	720-43194 720-43194
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-6 720-16651-7 Analysis Batch: 720-432 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE Lab Control Spike Lab Control Spike Duplicate	T T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B	720-43194
Prep Batch: 720-43194 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-6 720-16651-7 Analysis Batch:720-432 LCS 720-43194/2-A LCSD 720-43194/3-A MB 720-43194/1-A 720-16651-2 720-16651-4	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE 102 Lab Control Spike Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B	T T T T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B	720-43194 720-43194 720-43194 720-43194
	Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B HOIST B RING ROLLER B BLANK SAMPLE 102 Lab Control Spike Lab Control Spike Duplicate Method Blank ELECTRICAL BOX B	T T T T T T	Wipe Wipe Wipe Wipe Wipe Wipe Wipe Wipe	9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B 9071B	720-43194 720-43194 720-43194

Report Basis

T = Total

TestAmerica San Francisco

11/04/2008

Quality Control Results

0.0050

1 Wipe

Job Number: 720-16651-1 Client: Chemical Data Management

Method Blank - Batch: 720-43295 Method: 6010B Preparation: 3050B

Lab Sample ID: MB 720-43295/1-A Analysis Batch: 720-43345 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-43295 Lab File ID: N/A

Date Prepared: 11/03/2008 1105

Zinc

Units: mg/wipe Initial Weight/Volume: 1 Wipe Dilution: 1.0 Date Analyzed: 11/04/2008 0940 Final Weight/Volume: 50 mL

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

Lab Control Spike/ Method: 6010B Lab Control Spike Duplicate Recovery Report - Batch: 720-43295 Preparation: 3050B

ND

LCS Lab Sample ID: LCS 720-43295/2-A Analysis Batch: 720-43345 Instrument ID: Varian ICP

Client Matrix: Lab File ID: N/A Prep Batch: 720-43295 Wipe

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume:

Date Analyzed: 11/04/2008 0943 Final Weight/Volume: 50 mL Date Prepared: 11/03/2008 1105

LCSD Lab Sample ID: LCSD 720-43295/3-A Analysis Batch: 720-43345 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-43295 Lab File ID: N/A

Initial Weight/Volume: 1 Wipe Dilution: Units: mg/wipe 1.0 Date Analyzed: 11/04/2008 0947 Final Weight/Volume: 50 mL

Date Prepared: 11/03/2008 1105

	<u>%</u>	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	98	98	80 - 120	0	20		
Lead	99	99	80 - 120	0	20		
Zinc	94	94	80 - 120	0	20		

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

Quality Control Results

Instrument ID: No Equipment Assigned

Job Number: 720-16651-1 Client: Chemical Data Management

Method Blank - Batch: 720-43194 Method: 9071B Preparation: 9071B

Analysis Batch: 720-43202

Client Matrix: Wipe Prep Batch: 720-43194 Lab File ID: N/A Units: mg/wipe Dilution: 1.0

Lab Sample ID: MB 720-43194/1-A

Initial Weight/Volume: 1 g Date Analyzed: 10/30/2008 1447 Final Weight/Volume: 1 mL Date Prepared: 10/30/2008 1412

Result Qual RLAnalyte HEM ND 5.0

Lab Control Spike/ Method: 9071B Lab Control Spike Duplicate Recovery Report - Batch: 720-43194 Preparation: 9071B

LCS Lab Sample ID: LCS 720-43194/2-A Analysis Batch: 720-43202 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-43194 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume:

10/30/2008 1447 Final Weight/Volume: Date Analyzed: 1 mL Date Prepared: 10/30/2008 1412

LCSD Lab Sample ID: LCSD 720-43194/3-A Analysis Batch: 720-43202 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-43194 Lab File ID: N/A Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 g

10/30/2008 1447 Final Weight/Volume: 1 mL Date Analyzed:

Date Prepared: 10/30/2008 1412

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual HEM 94 94 70 - 120 0

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

Login Sample Receipt Check List

Client: Chemical Data Management Job Number: 720-16651-1

List Source: TestAmerica San Francisco

Login Number: 16651 Creator: Bullock, Tracy

List Number: 1

Question T / F/ NA Comment Radioactivity either was not measured or, if measured, is at or below N/A background The cooler's custody seal, if present, is intact. N/A The cooler or samples do not appear to have been compromised or True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. 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 True the COC. 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 True MS/MSDs VOA sample vials do not have headspace or bubble is <6mm (1/4") in True diameter. If necessary, staff have been informed of any short hold time or quick TAT True needs Multiphasic samples are not present. True Samples do not require splitting or compositing. True

D. November 24, 2008 (Sampling Event November 14, 2008)



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

milissa Bruver

Approved for release Melissa Brewer Project Manager I 11/24/2008 9:19 AM

Melissa Brewer Project Manager I melissa.brewer@testamericainc.com 11/24/2008

Job Narrative 720-J16931-1

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.

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 26	0.95	mg/Kg	6010B
Zinc		20	0.95	mg/Kg	6010B
Silica Gel Cleanup					
Diesel Range Orga		85	1.0	mg/Kg	8015B
Motor Oil Range O	rganics [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	05 101 11 12	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
9			0.00	99	33.02
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	32 102 V T	45	1.0	malla	6010B
		45	1.0	mg/Kg	
Nickel		60 15	1.0 1.0	mg/Kg	6010B 6010B
Lead Zinc		33	1.0	mg/Kg	6010B
ZIIIC		33	1.0	mg/Kg	OUTUD

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 Organi	ics [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 Organi	ics [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 Organi	ics [C10-C28]	46	2.0	mg/Kg	8015B
Motor Oil Range Org		180	99	mg/Kg	8015B
C19-C36	- ·	210	99	mg/Kg	8015B

720-16931-10 SB-103 7'-8' Chromium 18 1.0 Nickel 9.7 1.0 Lead 150 1.0 Zinc 110 1.0 Silica Gel Cleanup Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96 Zinc 12 0.96	mg/Kg mg/Kg	C040F	
Nickel 9.7 1.0 Lead 150 1.0 Zinc 110 1.0 Silica Gel Cleanup Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96		C040D	
Lead 150 1.0 Zinc 110 1.0 Silica Gel Cleanup Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	ma/Ka	6010B	
Zinc 110 1.0 Silica Gel Cleanup Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/mg	6010B	
Silica Gel Cleanup Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	6010B	
Diesel Range Organics [C10-C28] 23 1.0 Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	6010B	
Motor Oil Range Organics [C24-C36] 94 50 C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96			
C19-C36 110 50 720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	8015B	
720-16931-11 SB-103 11'-12' Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	8015B	
Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	8015B	
Chromium 18 0.96 Nickel 23 0.96 Lead 3.7 0.96			
Nickel 23 0.96 Lead 3.7 0.96	mg/Kg	6010B	
Lead 3.7 0.96	mg/Kg	6010B	
	mg/Kg	6010B	
2110	mg/Kg	6010B	
	g/.tg	00102	
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	

720-16931-14 SB-111 3'-4' Chromium 50 0.999 mg/Kg 6010B Nickel 69 0.999 mg/Kg 6010B Lead 6.6 0.999 mg/Kg 6010B Zinc 44 0.999 mg/Kg 6010B Zinc 44 0.999 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 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 Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.6 0.999 mg/Kg 8015B 720-16931-16 SB-111 7'-8' Chromium 15 1.0 mg/Kg 6010B Nickel 12 1.0 mg/Kg 6010B Nickel 14 1.0 mg/Kg 6010B Nickel 15 1.0 mg/Kg 6010B Nickel 16 1.0 mg/Kg 6010B Nickel 18 8.8 1.0 mg/Kg 6010B Nickel 19 10 mg/Kg 6010B	Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method	
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 0 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 Chromium 15 1.0 mg/Kg 6010B Nickel 12 1.0 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.6 0.99 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.6 0.99 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.6 0.99 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.6 0.99 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.0 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.0 mg/Kg 6010B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.0 mg/Kg 8015B Silica Gel Cleanup Diesel Range Organics [C10-C28] 3.0 mg/Kg 8015B C19-C36 87 50 mg/Kg 8015B C19-C36 87 50 mg/Kg 8015B C10 mg/Kg 6010B Lead 1.0 mg/Kg 6010B Lead 1.0 mg/Kg 6010B Lead 1.0 mg/Kg 6010B	720-16931-14	SB-111 3'-4'					
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Zinc 44 0.99 mg/Kg 6010B							
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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 720-16931-17 SB-111 9'-10' Chromium 14 1.0 mg/Kg 6010B Nickel 8.8 1.0 mg/Kg 6010B Nickel 8.8 1.0 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 6010B Silica Gel Cleanup Diesel Range Organics [C24-C36] 70 mg/Kg 8015B Motor Oil Range Organics [C24-C36] 70 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 Nickel 8.8 1.0 mg/Kg 6010B Lead 10 mg/Kg 6010B							
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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	720-16931-16	SB-111 7'-8'					
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	Chromium		15	1.0	ma/Ka	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							
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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		50			6010B	
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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			23	1.0	ma/Ka	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			_				
Chromium 14 1.0 mg/Kg 6010B Nickel 8.8 1.0 mg/Kg 6010B Lead 10 1.0 mg/Kg 6010B		0[]					
Nickel 8.8 1.0 mg/Kg 6010B Lead 10 1.0 mg/Kg 6010B	720-16931-17	SB-111 9'-10'					
Nickel 8.8 1.0 mg/Kg 6010B Lead 10 1.0 mg/Kg 6010B	Chromium		14	1.0	ma/Ka	6010B	
Lead 10 1.0 mg/Kg 6010B							
	Zinc		13	1.0	mg/Kg	6010B	

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 Cleanu	p				
Diesel Range Orga		16	0.99	mg/Kg	8015B
Motor Oil Range O		51	50	mg/Kg	8015B
C19-C36		63	50	mg/Kg	8015B
720-16931-19	W-101				
Dissolved					
Diesel Range Orga	anics [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
700 40004 00	W 400				
720-16931-20	W-102				
Dissolved					
Diesel Range Orga	anics [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 Orga	anics [C10-C28]	74	50	ug/L	8015B
Chromium	A11100 [O 10 O20]	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 46024 22	W 444				
720-16931-22	W-111				
Dissolved		0.4		,,	00450
Diesel Range Orga	anics [C10-C28]	91	50	ug/L	8015B
Nickel		0.42	0.0050	mg/L	6010B
Zinc		8.4	0.010	mg/L	6010B

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 Cleanu	ŋ					
Diesel Range Orga		2.2	1.0	mg/Kg	8015B	

METHOD SUMMARY

Client: Chemical Data Management

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.

Job Number: 720-16931-1

SAMPLE SUMMARY

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'

p-Terphenyl

 Lab Sample ID:
 720-16931-1
 Date Sampled:
 11/14/2008 1200

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.03 g
Date Analyzed: 11/19/2008 1113 Final Weight/Volume: 5 mL

70

Date Prepared: 11/18/2008 1212 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-C3	36] 58		50
C19-C36	150		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	1		0 - 5

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

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

 Lab Sample ID:
 720-16931-2
 Date Sampled:
 11/14/2008 1200

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.41 g
Date Analyzed: 11/19/2008 1139 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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
 Date Sampled:
 11/14/2008 1200

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.12 g
Date Analyzed: 11/19/2008 1206 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C	:36] 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
 Date Sampled:
 11/14/2008 1200

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.08 g
Date Analyzed: 11/19/2008 1233 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 Injection Volume:

Column ID: PRIMARY

DryWt Corrected: N Result (mg/Kg) Qualifier Analyte 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

 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
 Date Sampled:
 11/14/2008 1250

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.07 g
Date Analyzed: 11/19/2008 1300 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Commin Anial (Cross)	0		^ <i>F</i>

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

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

p-Terphenyl

 Lab Sample ID:
 720-16931-6
 Date Sampled:
 11/14/2008 1250

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.02 g
Date Analyzed: 11/19/2008 1327 Final Weight/Volume: 5 mL

79

Date Prepared: 11/18/2008 1212 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-C	36] ND		50
C19-C36	52		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

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

Lab Sample ID: 720-16931-7 Date Sampled: 11/14/2008 1250 Client Matrix: Solid Date Received: 11/14/2008 1735

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

Method: Analysis Batch: 720-44103 Instrument ID: HP DRO5 8015B

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.24 g Date Analyzed: 11/19/2008 1354 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	66] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

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

Lab Sample ID: 720-16931-8 Date Sampled: 11/14/2008 1250 Client Matrix: Solid Date Received: 11/14/2008 1735

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

Method: Analysis Batch: 720-44103 Instrument ID: HP DRO5 8015B

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.39 g Date Analyzed: 11/19/2008 2038 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	36] 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
 Date Sampled:
 11/14/2008 1400

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 2.0 Initial Weight/Volume: 30.43 g
Date Analyzed: 11/19/2008 0925 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	36] 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
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 Date Received:
 11/14/2008
 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.11 g
Date Analyzed: 11/19/2008 1728 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 Injection Volume:

Column ID: PRIMARY

Analyte D	OryWt 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

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

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

p-Terphenyl

 Lab Sample ID:
 720-16931-11
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 Date Received:
 11/14/2008
 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume:

Dilution: 1.0 Initial Weight/Volume: 30.27 g
Date Analyzed: 11/19/2008 2105 Final Weight/Volume: 5 mL

80

Date Prepared: 11/18/2008 1212 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-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

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

Lab Sample ID: 720-16931-12 Date Sampled: 11/14/2008 1400 Client Matrix: Solid Date Received: 11/14/2008 1735

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

Method: Analysis Batch: 720-44103 Instrument ID: HP DRO5 8015B

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.22 g Date Analyzed: 11/19/2008 2132 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	86] 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'

p-Terphenyl

 Lab Sample ID:
 720-16931-13
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.42 g
Date Analyzed: 11/19/2008 1635 Final Weight/Volume: 5 mL

77

Date Prepared: 11/18/2008 1212 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-C3	310		49
C19-C36	360		49
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	1		0 - 5

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

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

p-Terphenyl

 Lab Sample ID:
 720-16931-14
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.48 g
Date Analyzed: 11/19/2008 1755 Final Weight/Volume: 5 mL

81

Date Prepared: 11/18/2008 1212 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-C3	B6] 55		49
C19-C36	60		49
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

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

p-Terphenyl

 Lab Sample ID:
 720-16931-15
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.44 g
Date Analyzed: 11/19/2008 1822 Final Weight/Volume: 5 mL

78

Date Prepared: 11/18/2008 1212 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-C	36] ND		49
C19-C36	ND		49
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

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

 Lab Sample ID:
 720-16931-16
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Ratch: 720-43962 Lab File ID: N/A

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.05 g
Date Analyzed: 11/19/2008 1849 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C	36] 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
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.39 g
Date Analyzed: 11/19/2008 2159 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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-C3	66] ND		49
C19-C36	ND		49
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 5

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

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

p-Terphenyl

 Lab Sample ID:
 720-16931-18
 Date Sampled:
 11/14/2008 1555

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.24 g
Date Analyzed: 11/19/2008 1916 Final Weight/Volume: 5 mL

69

Date Prepared: 11/18/2008 1212 Injection Volume:

Column ID: PRIMARY

41 - 105

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	16		0.99
Motor Oil Range Organics [C24-C3	36] 51		50
C19-C36	63		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

Client Sample ID: W-101

Lab Sample ID: 720-16931-19 Date Sampled: 11/14/2008 1200 Client Matrix: Water Date Received: 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44141 HP DRO5 Instrument ID: Preparation: 3510C SGC Prep Batch: 720-43948 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume:

250 mL Date Analyzed: 11/20/2008 1921 Final Weight/Volume: 1 mL

Date Prepared: 11/17/2008 1744 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	Χ	46 - 114

46 - 114

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

Client Sample ID: W-102

p-Terphenyl

Lab Sample ID: 720-16931-20 Date Sampled: 11/14/2008 1250 Client Matrix: Water Date Received: 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44141 HP DRO5 Instrument ID: Preparation: 3510C SGC Prep Batch: 720-43948 Lab File ID: N/A

1.0

Dilution: Initial Weight/Volume: 250 mL Date Analyzed: 11/20/2008 1948 Final Weight/Volume: 1 mL

Date Prepared: 11/17/2008 1744 Injection Volume:

Column ID: **PRIMARY**

63

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

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

Client Sample ID: W-103

 Lab Sample ID:
 720-16931-21
 Date Sampled:
 11/14/2008
 1445

 Client Matrix:
 Water
 Date Received:
 11/14/2008
 1735

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

Method: 8015B Analysis Batch: 720-44141 Instrument ID: HP DRO5

Preparation: 3510C SCC Prep Batch: 720-43948 Lab File ID: N/A

Preparation: 3510C SGC Prep Batch: 720-43948 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL

Date Analyzed: 11/20/2008 2015 Final Weight/Volume: 1 mL

Date Prepared: 11/17/2008 1744 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
	2/ 5		
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 Date Sampled: 11/14/2008 1545 Client Matrix: Water Date Received: 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44141 HP DRO5 Instrument ID: Preparation:

3510C SGC Prep Batch: 720-43948 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL Date Analyzed: 11/20/2008 2042 Final Weight/Volume: 1 mL

Date Prepared: 11/17/2008 1744 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
 Date Sampled:
 11/14/2008 1555

 Client Matrix:
 Solid
 Date Received:
 11/14/2008 1735

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

Method: 8015B Analysis Batch: 720-44103 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.04 g
Date Analyzed: 11/19/2008 1943 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 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
 Date Sampled:
 11/14/2008 1200

 Client Matrix:
 Solid
 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 RLCadmium 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
 Date Sampled:
 11/14/2008
 1200

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1200

 Client Matrix:
 Solid
 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

Allalyte	Dryvit Corrected. IV	rtesuit (mg/rtg)	Qualifier	IXL
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
 Date Sampled:
 11/14/2008
 1200

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008 1250

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1250

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008 1250

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1250

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1400

 Client Matrix:
 Solid
 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

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

RL

10

11/24/2008

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

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

 Lab Sample ID:
 720-16931-13
 Date Sampled:
 11/14/2008 1510

 Client Matrix:
 Solid
 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

DryWt Corrected: N

Analyte

TestAmerica San Francisco

Zinc

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.52 Chromium 37 1.0 180 Nickel 1.0 Lead 19 1.0 Method: 6010B Analysis Batch: 720-44130 Instrument ID: Thermo 6500 ICP Prep Batch: 720-43961 Preparation: 3050B Lab File ID: N/A Dilution: 10 Initial Weight/Volume: .96 g Final Weight/Volume: Date Analyzed: 11/21/2008 0921 50 mL Date Prepared: 11/18/2008 0922

Result (mg/Kg)

920

Qualifier

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

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

 Lab Sample ID:
 720-16931-14
 Date Sampled:
 11/14/2008
 1510

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1510

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1510

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1510

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008 1555

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/14/2008
 1200

 Client Matrix:
 Water
 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 RLCadmium ND 0.0020 Chromium ND 0.0050 Nickel 0.12 0.0050 0.0065 0.0050 Lead 0.056 Zinc 0.010

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

Client Sample ID: W-102

 Lab Sample ID:
 720-16931-20
 Date Sampled:
 11/14/2008
 1250

 Client Matrix:
 Water
 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 Date Sampled: 11/14/2008 1445 Client Matrix: Water Date Received: 11/14/2008 1735

6010B Metals (ICP)-Dissolved

Method: 6010B Analysis Batch: 720-44094 Instrument ID: Varian ICP

Soluble Metals Preparation: Prep Batch: 720-44081 N/A Lab File ID:

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
 Date Sampled:
 11/14/2008 1545

 Client Matrix:
 Water
 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 RLCadmium ND 0.0020 Chromium ND 0.0050 Nickel 0.42 0.0050 ND 0.0050 Lead 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
 Date Sampled:
 11/14/2008 1555

 Client Matrix:
 Solid
 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

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	Α	Solid	3550B	
720-16931-1	SB-101 3'-4'	Α	Solid	3550B	
720-16931-2	SB-101 7'-8'	Α	Solid	3550B	
720-16931-3	SB-101 11'-12'	Α	Solid	3550B	
720-16931-3MS	Matrix Spike	Α	Solid	3550B	
720-16931-3MSD	Matrix Spike Duplicate	Α	Solid	3550B	
720-16931-4	SB-101 15'-16'	Α	Solid	3550B	
720-16931-5	SB-102 3'-4'	Α	Solid	3550B	
720-16931-6	SB-102 7'-8'	Α	Solid	3550B	
720-16931-7	SB-102 11'-12'	Α	Solid	3550B	
720-16931-8	SB-102 15'-16'	Α	Solid	3550B	
720-16931-9	SB-103 3'-4'	Α	Solid	3550B	
720-16931-10	SB-103 7'-8'	Α	Solid	3550B	
720-16931-11	SB-103 11'-12'	Α	Solid	3550B	
720-16931-12	SB-103 15'-16'	Α	Solid	3550B	
720-16931-13	SB-111 0'-1'	Α	Solid	3550B	
720-16931-14	SB-111 3'-4'	Α	Solid	3550B	
720-16931-15	SB-111 5'-6'	Α	Solid	3550B	
720-16931-16	SB-111 7'-8'	Α	Solid	3550B	
720-16931-17	SB-111 9'-10'	Α	Solid	3550B	
720-16931-18	SB-112 3'-4'	A	Solid	3550B	
720-16931-23	SB-112 7'-8'	Α	Solid	3550B	

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

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-4	4103				
MB 720-43962/1-A	Method Blank	Α	Solid	8015B	720-43962
720-16931-1	SB-101 3'-4'	Α	Solid	8015B	720-43962
720-16931-2	SB-101 7'-8'	Α	Solid	8015B	720-43962
720-16931-3	SB-101 11'-12'	Α	Solid	8015B	720-43962
720-16931-3MS	Matrix Spike	Α	Solid	8015B	720-43962
720-16931-3MSD	Matrix Spike Duplicate	Α	Solid	8015B	720-43962
720-16931-4	SB-101 15'-16'	Α	Solid	8015B	720-43962
720-16931-5	SB-102 3'-4'	Α	Solid	8015B	720-43962
720-16931-6	SB-102 7'-8'	Α	Solid	8015B	720-43962
720-16931-7	SB-102 11'-12'	Α	Solid	8015B	720-43962
720-16931-8	SB-102 15'-16'	Α	Solid	8015B	720-43962
720-16931-9	SB-103 3'-4'	Α	Solid	8015B	720-43962
720-16931-10	SB-103 7'-8'	Α	Solid	8015B	720-43962
720-16931-11	SB-103 11'-12'	Α	Solid	8015B	720-43962
720-16931-12	SB-103 15'-16'	Α	Solid	8015B	720-43962
720-16931-13	SB-111 0'-1'	Α	Solid	8015B	720-43962
720-16931-14	SB-111 3'-4'	Α	Solid	8015B	720-43962
720-16931-15	SB-111 5'-6'	Α	Solid	8015B	720-43962
720-16931-16	SB-111 7'-8'	Α	Solid	8015B	720-43962
720-16931-17	SB-111 9'-10'	Α	Solid	8015B	720-43962
720-16931-18	SB-112 3'-4'	Α	Solid	8015B	720-43962
720-16931-23	SB-112 7'-8'	Α	Solid	8015B	720-43962
Analysis Batch:720-4	4141				
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
		_		-3.02	5 . 5 0 1 0

Report Basis

D = Dissolved

A = Silica Gel Cleanup

Quality Control Results

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

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-43961					
LCS 720-43961/2-A	Lab Control Spike	Т	Solid	3050B	
LCSD 720-43961/3-A	Lab Control Spike Duplicate	Т	Solid	3050B	
LCSSRM 720-43961/26-A	LCS-Standard Reference Material	Т	Solid	3050B	
MB 720-43961/1-A	Method Blank	T	Solid	3050B	
720-16931-1	SB-101 3'-4'	Т	Solid	3050B	
720-16931-2	SB-101 7'-8'	T	Solid	3050B	
720-16931-3	SB-101 11'-12'	Τ	Solid	3050B	
720-16931-4	SB-101 15'-16'	T	Solid	3050B	
720-16931-5	SB-102 3'-4'	Τ	Solid	3050B	
720-16931-6	SB-102 7'-8'	Τ	Solid	3050B	
720-16931-7	SB-102 11'-12'	T	Solid	3050B	
720-16931-8	SB-102 15'-16'	Τ	Solid	3050B	
720-16931-9	SB-103 3'-4'	T	Solid	3050B	
720-16931-10	SB-103 7'-8'	Τ	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'	Т	Solid	3050B	

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

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-4406	2				
_CS 720-43961/2-A	Lab Control Spike	T	Solid	6010B	720-43961
_CSD 720-43961/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-43961
_CSSRM 720-43961/26-A	LCS-Standard Reference Material	T	Solid	6010B	720-43961
MB 720-43961/1-A	Method Blank	Т	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'	Т	Solid	6010B	720-43961
720-16931-5	SB-102 3'-4'	Т	Solid	6010B	720-43961
720-16931-6	SB-102 7'-8'	Т	Solid	6010B	720-43961
720-16931-7	SB-102 11'-12'	Т	Solid	6010B	720-43961
720-16931-8	SB-102 15'-16'	Т	Solid	6010B	720-43961
720-16931-9	SB-103 3'-4'	Т	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'	Ť	Solid	6010B	720-43961
720-16931-13	SB-111 0'-1'	T	Solid	6010B	720-43961
720-16931-14	SB-111 3'-4'	Ť	Solid	6010B	720-43961
720-16931-15	SB-111 5'-6'	T	Solid	6010B	720-43961
720-16931-16	SB-111 7'-8'	Ť	Solid	6010B	720-43961
720-16931-17	SB-111 9'-10'	T	Solid	6010B	720-43961
720-16931-18	SB-112 3'-4'	Ť	Solid	6010B	720-43961
720-16931-23	SB-112 7'-8'	T	Solid	6010B	720-43961
Dran Batala 720 44004					
Prep Batch: 720-44081 _CS 720-44081/2-A	Lab Cantral Caika	C	Water	Soluble Metals	
	Lab Control Spike	S			
_CSD 720-44081/3-A	Lab Control Spike Duplicate Method Blank	S D	Water	Soluble Metals Soluble Metals	
MB 720-43953/1-B			Water		
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:720-4409					
_CS 720-44081/2-A	Lab Control Spike	S	Water	6010B	720-44081
_CSD 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	VV-10Z	0	vvalci	00100	120 44001
720-10931-21	W-102 W-103	D D	Water	6010B	720-44081

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					
Analysis Batch:720-720-16931-13	-44130 SB-111 0'-1'	Т	Solid	6010B	720-43961

Report Basis

D = Dissolved

S = Soluble

T = Total

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

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/ Method: 8015B

Lab Control Spike Duplicate Recovery Report - Batch: 720-43948 Preparation: 3510C SGC

Dissolved

LCS Lab Sample ID: LCS 720-43947/2-B Analysis Batch: 720-44141 Instrument ID: HP DRO5

Client Matrix: Water Prep Batch: 720-43948 Lab File ID: N/A

Dilution: Units: ug/L Initial Weight/Volume: 1.0 250 mL Date Analyzed: 11/20/2008 1759 Final Weight/Volume: 1 mL

Injection Volume: Date Prepared: 11/17/2008 1744

Column ID: **PRIMARY**

Analysis Batch: 720-44141 Instrument ID: LCSD Lab Sample ID: LCSD 720-43947/3-B HP DRO5

Client Matrix: Prep Batch: 720-43948 Water Lab File ID: N/A Dilution:

1.0 Units: ug/L Initial Weight/Volume: 250 mL Date Analyzed: 11/20/2008 1826 Final Weight/Volume: 1 mL

Date Prepared: 11/17/2008 1744 Injection Volume:

Column ID: **PRIMARY**

% Rec. **RPD** RPD Limit LCS Qual LCSD Qual Analyte LCS **LCSD** Limit Diesel Range Organics [C10-C28] 71 71 41 - 103 0 30 Surrogate LCS % Rec LCSD % Rec Acceptance Limits p-Terphenyl 81 80 46 - 114

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 Analysis Batch: 720-44103 Instrument ID: HP DRO5 Client Matrix: Solid Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.26 g

Date Analyzed: 11/19/2008 1046 Final Weight/Volume: 5 mL
Date Prepared: 11/18/2008 1212 Injection Volume:

Date Prepared: 11/18/2008 1212 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 Analysis Batch: 720-44103 Instrument ID: HP DRO5

Client Matrix: Solid Prep Batch: 720-43962 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.15 g
Date Analyzed: 11/19/2008 2226 Final Weight/Volume: 5 mL

Date Prepared: 11/18/2008 1212 Injection Volume:

Column ID:

PRIMARY

MSD Lab Sample ID: 720-16931-3 Analysis Batch: 720-44103 Instrument ID: HP DRO5

Client Matrix: Solid Prep Batch: 720-43962 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 30

Dilution: 1.0 Initial Weight/Volume: 30.27 g
Date Analyzed: 11/19/2008 2253 Final Weight/Volume: 5 mL
Date Prepared: 11/18/2008 1212 Injection Volume:

Column ID: PRIMARY

<u>% Rec.</u>

MS **RPD** Analyte **MSD** Limit **RPD Limit** MS Qual MSD Qual Diesel Range Organics [C10-C28] 75 79 50 - 130 30 MS % Rec Surrogate MSD % Rec Acceptance Limits 41 - 105 p-Terphenyl 89 90

Lab File ID:

N/A

62 - 113

62 - 110

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

Method Blank - Batch: 720-43961 Method: 6010B Preparation: 3050B

Lab Sample ID: MB 720-43961/1-A Analysis Batch: 720-44062 Instrument ID: Thermo 6500 ICP

Client Matrix: Prep Batch: 720-43961 Solid Lab File ID: N/A

Units: mg/Kg Initial Weight/Volume: 1.01 g Dilution: 1.0

Date Analyzed: 11/19/2008 1557 Final Weight/Volume: 50 mL Date Prepared: 11/18/2008 0922

Analyte	Result	Qual	RL
Cadmium	ND		0.50
Chromium	ND		0.99
Nickel	ND		0.99
Lead	ND		0.99
Zinc	ND		0.99

LCS-Standard Reference Material - Batch: 720-43961 Method: 6010B Preparation: 3050B

44.1

44.0

Lab Sample ID: LCSSRM 720-43961/26-A Analysis Batch: 720-44062 Instrument ID: Thermo 6500 ICP Prep Batch: 720-43961

Client Matrix: Solid

Lead

Zinc

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 1.02 g Date Analyzed: 11/19/2008 1537 Final Weight/Volume: 50 mL

Date Prepared: 11/18/2008 0922

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

36.9

37.3

84

85

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

Lab Control Spike/ Method: 6010B
Lab Control Spike Duplicate Recovery Report - Batch: 720-43961 Preparation: 3050B

LCS Lab Sample ID: LCS 720-43961/2-A

Client Matrix: Solid Dilution: 1.0

Date Analyzed: 11/19/2008 1601 Date Prepared: 11/18/2008 0922 Analysis Batch: 720-44062 Instrument ID: Thermo 6500 ICP

Prep Batch: 720-43961 Lab File ID: N/A

Units: mg/Kg Initial Weight/Volume: .99 g Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-43961/3-A

Client Matrix: Solid Dilution: 1.0

Date Analyzed: 11/19/2008 1604 Date Prepared: 11/18/2008 0922 Analysis Batch: 720-44062 Instrument ID: Thermo 6500 ICP

Prep Batch: 720-43961 Lab File ID: N/A

Units: mg/Kg Initial Weight/Volume: 1.04 g Final Weight/Volume: 50 mL

	<u>%</u>						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Cadmium	93	95	80 - 120	3	20		
Chromium	98	100	80 - 120	3	20		
Nickel	95	96	80 - 120	3	20		
Lead	94	95	80 - 120	3	20		
Zinc	95	96	80 - 120	4	20		

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	LCS	<u>6 Rec.</u> 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

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

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 720-44081

Method: 6010B

Preparation: Soluble Metals

Dissolved

MS Lab Sample ID: Client Matrix:

720-16931-19 Water

Analysis Batch: 720-44094

Instrument ID: Varian ICP

Dilution:

Lab File ID: N/A Initial Weight/Volume:

Date Analyzed:

1.07

Prep Batch: 720-44081

Final Weight/Volume: 1.0 mL

Date Prepared:

11/20/2008 1145 11/20/2008 1034

MSD Lab Sample ID: 720-16931-19

Client Matrix: Water Dilution: 1.07

Analysis Batch: 720-44094 Prep Batch: 720-44081

Instrument ID: Varian ICP Lab File ID: N/A

Initial Weight/Volume:

Date Analyzed: Date Prepared:

11/20/2008 1149

11/20/2008 1034

Final Weight/Volume: 1.0 mL

	<u>%</u>	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	

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,

TestAmerica TESTAMERICA San Francisco Chain of Custody 1220 Quarry Lane • Pleasanton CA 94506 4750

1.234567690

Reference #:	113411	

TestA	7	16	er	ic	C	at K	122	MER 0 Qua	ICA arry L	San I	Franc Plea	isco santo	Cha n CA	in 6f \ 9456	Cust 66-475	ody 6	R	efere	nce #	:	13	41,	/	11/24/2008
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Company: CDMS					260B TBE		95 PE	D D	9	OCS		Ę	0 608	8310		RIUFT DIRCRA	.81602		Q,	鲁口	2.5			
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Bill To:	S	ampled E	Зу:		☐ 8015/3021 ☐ 8250B ☐ BTEX ☐ MTBE	Arome - 🗆 80	8015/	A 8260 ates C	Halber PA 80	anics 08 (0 00	ase	00	82	als 7470/	2 peo	fetals	STL (ST	alent In hol	Sond,	0 d			
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Sample ID	Date	Time	Mat	Pres	TPH EPA	Purge	H W	Tall Paragraph	Purge	/olets	Semiv D EP	Di an EPA	Pestic	PNAs by	CAM1	Aetals J Oth	OW L	00	00	00	Anians :			
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58-102 31-4'		12:50	1	-										-		X				-				ų, V
56-102 7-81	+	12.50	7											-		X					-			70 0
56-102 11-10		1	1				2									X				-	-			
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Had til Howay (confirm on silka gel)			Printed Name Date						Printed Name Date					- Þ	Printed Name Date									
See Terms and Conditions on reverse *TestAmerica SF reports 8015M from C ₃ -C ₂₄ (industry norm). Default for 8015B is C ₁₀ -C ₂₈			Company C							Company						Company								

TestAmerica TestAmerica TestAmerica 120 Quarry Lane • Pleasanton CA 94566-4756 Phone: (925) 484-1919 • Fax: (925) 600-3002

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THE LEADER IN ENVI	IG		ŏ	(020)		1010	· i az	. (32	3) 00	0-300.	2	D	ate 1	1/14	108	Pac	ge <u>2</u>	n.f	2	Ċ				
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Company;				1 CT 8260B		Ser G	1912	80	SOC		Ę	E 608	10		□ RCRA	200.8/6020		Q.	全口	0				
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Bill To:	Sampled i	Ву:			1	TEPH EPA 8015M* D S Diesel B Motor Oil B	Fuel Tests EPA 3260B: CI Gas CI BTEX CI Five Oxygenates CI BCA, EDB CI	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8280B ☐ 624	Semivolatiles GCMS	Oil and Grease D (EPA 1664)	EPA	□ 8270	CAM17 Metais (EPA 6010/7470/7471)	Metals: 🗆 Lead 🛱 LUFT	Low Level Metals by EPA (ICP-MS):	W.E.T (STLC) TCLP	Hexavalent Chromium pH (24h told time for H ₂ O)	Cond.	0 m				
Attn:	Phone:			TPH EPA	Purgeable A BTEX EPA	H EP/	Tests E	eable CCs) I	tile Or PA 82	volati PA 82	nd Gn 3, 1684	Pesticides PCBs	<u>A</u>	5 by 17 Me 6010/	Ber Dit	WS):	W.E.T	Hexay pH (2)	Spec (
Sample ID Da	ite Time	Mat rix	Pres erv.	40	Pung	12	300	Purg (HVC	Vola	Sea	Oil ar (EPA	Pesti PCB:	PNAs by	CAM (EPA	Metal	Low L	00	00	00	Anions :				
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SB-111 5'-6'	3:10					X							-		X	-		-			-	-	_	- 4
56-111 7'-81	3:10					X									-					-	-	_	-	_
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Special Instructions / Comments:	□ Level 4 □ EDD □ State Tank Fund EDF □ Global ID			Signa	ture C	11-		Time	10	Sign	ature			Tir	me	Si	gnature			Ti	ime			
	Monday (confirm on filler tions on reverse			Printed Name Date					Printed Name Date							Printed Name Date								
			Company						Company						Co	Company								

TestAmerica TESTAMERICA San Francisco Chain of Custody 1220 Quarry Lane • Pleasanton CA 04500 (1975)

1220 Quarry Lane • Pleasanton CA 94566-4756 Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #:

THE LEADER IN ENVIRONMENTAL TESTING

20. 21, 22

2 11/11/12

Report To							-9	0									L	Date I	1191	00	_ Page	3_3	_ of <u>≤</u>	1
Attn: JIM CAY	cro						2			William St.		-	An	alysis	Requ	est	W. St.	, III.		1		515	TISTIS!	
Attn: JM CAY Company: CPMS					日間		1959	BTEX	m	3			608 608			8	9020		=	_	<u>п</u>			7
Address:					- 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00	2608	all	as Cl	32608	8 8		Petroleum Total		8310		D RC	200.84		E T	□ Alkalinity □ TDS □	000			
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Sample ID	Date	A STATE OF THE PARTY OF	Mat rix	Pres erv.	TPH EPA	Purg	验	Fleet I	Purge (HVO	Volati	Serriv	Ot and Grease (EPA 1664)	Pesticides □ PCBs □	PNAs by	CAM17	Metals:	LOW Le	00	I T T	DD 24 80	Anions			
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Project Info.	_ 0 P	Samp	ole R	eceip		17.5	1) Reli	nquish	ed by:				2) R	elinanis	hed by:				1 50					
Project Name: VEKEN Forge - Project#:		# of Co					1	4	-	- (5:35	-PM	2000	om idan	med by.				3)	Relinqu	ished by:			
Project#:		Head S	pace:				-Signal	иге		thank?	7 Time		Sign	ature			Tir	ne	Sig	nature			Time	
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Report: □ Routine □ Level: Special Instructions / Comments	3 DLev	vel 4. CI E	DD D	3 State Tar	ik Fund Et	DF .	Signati	tre/	un	_ 11/	Time	55	Signa	ature			Tin	200	-					
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See Terms and Conditions on revers	aay (Confi	M D	n sili	age	()	1	191	- 5	×			36						1		55		Date	
* Pleas & filts the samples: ** Hold 51 Monday (Confirm on Silica gel) TestAmerica SF reports 8015M from Co-Coa (Industry norm). Default for 8015B		15B is	5B is Company						Comp	pany					Cor	Company								
199/7/188																					500011			

Login Sample Receipt Check List

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

List Source: TestAmerica San Francisco

Login Number: 16931 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	

E. December 2, 2008 (Sampling Event November 21, 2008)



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

milissa Bruver

Approved for releas Melissa Brewer Project Manager I 12/2/2008 9:43 AM

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
12/02/2008

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.

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 Orga		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 Orga		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	1			-	
Diesel Range Orga		3.4	1.0	mg/Kg	8015B
5 - 5-				0 0	

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 Orga		1100	10	mg/Kg	8015B
Motor Oil Range Oi		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 Orga	nics [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 Orga		7.6	1.0	mg/Kg	8015B

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 Orga	inics [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	9				
Diesel Range Orga	inics [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	ma/Ka	6010B
		13 8.4	0.96 0.96	mg/Kg	
Nickel Lead		8.4 5.3	0.96 0.96	mg/Kg mg/Kg	6010B 6010B
Zinc		5.3 7.8	0.96		6010B
ZIIIC		1.0	0.90	mg/Kg	00100

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 Cleanu)				
Diesel Range Orga		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 Cleanu	7				
Diesel Range Orga		49	1.0	mg/Kg	8015B
Motor Oil Range O		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 Cleanu	7				
Diesel Range Orga		5500	50	mg/Kg	8015B
Motor Oil Range O		11000	2500	mg/Kg	8015B
C19-C36		15000	2500	mg/Kg	8015B

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17028-20	SB-107 3'-4'				
Chromium Nickel Lead Zinc		14 10 23 49	1.0 1.0 1.0 1.0	mg/Kg mg/Kg mg/Kg mg/Kg	6010B 6010B 6010B 6010B
Silica Gel Cleanup					
Diesel Range Orga Motor Oil Range O C19-C36		230 520 700	5.0 250 250	mg/Kg mg/Kg mg/Kg	8015B 8015B 8015B
720-17028-21	SB-107 7'-8'				
Chromium Nickel Lead Zinc		14 11 5.2 12	0.95 0.95 0.95 0.95	mg/Kg mg/Kg mg/Kg mg/Kg	6010B 6010B 6010B 6010B
720-17028-22	W-107				
Dissolved Diesel Range Orga Cadmium Chromium Nickel Lead Zinc	inics [C10-C28]	62 0.0031 0.022 0.48 0.12 1.3	50 0.0020 0.0050 0.0050 0.0050 0.010	ug/L mg/L mg/L mg/L mg/L mg/L	8015B 6010B 6010B 6010B 6010B 6010B
720-17028-23	W-108				
Dissolved Diesel Range Orga Cadmium Chromium Nickel Lead Zinc	nnics [C10-C28]	58 0.0022 0.025 0.076 5.6 0.97	50 0.0020 0.0050 0.0050 0.0050 0.010	ug/L mg/L mg/L mg/L mg/L mg/L	8015B 6010B 6010B 6010B 6010B
720-17028-24	W-109				
Dissolved Zinc		0.018	0.010	mg/L	6010B

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method	
720-17028-25	W-105					
Dissolved						
Diesel Range Orga	nics [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

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

Job Number: 720-17028-1

SAMPLE SUMMARY

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
 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 Ratch: 720-44391 Lab File ID: N/A

Preparation: 3550B Prep Batch: 720-44391 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.04 g
Date Analyzed: 11/28/2008 2114 Final Weight/Volume: 5 mL

Date Prepared: 11/26/2008 1826 Injection Volume:

	_		
Surrogate	%Rec		Acceptance Limits
C19-C36	ND		50
Motor Oil Range Organics [C24-C3	86] ND		50
Diesel Range Organics [C10-C28]	2.2		1.0
Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL

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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	6.1		1.0
Motor Oil Range Organics [C24-C3	66] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Commin Anial (Cumm)	^		^ F

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:

Surrogate	%Rec		Acceptance Limits
C19-C36	ND		50
Motor Oil Range Organics [C24-C3	86] ND		50
Diesel Range Organics [C10-C28]	ND		1.0
Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL

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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C3	36] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
O A 1 (O)	^		٥ - ٦

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-105 3'-4'

p-Terphenyl

 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

79

Date Prepared: 11/26/2008 1826 Injection Volume:

Column ID: PRIMARY

41 - 105

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	3.4		1.0
Motor Oil Range Organics [C24-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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

Analysis Batch: 720-44490 Instrument ID: HP DRO5 Method: 8015B

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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	Λ		0 - 5

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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Commin Anial (Cross)	0		^ <i>F</i>

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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	1100		10
Motor Oil Range Organics [C24-C3	36] 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-C3	86] ND		50
C19-C36	ND		50
	2/5		
Surrogate	%Rec		Acceptance Limits

 Surrogate
 %Rec
 Acceptance Limits

 Capric Acid (Surr)
 0
 0 - 5

 p-Terphenyl
 58
 41 - 105

41 - 105

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-109 1'-2'

p-Terphenyl

 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 Ratch: 720-44391 Lab File ID: N/A

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

57

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	7.6		1.0
Motor Oil Range Organics [C24-C3	86] ND		50
C19-C36	ND		50
	2/ 5		
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

41 - 105

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-109 4'-5'

p-Terphenyl

 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

74

Date Prepared: 11/26/2008 1826 Injection Volume:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	8.4		1.0
Motor Oil Range Organics [C24-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

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 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 0726 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-C3	86] 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:

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	1.5		1.0
Motor Oil Range Organics [C24-C3	66] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 5

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-110 4'-5'

 Lab Sample ID:
 720-17028-14
 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: 30.01 g
Date Analyzed: 11/29/2008 0820 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-C	36] 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
 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 Ratch: 720-44391 Lab File ID: N/A

Preparation: 3550B Prep Batch: 720-44391 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 30.04 g
Date Analyzed: 11/29/2008 0847 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-C	36] 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'

p-Terphenyl

 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 Ratch: 720-44391 Lab File ID: N/A

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

62

Date Prepared: 11/26/2008 1826 Injection Volume:

Column ID: PRIMARY

41 - 105

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL	
Diesel Range Organics [C10-C28] 2.6		1.0	
Motor Oil Range Organics [C24-C	C36] ND		50	
C19-C36	ND		50	
Surrogate	%Rec		Acceptance Limits	
Capric Acid (Surr)	0		0 - 5	

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-108 4'-5'

p-Terphenyl

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: Analysis Batch: 720-44490 Instrument ID: HP DRO5 8015B

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

39

Date Prepared: 11/26/2008 1826 Injection Volume:

Column ID: **PRIMARY**

41 - 105

Analyte	DryWt Corrected: N Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]	49		1.0
Motor Oil Range Organics [C24-C3	36] 110		50
C19-C36	150		50
Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5

Χ

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-108 7'-8'

 Lab Sample ID:
 720-17028-18
 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: 30.05 g
Date Analyzed: 11/29/2008 1156 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-C3	86] ND		50
C19-C36	ND		50
Surrogate	%Rec		Acceptance Limits

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-C3	36]	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 Ratch: 720-44391 Lab File ID: N/A

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-C3	520		250
C19-C36	700		250
Surrogate	%Rec		Acceptance Limits

 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
 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: 720-44448 Instrument ID: HP DRO5

Preparation: 3550B Prep Batch: 720-44354 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 2006 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-C	36] 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
 Date Sampled:
 11/21/2008 0945

 Client Matrix:
 Water
 Date Received:
 11/21/2008 1520

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

Method: 8015B Analysis Batch: 720-44424 Instrument ID: HP DRO5

Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL Date Analyzed: 11/26/2008 2044 Final Weight/Volume: 1 mL

Date Prepared: 11/24/2008 1910 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
 Date Sampled:
 11/21/2008 1000

 Client Matrix:
 Water
 Date Received:
 11/21/2008 1520

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

Method: 8015B Analysis Batch: 720-44424 Instrument ID: HP DRO5

Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL

Date Analyzed: 11/26/2008 2112 Final Weight/Volume: 1 mL

Date Prepared: 11/24/2008 1910 Injection Volume:

Column ID: PRIMARY

Analyte Result (ug/L) Qualifier RLDiesel 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
 Date Sampled:
 11/21/2008 1010

 Client Matrix:
 Water
 Date Received:
 11/21/2008 1520

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

Method: 8015B Analysis Batch: 720-44424 Instrument ID: HP DRO5
Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

reparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL

Date Analyzed: 11/26/2008 2138 Final Weight/Volume: 1 mL

Date Prepared: 11/24/2008 1910 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%RecAcceptance LimitsCapric Acid (Surr)00 - 5p-Terphenyl4946 - 114

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: W-105

 Lab Sample ID:
 720-17028-25
 Date Sampled:
 11/21/2008
 1145

 Client Matrix:
 Water
 Date Received:
 11/21/2008
 1520

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

Method: 8015B Analysis Batch: 720-44424 Instrument ID: HP DRO5

Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Preparation: 3510C SGC Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Initial Weight/Volume: 250 mL

Date Analyzed: 11/26/2008 2206 Final Weight/Volume: 1 mL

Date Prepared: 11/24/2008 1910 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
 Date Sampled:
 11/21/2008 1030

 Client Matrix:
 Solid
 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 1128 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		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
 Date Sampled:
 11/21/2008 1030

 Client Matrix:
 Solid
 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 1131 Final Weight/Volume: 50 mL Date Prepared: 11/25/2008 1303

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RL

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

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 1142 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
 Date Sampled:
 11/21/2008 1025

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 1025

 Client Matrix:
 Solid
 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: 1.04 g

Date Analyzed: 11/26/2008 1149 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

0.98

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: SB-105 7'-8'

Lead

Zinc

720-17028-6 Lab Sample ID: Date Sampled: 11/21/2008 1025 Client Matrix: Date Received: 11/21/2008 1520 Solid

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-44353 Instrument ID: Thermo 6500 ICP

Prep Batch: 720-44282 Preparation: 3050B Lab File ID: N/A Dilution: 1.0 Initial Weight/Volume: 1.02 g

35

Date Analyzed: 11/26/2008 1153 Final Weight/Volume: 50 mL Date Prepared: 11/25/2008 1303

Analyte DryWt Corrected: N Result (mg/Kg) Qualifier RLCadmium ND 0.49 Chromium 14 0.98 Nickel 10 0.98 17 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
 Date Sampled:
 11/21/2008 0945

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0945

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0945

 Client Matrix:
 Solid
 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
 Date Sampled:
 11/21/2008 0930

 Client Matrix:
 Solid
 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: 1.04 g

Date Analyzed: 11/26/2008 1207 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
 Date Sampled:
 11/21/2008 0930

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0930

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0915

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0915

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0915

 Client Matrix:
 Solid
 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 1706 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
 Date Sampled:
 11/21/2008 0900

 Client Matrix:
 Solid
 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: 1.04 g

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
 Date Sampled:
 11/21/2008 0900

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0900

 Client Matrix:
 Solid
 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: 1.01 g

Date Analyzed: 11/26/2008 1717 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
 Date Sampled:
 11/21/2008 0830

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0830

 Client Matrix:
 Solid
 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

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
 Date Sampled:
 11/21/2008 0830

 Client Matrix:
 Solid
 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 1727 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
 Date Sampled:
 11/21/2008 0945

 Client Matrix:
 Water
 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

Preparation: Soluble Metals Prep Batch: 720-44395 Lab File ID: N/Dilution: 1.07 Initial Weight/Volume:

Date Analyzed: 11/28/2008 1015 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
7inc	1.3		0.010

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: W-108

 Lab Sample ID:
 720-17028-23
 Date Sampled:
 11/21/2008 1000

 Client Matrix:
 Water
 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

Preparation: Soluble Metals Prep Batch: 720-44395 Lab File ID: Dilution: 1.07 Initial Weight/Volume:

Date Analyzed: 11/28/2008 1019 Final Weight/Volume: 1.0 mL

Date Analyzed: 11/28/2008 1019 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
 Date Sampled:
 11/21/2008 1010

 Client Matrix:
 Water
 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 RLCadmium ND 0.0020 Chromium ND 0.0050 Nickel ND 0.0050 ND 0.0050 Lead 0.018 Zinc 0.010

Client: Chemical Data Management Job Number: 720-17028-1

Client Sample ID: W-105

 Lab Sample ID:
 720-17028-25
 Date Sampled:
 11/21/2008 1145

 Client Matrix:
 Water
 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 1027 Final Weight/Volume: 1.0 mL

Date Prepared: 11/28/2008 0528

Analyte Result (mg/L) Qualifier RLCadmium ND 0.0020 Chromium ND 0.0050 Nickel 0.052 0.0050 0.0094 0.0050 Lead 0.93 Zinc 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.

QC Association Summary

	-	Report			
Lab Sample ID	Client Sample ID	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	Α	Solid	3550B	
LCSD 720-44354/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-44354/1-A	Method Blank	Α	Solid	3550B	
720-17028-21	SB-107 7'-8'	Α	Solid	3550B	
Drop Botoby 720 44204					
Prep Batch: 720-44391 LCS 720-44391/2-A	Lab Control Spike	Α	Solid	3550B	
LCS 720-44391/2-A LCSD 720-44391/3-A		A	Solid	3550B 3550B	
MB 720-44391/1-A	Lab Control Spike Duplicate Method Blank	A	Solid	3550B	
720-17028-1	SB-104 1'-2'	A	Solid	3550B 3550B	
720-17028-1 720-17028-1MS		A	Solid	3550B	
720-17028-1MSD	Matrix Spike Matrix Spike Duplicate	A	Solid	3550B 3550B	
720-17028-1W3D 720-17028-2	SB-104 3'-4'	A	Solid	3550B	
720-17028-2 720-17028-3	SB-104 3-4 SB-104 7'-8'	A	Solid	3550B	
720-17028-3 720-17028-4	SB-104 7 -6 SB-105 1'-2'	A	Solid	3550B 3550B	
720-17028- 4 720-17028-5	SB-105 1-2 SB-105 3'-4'	A	Solid	3550B 3550B	
720-17028-6	SB-105 3-4 SB-105 7'-8'	A	Solid	3550B 3550B	
720-17028-7 720-17028-7	SB-105 7 -6 SB-106 1'6"-2'6"	A	Solid	3550B 3550B	
720-17028-7 720-17028-8	SB-106 16 -2 6 SB-106 4'-5'	A	Solid	3550B 3550B	
720-17028-9	SB-100 4-3 SB-106 7'-8'	A	Solid	3550B 3550B	
720-17028-10 720-17028-10	SB-100 / -0 SB-109 1'-2'	A	Solid	3550B 3550B	
720-17028-10 720-17028-11	SB-109 1-2 SB-109 4'-5'	A	Solid	3550B	
720-17028-11 720-17028-12	SB-109 4-3 SB-109 7'-8'	A	Solid	3550B 3550B	
720-17028-12 720-17028-13	SB-110 1'-2'	A	Solid	3550B	
720-17028-14 720-17028-15	SB-110 4'-5'	A A	Solid Solid	3550B	
	SB-110 7'-8'	A	Solid	3550B	
720-17028-16 720-17028-17	SB-108 1'-2'	A		3550B	
720-17028-17 720-17028-19	SB-108 4'-5'		Solid	3550B	
720-17028-18 720-17028-10	SB-108 7'-8'	A	Solid	3550B	
720-17028-19	SB-107 1'-2'	A	Solid	3550B	
720-17028-20	SB-107 3'-4'	Α	Solid	3550B	

QC Association Summary

•	•	Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-44	424				
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:720-44	448				
_CS 720-44354/2-A	Lab Control Spike	Α	Solid	8015B	720-44354
_CSD 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:720-44	400				
LCS 720-44391/2-A	Lab Control Spike	Α	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
720-17028-1MS 720-17028-1MSD	Matrix Spike Duplicate	A	Solid	8015B	720-44391
720-17028-1103D 720-17028-2	SB-104 3'-4'	A	Solid	8015B	720-44391
720-17028-2 720-17028-3	SB-104 7'-8'	A	Solid	8015B	720-44391
720-17028-3 720-17028-4	SB-104 7 -6 SB-105 1'-2'	A	Solid	8015B	720-44391
720-17028- 4 720-17028-5	SB-105 1'-2 SB-105 3'-4'	A	Solid	8015B	720-44391
720-17028-6	SB-105 5'-4'	A	Solid	8015B	720-44391
720-17028-7 720-17028-7	SB-103 7 -8 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-100 4-3 SB-106 7'-8'	Ā	Solid	8015B	720-44391
720-17028-9 720-17028-10	SB-100 7-8 SB-109 1'-2'	A	Solid	8015B	720-44391
720-17028-10 720-17028-11	SB-109 1'-2 SB-109 4'-5'	A	Solid	8015B	720-44391
720-17028-11	SB-109 4-3 SB-109 7'-8'	A	Solid	8015B	720-44391
720-17028-12 720-17028-13	SB-109 7 -6 SB-110 1'-2'	A	Solid	8015B	720-44391
720-17028-14 720-17028-15	SB-110 4'-5'	A A	Solid Solid	8015B	720-44391
720-17028-15 720-17028-16	SB-110 7'-8'	A	Solid	8015B	720-44391
720-17028-16 720-17028-17	SB-108 1'-2'			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'	Α	Solid	8015B	720-44391

Report Basis

D = Dissolved

A = Silica Gel Cleanup

TestAmerica San Francisco

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-44282					
LCS 720-44282/2-A	Lab Control Spike	Т	Solid	3050B	
LCSD 720-44282/3-A	Lab Control Spike Duplicate	Т	Solid	3050B	
LCSSRM 720-44282/25-A	LCS-Standard Reference Material	T	Solid	3050B	
MB 720-44282/1-A	Method Blank	Т	Solid	3050B	
720-17028-1	SB-104 1'-2'	Т	Solid	3050B	
720-17028-2	SB-104 3'-4'	T	Solid	3050B	
720-17028-3	SB-104 7'-8'	Т	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'	Т	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'	Т	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	Т	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'	Т	Solid	3050B	
720-17028-17	SB-108 4'-5'	T	Solid	3050B	
720-17028-18	SB-108 7'-8'	Т	Solid	3050B	
720-17028-19	SB-107 1'-2'	T	Solid	3050B	
720-17028-20	SB-107 3'-4'	Т	Solid	3050B	
720-17028-21	SB-107 7'-8'	Т	Solid	3050B	

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-443	53				
LCS 720-44282/2-A	Lab Control Spike	Τ	Solid	6010B	720-44282
LCSD 720-44282/3-A	Lab Control Spike Duplicate	T	Solid	6010B	720-44282
LCSSRM 720-44282/25-A		Τ	Solid	6010B	720-44282
MB 720-44282/1-A	Method Blank	Τ	Solid	6010B	720-44282
720-17028-1	SB-104 1'-2'	Τ	Solid	6010B	720-44282
720-17028-2	SB-104 3'-4'	Τ	Solid	6010B	720-44282
720-17028-3	SB-104 7'-8'	Τ	Solid	6010B	720-44282
720-17028-4	SB-105 1'-2'	T	Solid	6010B	720-44282
720-17028-5	SB-105 3'-4'	Τ	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"	Τ	Solid	6010B	720-44282
720-17028-8	SB-106 4'-5'	Τ	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'	Т	Solid	6010B	720-44282
Analysis Batch:720-4439	92				
LCS 720-44334/2-A	Lab Control Spike	Τ	Solid	6010B	720-44334
LCSD 720-44334/3-A	Lab Control Spike Duplicate	Τ	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'	Τ	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'	Т	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

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:720-44	410				
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

PRIMARY

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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

p-Terphenyl

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/ Method: 8015B

Lab Control Spike Duplicate Recovery Report - Batch: 720-44226 Preparation: 3510C SGC

Dissolved

LCS Lab Sample ID: LCS 720-44218/2-B Analysis Batch: 720-44424 Instrument ID: HP DRO5

Client Matrix: Water Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 250 mL Date Analyzed: 11/26/2008 1613 Final Weight/Volume: 1 mL

Date Prepared: 11/24/2008 1549 Injection Volume: Column ID:

LCSD Lab Sample ID: LCSD 720-44218/3-B Analysis Batch: 720-44424 Instrument ID: HP DRO5 Client Matrix: Water Prep Batch: 720-44226 Lab File ID: N/A

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 250 mL

Date Analyzed: 11/26/2008 1640 Final Weight/Volume: 1 mL
Date Prepared: 11/24/2008 1549 Injection Volume:

Column ID: PRIMARY

% Rec. **RPD** RPD Limit LCS Qual LCSD Qual Analyte LCS **LCSD** Limit Diesel Range Organics [C10-C28] 59 53 41 - 103 11 30 Surrogate LCS % Rec LCSD % Rec Acceptance Limits

67

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

64

PRIMARY

Column ID:

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 Analysis Batch: 720-44448 Instrument ID: HP DRO5 Client Matrix: Solid Prep Batch: 720-44354 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.09 g

Date Analyzed: 11/27/2008 0546 Final Weight/Volume: 5 mL Date Prepared: 11/26/2008 1252 Injection Volume:

Qual RLAnalyte Result Diesel Range Organics [C10-C28] ND 1.0 Motor Oil Range Organics [C24-C36] ND 50 C19-C36 ND 50 % Rec Surrogate Acceptance Limits 0 0 - 5 Capric Acid (Surr)

p-Terphenyl 94 41 - 105

Lab Control Spike/ Method: 8015B

Lab Control Spike Duplicate Recovery Report - Batch: 720-44354 Preparation: 3550B Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-44354/2-A Analysis Batch: 720-44448 Instrument ID: HP DRO5 Client Matrix: Solid Prep Batch: 720-44354 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.08 g

 Date Analyzed:
 11/27/2008 0452
 Final Weight/Volume:
 5 mL

 Date Prepared:
 11/26/2008 1252
 Injection Volume:

Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44354/3-A Analysis Batch: 720-44448 Instrument ID: HP DRO5

Client Matrix: Solid Prep Batch: 720-44354 Lab File ID: N/A
Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.09 g

Date Analyzed: 11/27/2008 0519 Final Weight/Volume: 5 mL

Date Prepared: 11/26/2008 1252 Injection Volume: Column ID: PRIMARY

COIDITID. PRIMART

% Rec. Analyte LCS **LCSD** Limit **RPD** RPD Limit LCS Qual LCSD Qual Diesel Range Organics [C10-C28] 77 74 50 - 130 30 LCS % Rec LCSD % Rec Surrogate Acceptance Limits p-Terphenyl 89 89 41 - 105

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

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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 Analysis Batch: 720-44490 Instrument ID: HP DRO5 Client Matrix: Solid Prep Batch: 720-44391 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.02 g
Date Analyzed: 11/28/2008 2354 Final Weight/Volume: 5 mL

Date Analyzed: 11/28/2008 2354 Final Weight/Volume: 5 r
Date Prepared: 11/26/2008 1826 Injection Volume:

Column ID: PRIMARY

Qual RLAnalyte Result Diesel Range Organics [C10-C28] ND 1.0 Motor Oil Range Organics [C24-C36] ND 50 C19-C36 ND 50 Surrogate % Rec Acceptance Limits 0 0 - 5Capric Acid (Surr)

90

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-44391

Method: 8015B
Preparation: 3550B
Silica Gel Cleanup

p-Terphenyl

LCS Lab Sample ID: LCS 720-44391/2-A Analysis Batch: 720-44490 Instrument ID: HP DRO5 Client Matrix: Solid Prep Batch: 720-44391 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.04 g

Date Analyzed: 11/28/2008 2301 Final Weight/Volume: 5 mL

Date Prepared: 11/26/2008 1826 Injection Volume: Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-44391/3-A Analysis Batch: 720-44490 Instrument ID: HP DRO5

Client Matrix: Solid Prep Batch: 720-44391 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 30.03 g
Date Analyzed: 11/28/2008 2327 Final Weight/Volume: 5 mL

Date Prepared: 11/26/2008 1826 Injection Volume:

Column ID: PRIMARY

% Rec. Analyte LCS **LCSD** Limit **RPD** RPD Limit LCS Qual LCSD Qual Diesel Range Organics [C10-C28] 80 74 50 - 130 7 30 LCS % Rec LCSD % Rec Surrogate Acceptance Limits p-Terphenyl 83 78 41 - 105

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

PRIMARY

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Client: Chemical Data Management Job Number: 720-17028-1

Matrix Spike/ Method: 8015B
Matrix Spike Duplicate Recovery Report - Batch: 720-44391 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

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:

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

82

p-Terphenyl

% Rec. MS MSD **RPD** MS Qual MSD Qual Analyte Limit **RPD Limit** Diesel Range Organics [C10-C28] 50 - 130 70 58 17 30 Surrogate MS % Rec MSD % Rec Acceptance Limits

70

Lab File ID:

N/A

Job Number: 720-17028-1 Client: Chemical Data Management

Method Blank - Batch: 720-44282 Method: 6010B Preparation: 3050B

Lab Sample ID: MB 720-44282/1-A Analysis Batch: 720-44353 Instrument ID: Thermo 6500 ICP

Client Matrix: Prep Batch: 720-44282 Solid Lab File ID: N/A

Units: mg/Kg Initial Weight/Volume: 0.96 g Dilution: 1.0

Date Analyzed: 11/26/2008 1042 Final Weight/Volume: 50 mL Date Prepared: 11/25/2008 1303

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

Instrument ID: Thermo 6500 ICP Lab Sample ID: LCSSRM 720-44282/25-A Analysis Batch: 720-44353

Client Matrix: Solid Prep Batch: 720-44282

Initial Weight/Volume: 1.01 g Dilution: 1.0 Units: mg/Kg

Date Analyzed: 11/26/2008 1232 Final Weight/Volume: 50 mL Date Prepared: 11/25/2008 1304

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/ Method: 6010B
Lab Control Spike Duplicate Recovery Report - Batch: 720-44282 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

	<u>%</u>	Rec.					
Analyte	LCS	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		

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 Analysis Batch: 720-44392 Instrument ID: Thermo 6500 ICP

Client Matrix: Solid Prep Batch: 720-44334 Lab File ID: N/A

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 1.04 g

Date Prepared: 11/26/2008 0855

Zinc

Date Analyzed: 11/26/2008 1618 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 Analysis Batch: 720-44392 Instrument ID: Thermo 6500 ICP

Client Matrix: Solid Prep Batch: 720-44334 Lab File ID: N/A

44.0

Dilution: 1.0 Units: mg/Kg Initial Weight/Volume: 1.00 g
Date Analyzed: 11/26/2008 1800 Final Weight/Volume: 50 mL
Date Prepared: 11/26/2008 0855

% Rec. Analyte Spike Amount Result 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

38.6

88

62 - 110

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

Job Number: 720-17028-1 Client: Chemical Data Management

Lab Control Spike/ Method: 6010B Lab Control Spike Duplicate Recovery Report - Batch: 720-44334 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

	9	⁶ Rec.					
Analyte	LCS	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		

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

	<u>%</u>	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

Job Number: 720-17028-1 Client: Chemical Data Management

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 720-44395

Method: 6010B

Preparation: Soluble Metals

Dissolved

MS Lab Sample ID: Client Matrix:

720-17028-22 Water

1.07

Analysis Batch: 720-44410 Prep Batch: 720-44395

Instrument ID: Varian ICP Lab File ID: N/A

Initial Weight/Volume:

Date Analyzed: 11/28/2008 1008

Date Prepared:

Dilution:

11/28/2008 0528

Final Weight/Volume: 1.0 mL

MSD Lab Sample ID: 720-17028-22

Client Matrix:

Water

Analysis Batch: 720-44410

Instrument ID: Varian ICP Lab File ID: N/A

Dilution: 1.07 Prep Batch: 720-44395

Initial Weight/Volume:

Date Analyzed: Date Prepared: 11/28/2008 1012 11/28/2008 0528 Final Weight/Volume: 1.0 mL

	<u>% R</u>	lec.				
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	

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 ackground	N/A	
he cooler's custody seal, if present, is intact.	N/A	
he cooler or samples do not appear to have been compromised or ampered 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	
here are no discrepancies between the sample IDs on the containers and ne 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	
here is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
OA sample vials do not have headspace or bubble is <6mm (1/4") in iameter.	True	
necessary, staff have been informed of any short hold time or quick TAT eeds	True	
fultiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



ANALYTICAL REPORT

Job Number: 720-18578-1

Job Description: Western Forge, Albany

For:

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

Attention: Mr. Jamie Hernandez

Approved for release Dimple Sharma Project Manager I 3/26/2009 4:36 PM

Dimple Sharma Project Manager I dimple.sharma@testamericainc.com 03/26/2009

Job Narrative 720-J18578-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

Metals

Method(s) 6010B: The laboratory control sample (LCS) for batch 47899 recovered outside acceptance limits for all analytes. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported. The data reported is estimated based on EPA guidelines.

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: 720-18578-1

Lab Sample ID Analyte	Client Sample ID	Result / 0	Qualifier	Reporting Limit	Units	Method	
720-18578-1	S-1						
Chromium Nickel Lead Zinc		0.35 3.4 0.24 0.68	* * *	0.0050 0.050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B	
720-18578-2	S-2						
Chromium Nickel Lead Zinc		0.10 0.76 0.033 0.15	* * *	0.0050 0.0050 0.0050 0.0050	mg/wipe mg/wipe mg/wipe mg/wipe	6010B 6010B 6010B 6010B	
720-18578-3 Nickel Zinc	S-3	0.011 0.12	* *	0.0050 0.0050	mg/wipe mg/wipe	6010B 6010B	

METHOD SUMMARY

Client: Chemical Data Management Job Number: 720-18578-1

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: 720-18578-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-18578-1	S-1	Wipe	03/18/2009 1124	03/18/2009 1500
720-18578-2	S-2	Wipe	03/18/2009 1135	03/18/2009 1500
720-18578-3	S-3	Wipe	03/18/2009 1147	03/18/2009 1500
720-18578-4	BLANK	Wipe	03/18/2009 0000	03/18/2009 1500

Client: Chemical Data Management Job Number: 720-18578-1

Client Sample ID: S-1

Lab Sample ID: 720-18578-1 Date Sampled: 03/18/2009 1124

Client Matrix: Wipe Date Received: 03/18/2009 1500

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-47990 Instrument ID: Varian ICP

Preparation: 3050B Dilution: 1.0

Date Analyzed: 03/24/2009 1835 Date Prepared: 03/23/2009 0958 Prep Batch: 720-47899 Lab File ID: N/A 1 Wipe Initial Weight/Volume: Final Weight/Volume: 50 mL

Qualifier Analyte Result (mg/wipe) RLCadmium ND 0.0050 Chromium 0.35 0.0050 0.24 0.0050 Lead

Zinc 0.68 0.0050 Analysis Batch: 720-48003 Instrument ID: Varian ICP Method: 6010B Prep Batch: 720-47899 Lab File ID: N/A

Preparation: 3050B Dilution: 10

Date Analyzed: 03/25/2009 1420

Date Prepared: 03/23/2009 0958 Initial Weight/Volume: 1 Wipe Final Weight/Volume: 50 mL

Analyte Result (mg/wipe) Qualifier RL

Nickel 3.4 0.050

Varian ICP

Client: Chemical Data Management Job Number: 720-18578-1

Client Sample ID: S-2

Date Analyzed:

Date Prepared:

03/24/2009 1839

03/23/2009 0958

 Lab Sample ID:
 720-18578-2
 Date Sampled:
 03/18/2009 1135

 Client Matrix:
 Wipe
 Date Received:
 03/18/2009 1500

6010B Metals (ICP)

Method: 6010B Analysis Batch: 720-47990 Instrument ID: Preparation: 3050B Prep Batch: 720-47899 Lab File ID: Dilution: 1.0 Initial Weight/V

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

Analyte Result (mg/wipe) Qualifier RLCadmium ND 0.0050 Chromium 0.10 0.0050 Nickel 0.76 0.0050 0.0050 Lead 0.033 0.0050 Zinc 0.15

Client: Chemical Data Management Job Number: 720-18578-1

Client Sample ID: S-3

 Lab Sample ID:
 720-18578-3
 Date Sampled:
 03/18/2009
 1147

 Client Matrix:
 Wipe
 Date Received:
 03/18/2009
 1500

6010B Metals (ICP)

Method: 6010B Preparation: 3050B Dilution: 1.0

Date Analyzed: 03/24/2009 1842 Date Prepared: 03/23/2009 0958 Analysis Batch: 720-47990 Prep Batch: 720-47899 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	ND	*	0.0050
Nickel	0.011	*	0.0050
Lead	ND	*	0.0050
Zinc	0.12	*	0.0050

Client: Chemical Data Management Job Number: 720-18578-1

Client Sample ID: BLANK

 Lab Sample ID:
 720-18578-4
 Date Sampled:
 03/18/2009 0000

 Client Matrix:
 Wipe
 Date Received:
 03/18/2009 1500

6010B Metals (ICP)

Method:6010BAnalysis Batch: 720-47990Instrument ID:Varian ICPPreparation:3050BPrep Batch: 720-47899Lab File ID:N/ADilution:1.0Initial Weight/Volume:1 Wipe

Dilution: 1.0 Initial Weight/Volume: 1 Wipe Date Analyzed: 03/24/2009 1846 Final Weight/Volume: 50 mL Date Prepared: 03/23/2009 0958

Analyte Result (mg/wipe) Qualifier RLCadmium ND 0.0050 Chromium ND 0.0050 Nickel ND 0.0050 0.0050 Lead ND 0.0050 Zinc ND

		General Chemistry	
Client Sample ID:	S-1		
Lab Sample ID:	720-18578-1		Date Sampled: 03/18/2009 1124
Client Matrix:	Wipe		Date Received: 03/18/2009 1500
Analyte	Result	Qual Units	RL Dil Method
HEM	ND	mg/wipe	5.0 1.0 9071B
	Anly Batch: 720-47909	Date Analyzed 03/23/2009 1145	
	Prep Batch: 720-47906	Date Prepared: 03/23/2009 1134	
Client Sample ID:	S-2		
Lab Sample ID:	720-18578-2		Date Sampled: 03/18/2009 1135
Client Matrix:	Wipe		Date Received: 03/18/2009 1500
Analyte	Result	Qual Units	RL Dil Method
HEM	ND	mg/wipe	5.0 1.0 9071B
	Anly Batch: 720-47909	Date Analyzed 03/23/2009 1145	
	Prep Batch: 720-47906	Date Prepared: 03/23/2009 1134	
Client Sample ID:	S-3		
Lab Sample ID:	720-18578-3		Date Sampled: 03/18/2009 1147
Client Matrix:	Wipe		Date Received: 03/18/2009 1500
Analyte	Result	Qual Units	RL Dil Method
HEM	ND	mg/wipe	5.0 1.0 9071B
	Anly Batch: 720-47909	Date Analyzed 03/23/2009 1145	
	Prep Batch: 720-47906	Date Prepared: 03/23/2009 1134	
Client Sample ID:	BLANK		
Lab Sample ID:	720-18578-4		Date Sampled: 03/18/2009 0000
Client Matrix:	Wipe		Date Received: 03/18/2009 1500
A nalvte	Result	Qual Units	RL Dil Method
Analyte HEM	ND		5.0 1.0 9071B
I I⊏IVI	Anly Batch: 720-47909	mg/wipe Date Analyzed 03/23/2009 1145	5.0 1.0 907 IB
	-	,	
	Prep Batch: 720-47906	Date Prepared: 03/23/2009 1134	

DATA REPORTING QUALIFIERS

Client: Chemical Data Management Job Number: 720-18578-1

Lab Section	Qualifier	Description				
Metals						
	*	LCS or LCSD exceeds the control limits				

Client: Chemical Data Management Job Number: 720-18578-1

QC Association Summary

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-47899					
LCS 720-47899/2-A	Lab Control Spike	T	Wipe	3050B	
LCSD 720-47899/3-A	Lab Control Spike Duplicate	T	Wipe	3050B	
MB 720-47899/1-A	Method Blank	T	Wipe	3050B	
720-18578-1	S-1	Т	Wipe	3050B	
720-18578-2	S-2	T	Wipe	3050B	
720-18578-3	S-3	T	Wipe	3050B	
720-18578-4	BLANK	Т	Wipe	3050B	
Analysis Batch:720-4799	0				
LCS 720-47899/2-A	Lab Control Spike	Т	Wipe	6010B	720-47899
LCSD 720-47899/3-A	Lab Control Spike Duplicate	T	Wipe	6010B	720-47899
MB 720-47899/1-A	Method Blank	Т	Wipe	6010B	720-47899
720-18578-1	S-1	Т	Wipe	6010B	720-47899
720-18578-2	S-2	Т	Wipe	6010B	720-47899
720-18578-3	S-3	Т	Wipe	6010B	720-47899
720-18578-4	BLANK	T	Wipe	6010B	720-47899
Analysis Batch:720-4800	3				
720-18578-1	S-1	Т	Wipe	6010B	720-47899

Report Basis T = Total

Job Number: 720-18578-1 Client: Chemical Data Management

QC Association Summary

	Report			
Client Sample ID	Basis	Client Matrix	Method	Prep Batch
Lab Control Spike	T	Wipe	9071B	
Lab Control Spike Duplicate	Т	Wipe	9071B	
Method Blank	Т	Wipe	9071B	
S-1	Т	Wipe	9071B	
S-2	Т	Wipe	9071B	
S-3	Т	Wipe	9071B	
BLANK	Т	Wipe	9071B	
909				
Lab Control Spike	Т	Wipe	9071B	720-47906
Lab Control Spike Duplicate	Т	Wipe	9071B	720-47906
Method Blank	Т	Wipe	9071B	720-47906
S-1	Т	Wipe	9071B	720-47906
S-2	Т	Wipe	9071B	720-47906
S-3	Т	Wipe	9071B	720-47906
BI ANK	Т	Wipe	9071B	720-47906
	Lab Control Spike Lab Control Spike Duplicate Method Blank S-1 S-2 S-3 BLANK D09 Lab Control Spike Lab Control Spike Duplicate Method Blank S-1 S-2	Lab Control Spike T Lab Control Spike Duplicate T Method Blank T S-1 T S-2 T S-3 BLANK T Lab Control Spike T Lab Control Spike T Lab Control Spike T Lab Control Spike T Lab Control Spike T Lab Control Spike T S-1 T S-2 T S-3 T Method Blank T S-1 T S-2 T S-2 T S-3 T	Lab Control Spike T Wipe Lab Control Spike Duplicate T Wipe Method Blank T Wipe S-1 T Wipe S-2 T Wipe S-3 T Wipe BLANK T Wipe Lab Control Spike T Wipe Lab Control Spike T Wipe Method Blank T Wipe Method Blank T Wipe S-1 T Wipe S-1 T Wipe S-2 T Wipe S-2 T Wipe S-3 T Wipe	Client Sample ID Basis Client Matrix Method Lab Control Spike T Wipe 9071B Lab Control Spike Duplicate T Wipe 9071B Method Blank T Wipe 9071B S-1 T Wipe 9071B S-2 T Wipe 9071B S-3 T Wipe 9071B BLANK T Wipe 9071B Lab Control Spike T Wipe 9071B Lab Control Spike Duplicate T Wipe 9071B Method Blank T Wipe 9071B S-1 T Wipe 9071B S-2 T Wipe 9071B S-2 T Wipe 9071B S-2 T Wipe 9071B S-2 T Wipe 9071B S-3 T Wipe 9071B

Report Basis T = Total

0.0050

0.0050

Client: Chemical Data Management Job Number: 720-18578-1

Method Blank - Batch: 720-47899 Method: 6010B Preparation: 3050B

Lab Sample ID: MB 720-47899/1-A Analysis Batch: 720-47990 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-47899 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe Date Analyzed: 03/24/2009 1824 Final Weight/Volume: 50 mL

 Analyte
 Result
 Qual
 RL

 Cadmium
 ND
 0.0050

 Chromium
 ND
 0.0050

 Nickel
 ND
 0.0050

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-47899

Method: 6010B
Preparation: 3050B

ND

ND

LCS Lab Sample ID: LCS 720-47899/2-A Analysis Batch: 720-47990 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-47899 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe

Date Analyzed: 03/24/2009 1827 Final Weight/Volume: 50 mL Date Prepared: 03/23/2009 0958

LCSD Lab Sample ID: LCSD 720-47899/3-A Analysis Batch: 720-47990 Instrument ID: Varian ICP

Client Matrix: Wipe Prep Batch: 720-47899 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe Date Analyzed: 03/24/2009 1831 Final Weight/Volume: 50 mL

Date Analyzed: 03/24/2009 1831 Final Weight/Volume: 50 mL Date Prepared: 03/23/2009 0958

Analyte	LCS	<u>6 Rec.</u> LCSD	Limit	RPD	RPD Limit	LCS Qual LCSD Qual
Cadmium	74	83	80 - 120	12	20	*
Chromium	76	86	80 - 120	12	20	*
Nickel	74	83	80 - 120	11	20	*
Lead	73	82	80 - 120	12	20	*
Zinc	74	83	80 - 120	12	20	*

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

Date Prepared: 03/23/2009 0958

Lead

Zinc

Quality Control Results

Job Number: 720-18578-1 Client: Chemical Data Management

Method Blank - Batch: 720-47906 Method: 9071B Preparation: 9071B

Lab Sample ID: MB 720-47906/1-A Analysis Batch: 720-47909 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-47906 Lab File ID: N/A

Units: mg/wipe Dilution: 1.0 Initial Weight/Volume: 1 Wipe

Final Weight/Volume: 1 Wipe Date Analyzed: 03/23/2009 1145 Date Prepared: 03/23/2009 1134

Qual RL Analyte Result HEM ND 5.0

Lab Control Spike/ Method: 9071B

Lab Control Spike Duplicate Recovery Report - Batch: 720-47906 Preparation: 9071B

LCS Lab Sample ID: LCS 720-47906/2-A Analysis Batch: 720-47909 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-47906 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe

Final Weight/Volume: Date Analyzed: 03/23/2009 1145 Wipe Date Prepared: 03/23/2009 1134

LCSD Lab Sample ID: LCSD 720-47906/3-A Analysis Batch: 720-47909 Instrument ID: No Equipment Assigned

Client Matrix: Wipe Prep Batch: 720-47906 Lab File ID: N/A

Dilution: 1.0 Units: mg/wipe Initial Weight/Volume: 1 Wipe Date Analyzed: 03/23/2009 1145 Final Weight/Volume: 1 Wipe

Date Prepared: 03/23/2009 1134

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual HEM 96 96 70 - 120 0

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

TestAmerica 720-18578 TestAmerica TestAmerica San Francisco Chain of Custody

THE LEADER IN ENVIRONMENTAL TESTING

1220 Quarry Lane • Pleasanton CA 94566-4756 Phone: (925) 484-1919 • Fax: (925) 600-3002 Reference #: _/15080

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Login Sample Receipt Check List

Client: Chemical Data Management Job Number: 720-18578-1

Login Number: 18578 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.	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	

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

A. Brown and Caldwell Re	eport. 1984.
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B.	Fred	Hoffman	Geological	Evaluation.	2008.
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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

Fredric Hoffman

CA Professional Geologist No. 3929

CA Certified Hydrogeologist No. 83

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	Samnle denth, inches	Conper	Lead	Nickel	Oil and Grease
Inside soils			1		
VI	18 - 24	20	17	15	<50
V 2	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 - 13	470	100	320	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	380	180	250	240
V16	18 - 24	27	<13	100	120
V17	6 - 12	110	18	1,900	2,470 /
Outside soils					
SVI	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
TLCª		2,500	1,000	2,000	-
Cleanup levelb	1	1,250	500	1,000	1,000

aTotal threshold limit concentration in millionans per kilogram 22 CAC 66699 January 11, 1985.

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

DApproved by State.

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).

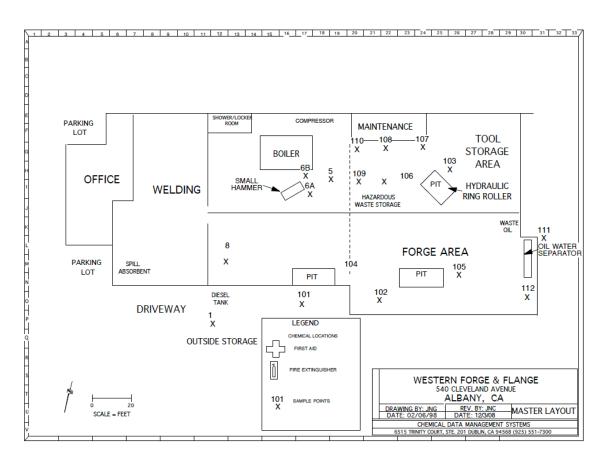


Figure 1. Location of 2008 subsurface sampling events.

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
30101	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 (c	ont)					
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.

Documents Reviewed and/or Cited

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

California Department of Toxic Substances Control (CADTSC). September 2002. Site Screening Form. Available on the DTSC Envirostor Website: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/5681241691/western%20forge%20site%20screening.pdf

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SFRWQCB. 2008. Environmental Screening Levels Surfer. EXCEL Spreadsheet for access to screening level guidance. May 2008.

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

TestAmerica. 2008b. Analytical Report, Job Number 720-16931-1, Job Description: Western Forge, Albany. November 21, 2008.

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CA Certified Hydrogeologist No. 83

iii. Recommendations/Conclusions

Since the relocation of the Western Forge and Flange Co. facility from Albany to Texas, extensive activities have occurred at this site to achieve closure and remediate any contamination that resulted from past manufacturing processes.

Above Ground

Multiple rounds of aggressive decontamination of the rafters, control panels and structural elements, most of which are between 15 and 45 feet above ground level, have reduced the concentrations of residual contaminants on those surfaces. Verification sampling has shown fluctuating levels of contaminants between sampling locations, most of which are located between 15 and 45- feet above ground level. Results have shown however, that some of these locations continue to exceed the ESLs for the majority of the analytes (metals) even after multiple cleanings.

Wipe sample S-3, at approximately 8 feet above ground level, tested non-detect for all of the analytes, except for nickel. The value of S-3 is 11ug/100cm³ for nickel. The guidelines suggest an environmental screening level of 10 ug/100cm³. S-3 in this respects shows a slight deviation to the ESL for nickel.

The floors of the production area, shipping and welding area have been swept multiple times and triple rinsed using hot pressurized water. All hazardous waste generated from the closure activities has been hauled off site by a licensed hazardous waste hauler to an approved waste treament facility. Hazardous materials used during the manufacturing processes were relocated to the Texas facility prior to the start of the closure activities.

All of the items identified in the closure plan and required by the Alameda County Department of Environmental Health (ACDEH) have been addressed. 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. A final walkthrough with ACDEH is scheduled for July 1st, 2009. The purpose of this final walkthrough is to confirm all the items as recommended and required by ACDEH have been addressed.

Western Forge and Flange Co. is currently in the process of selling their property at 540 Cleveland Ave, Albany CA. ACDEH has recommended disclosing the current above ground contamination at the site to any potential buyer prior to selling the property. ACDEH has also decided to transfer this case over to the Alameda County Site Mitigation/Local Oversight Program for the evaluation of the subsurface issues.

Subsurface

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.

Several subsurface investigations and sampling events occurred during the hazardous material closure in an effort to evaluate the presence or absence of contamination at the site. Subsurface investigations led to excavations of contaminated soil in several locations (5, 6B, SB106, SB107). Excavation also occurred in suspect areas around Pit 1, Pit 2, and in two other locations near the northwest walls where etching was visible. No indication of contamination was observed at these locations. (Fig. 2, Closure Report).

Subsurface sampling results 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).

Additional 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. During the soil cleanup excavation of soil sample location SB106, perched water was encountered, and eventually the oil and water mixed together. Several efforts to removal the oil from the surface of the water at soil sample location SB 106 have have greatly reduced the amount of oil in the excavation.

Most recently, remediation efforts included the introduction of RegenOx®, an advanced chemical oxidation designed to treat organic contaminants, that destroys petroleum contaminants, enhances subsequent bioremediation, and avoids detrimental impact to groundwater aquifers.

The introduction of this chemical to the soil sample location SB 106 has been followed with continuous skimming of the water surface to further remove oil The goal of this remediation practice is to reduce the concentration of petroleum hydrocarbons from this excavation below that of the ESL.

Currently, the remedial activities at WFF-Albany have come to a halt, pending an evaluation by the Alameda County Site Mitigation/Local Oversight Program.

As mentioned above, this case is being transferred to the Alameda County Site Mitigation/Local Oversight Program to address the subsurface issues and concerns of this closure.