



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Clean Water Act Compliance Office
Inspection Report

Site Location: Port of Redwood City adjacent to:
Sims Metal Management
699 Seaport Blvd.
Redwood City, CA 94603

Date and Time of Visit: August 25, 2011
10:15 am (Entry)
1:00 pm (Exit)

Site Owner and/or Operator: Port of Redwood City (Port or Owner)
Sims Metal Management (Sims or Operator/Tenant)

Site Contact: Donald Snaman (650-306-4150) (Port)
Mariya Semeit (650-369-4161) (Sims)

Conducted by: Luis Garcia-Bakarich (EPA CWA Compliance Office)
Greg Nagle (EPA Laboratory)

Accompanied by:

Summary Prepared by: Luis Garcia-Bakarich

Report Finalized on:

Site Visit Purpose

EPA visited the site to conduct soil and residue sampling along the shoreline of Redwood Creek and adjacent to storm water conveyance structures to better understand potential pollution constituents industrial activities at Sims to Waters of the U.S. either directly or via storm water and non-storm water discharges.

EPA had conducted a storm water inspection at the Sims facility on March 4, 2011, and had observed industrial activities that occur beyond the control of a perimeter storm water containment berm and associate on-site storm water collection and retention system that was identified by the facility as their principal storm water pollution prevention tool. During the March inspection, EPA also observed accumulated material including shredding residue, scrap metal, and other debris associated with Sims' industrial activities in areas either in direct contact with Waters of the U.S. or in areas where they could become entrained in storm water discharges to Waters of the U.S. via storm water conveyance structures.

A sampling and analysis plan (SAP) was developed and approved by the EPA Region 9 Quality Assurance Office. The SAP identified the target sample locations, sample collection methods, the constituents to be sampled for, and the methods by which the constituents will be analyzed. The EPA Region 9 Laboratory followed standard operating procedures (SOP) for sample labeling and chain of custody protocol. Luis Garcia-Bakarich provided field-level technical direction for specific sample locations, and Greg Nagle collected the samples in accordance with the SAP.

Site Visit Summary

Luis Garcia-Bakarich and Greg Nagle (EPA) made contact with Don Snaman with the Port of Redwood City shortly after 10:00 am. Mr. Snaman provided EPA with a Port's security contact who facilitated access to the Redwood Creek shoreline. A sea-faring ship was at berth and was preparing to receive materials from the Sims Facility (IMGP0713, 0726, 0728, and 0729). It was unclear if loading had commenced prior to EPA's arrival, however, loading operations were underway by the time that EPA departed the Port's property. In all, EPA took 8 sediment samples from three general locations; the Redwood Creek shoreline, areas adjacent to storm water catchment structures along Herkner Drive, and a storm water conveyance ditch along Seaport Blvd to the east of the facility. The excerpt from the Storm Water Utility Map and the map associated with the SAP should provide geographical reference to the narrative nature of this report.

Redwood Creek Shoreline Area Samples:

EPA took 3 sediment samples among the rip-rap and pier footings that underlie the ship loading conveyor; 2 on the south side that were approximately 3 feet apart (IMGP0718, 0719, 0721, and 0722) and 1 on the north side (IMGP0723 and 0724). After completing these three sample collections, EPA exited the Redwood Creek Shoreline area.

Redwood Creek Shoreline Area Observations:

- The Redwood Creek shoreline is mostly lined with rip-rap composed of broken concrete rubble (IMGP0713, 0728, and 0729).
- When compared with observations made during the March 4, 2011 inspection, accumulated residue on the shore and conveyor structure appeared to have been mostly removed (IMGP0714-0717, 0720, 0723, and 0724).
- During sample collection it became apparent that residues were diverse in consistency where some remained as fine sediment and other residues had become amalgamated into a brittle mass.
- Some of the gaps in the containment walls along the catchment platform appear to have been eliminated, though one or two may still remain along the southern wall (IMGP0715).
- Potential non-storm water discharges were noted on the catchment platform surface (IMGP0716 and 0717).
- A tractor was observed being loaded into the hold of the ship. Source of the tractor was unknown, however no trailer was observed and an identical make and model (John Deere 650-G) had been previously observed on the Sims facility.

Herkner Drive Area Storm Water Catchment Samples:

EPA took 4 samples from areas adjacent to the mapped storm water catchment basins. Three of these catch basins were among rail lines, and samples were taken from the most obvious route of entry to the storm water conveyance system. For Catch Basin #12, the sample was taken from an apparent opening under a steel plate that could convey storm water to the catch basin (IMGP0731-0733). For Catch Basin #13, the sample was taken from within basin vault itself (IMGP0734-0736). For Catch Basin #14, the sample was taken from materials perched directly above the grate and perforated filter fabric

(IMGP0737). For Catch Basin #15/16, the sample was taken from the areas surrounding the catch basin inlet (IMGP0738, 0739, 0743, and 0748).

Herkner Drive Area Observations:

- The mapped location Catch Basin #12 was covered by a steel plate and the catch basin itself could not be verified. Steel plates are common covers for storm water catch basins to protect the basin from large debris and heavy equipment or other vehicle operation. A tunnel was observed along the northern edge of the plate by which storm water could access the catch basin, and the sample collection took place at this location. (IMGP0731-0733)
- Catch Basin #13 had a coarse grate that was removed by Luis Garcia-Bakarich, and the catch basin vault had accumulated debris that almost blocks the vault outlet. Since the vault was accessible, the sample was collected from within the catch basin. The grate was replaced after the sample collection was complete. (IMGP0734-0736)
- Metal scraps including insulated wires and other shredding residues such as foam and hose pieces were noted in the rail road track area in the vicinity of the catch basins #12-13.
- Catch Basin #14 was covered by accumulated residue or sediment and a severely deteriorated and perforated fabric. A boot scrape uncovered the grate and revealed the deteriorated fabric. The fabric appeared to have been worn away over the grate and have at least one hole punched through the fabric. The sample was collected from the material on top of the fabric closest to the puncture hole and areas of deterioration. (IMGP0737)
- Non-storm water discharges were observed entering the gutter and Catch Basin #15/16 via water truck that over-sprayed the facility containment berm presumably for dust control purposed. Source of the contents of the water truck was not confirmed. (IMGP0727, 0730, 0744-0748)
- Catch Basin #15/16 *note: In the mapped location of catch basins #15 and #16, only one catch basin was observed. The catch basin inlet was partially protected by a heavy fabric. The sample was collected from the surface on the curb that was perched over the gutter and the catch basin. (IMGP0743)
- Residue discharges were observed falling from the aerial portions of the conveyor to the street area after the conveyor had been operating for approximately 30 minutes.
- A street sweeping vehicle began cleaning the street areas while EPA was concluding collections at the CB#15/16 location. (IMGP0749, 0750, and 0753)

Seaport Blvd. Area Ditch Sample:

EPA changed locations again and surveyed the area and drainage ditch to the east of the facility, along Seaport Blvd. EPA took a sediment sample from the drainage ditch near the south east emergency access gate for the facility (IMGP0756).

Seaport Blvd. Area Observations:

- Obsolete rails were discarded into the drainage ditch that runs along Seaport Blvd to the east of the Sims facility (IMGP0754-0755). The discarded rails are not suspected of being associated with Sims operations however were noted associated with the storm water conveyance system.

EPA concluded the site visit and departed at approximately 1pm. At no point did EPA contact Sims personnel or enter the Sims facility.

Attachments

Inspection Photos

Photo Log

Partial Scan of Port of Redwood City Storm Water Utility Map

Sampling and Analysis Plan

Sampling results

Aerial Image of Actual Sampling Locations



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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**Sims Metals Management
Residue Sampling Inspection Photo Log
8.25.2011**

EPA Participants:

Luis Garcia-Bakarich – Clean Water Act Compliance Office (Photographer)

Greg Nagle – Region 9 Laboratory

Camera:

Pentax Optio W80 #S63267

IMGP0712: Title shot, taken post entrance interview with Port of Redwood City staff.

IMGP0713: Photo taken from shoreline access gate. A ship is at berth to receive materials from Sims. Rip-rap shoreline depicted in the foreground is relatively unimpacted by industrial activities.

IMGP0714: Shoreline south-side of ship-loading conveyor footing. The mound depicted is cement that was poured or spilled over the rip-rap with significant iron-oxide staining. “Bath-tub ring” is visible on the wall as evidence of former extent of residues that had accumulated on the south side of the conveyor structure.

IMGP0715: South side of the catchment platform with potential gap in the barrier wall.

IMGP0716: Deck of the catchment platform with non-storm water on the deck surface.

IMGP0717: Land-side edge of the catchment platform with non-storm water saturating the area.

IMGP0718: Sample Sims #1 –sampling location at the eastern-most footing on the south side of the catchment platform/conveyor.

IMGP0719: Sample Sims #1 – same as IMGP0718 – different photo angle to demonstrate proximity to facility equipment.

IMGP0720: Concrete mound previously discussed in IMGP0714 from the opposite angle and close-up. “Bath-tub ring” is clearer along the wall face along with loose debris on the surface of the concrete mass.

IMGP0721: Sample Sims #2 – approximately 3’ from Sims#1 towards Redwood Creek. This sample attempted to capture amalgamated residues.

IMGP0722: General location of Sample Sims #1 and #2 sampling location and the observed staining on the rip-rap.

IMGP0723: Sample Sims #3 – sampling location on the north side of the catchment platform/conveyor. Iron oxide staining was prevalent on the rip-rap, and residual evidence of extent of accumulated residues is visible on the wall and rip-rap.

IMGP0724: Sample Sims #3 – same as IMGP0273

IMGP0725: North side of the catchment platform.

IMGP0726: Ship is loading John Deer 650-G tractor into the hold from the wharf. A tractor of the same make and model was observed on a previous inspection on the Sims facility: (IMGP0251 – March 4, 2011 Inspection Report).

IMGP0727: Rail spur with conveyor over the transportation routes, and water truck on the Sims facility spraying water (presumably for dust suppression) that is falling outside the Sims facility and creating a non-storm water discharge.

IMGP0728: Photo of the ship identified as “Kostas N” home port in Kingstown, St. Vincent and the Grenadines. Shoreline rip-rap is relatively unimpacted by industrial activities.

IMGP0729: Photo of the port side of the ship and the relatively unimpacted shoreline.

IMGP0730: Similar to IMGP0727, however water truck is going in the reverse direction and still creating non-stormwater discharges.

IMGP0731: Steel plate cover at the mapped location of Catch Basin #12. Metal and foam debris was observed scattered throughout this location. Gap between grade and lip of the plate created a potential route for storm water discharge to the catch basin.

IMGP0732: Close-up of IMGP0731

IMGP0733: Sample Catch Basin #12 – sampling location at the location of most likely storm water access point to the catch basin.

IMGP0734: Sample Catch Basin #13, again metal, foam, insulation, hose pieces and other debris observed scattered throughout the location.

IMGP0735: Sample Catch Basin #13 vault after grate had been removed. Outlet pipe is nearly choked closed. Metal, plastic, foam and other debris was observed. Sample location at CB#13 was collected from within the vault.

IMGP0736: Sample Catch Basin #13 – same as IMGP0735 with flash.

IMGP0737: Sample Catch Basin #14 – completely obscured by accumulated residue from the conveyor. The grate was discovered after a boot scrape. Grate had been covered by some sort of fabric, however it had been punctured and was worn thin over the grate. Sample was taken from this area.

IMGP0738: Sample Catch Basin #15/16 – was partially protected by some sort of heavy filter fabric. Non-stormwater discharges from Sims are depicted migrating towards the catch basin. Residue and sediment was observed on the pavement above the catch basin with potential to become entrained in storm water and non-storm water discharges to the catch basin.

*Note: The Port of Redwood City identifies two catch basins (#15 and #16) in very close proximity to each other, however only one catch basin could be identified in the field so they are identified herein as CB #15/16

IMGP0739: Same as IMGP0738 – different orientation of the camera.

IMGP0740: Conveyor belt tensioning system.

IMGP0741: Same as IMGP0741 without flash.

IMGP0742: Non storm water discharges from the Sims facility into the gutter to the north of the conveyor.

IMGP0743: Sediment/residue sample (Sample Catch Basin #15/16) being collected from on top of the curb.

IMGP0744: Water truck spraying water over containment barrier creating a non-storm water discharge.

IMGP0745: Water truck spraying water over containment barrier creating a non-stormwater discharge.

IMGP0746: Water truck spraying water over containment barrier creating a non-stormwater discharge.

IMGP0747: Wetted area beyond the containment barrier that resulted from non-stormwater discharge.

IMGP0748: Non-storm water discharging into CB#15/16.

IMGP0749: Street sweeper.

IMGP0750: Tennant “Sentinel” #10032 street sweeper – a street sweep of same make and model with identical identifier number stenciled on the side was previously observed on the Sims facility during the March 4, 2011 inspection (IMGP0216 and 0302).

IMGP0751: Stormwater pump house that is part of the storm sewer conveyance system.

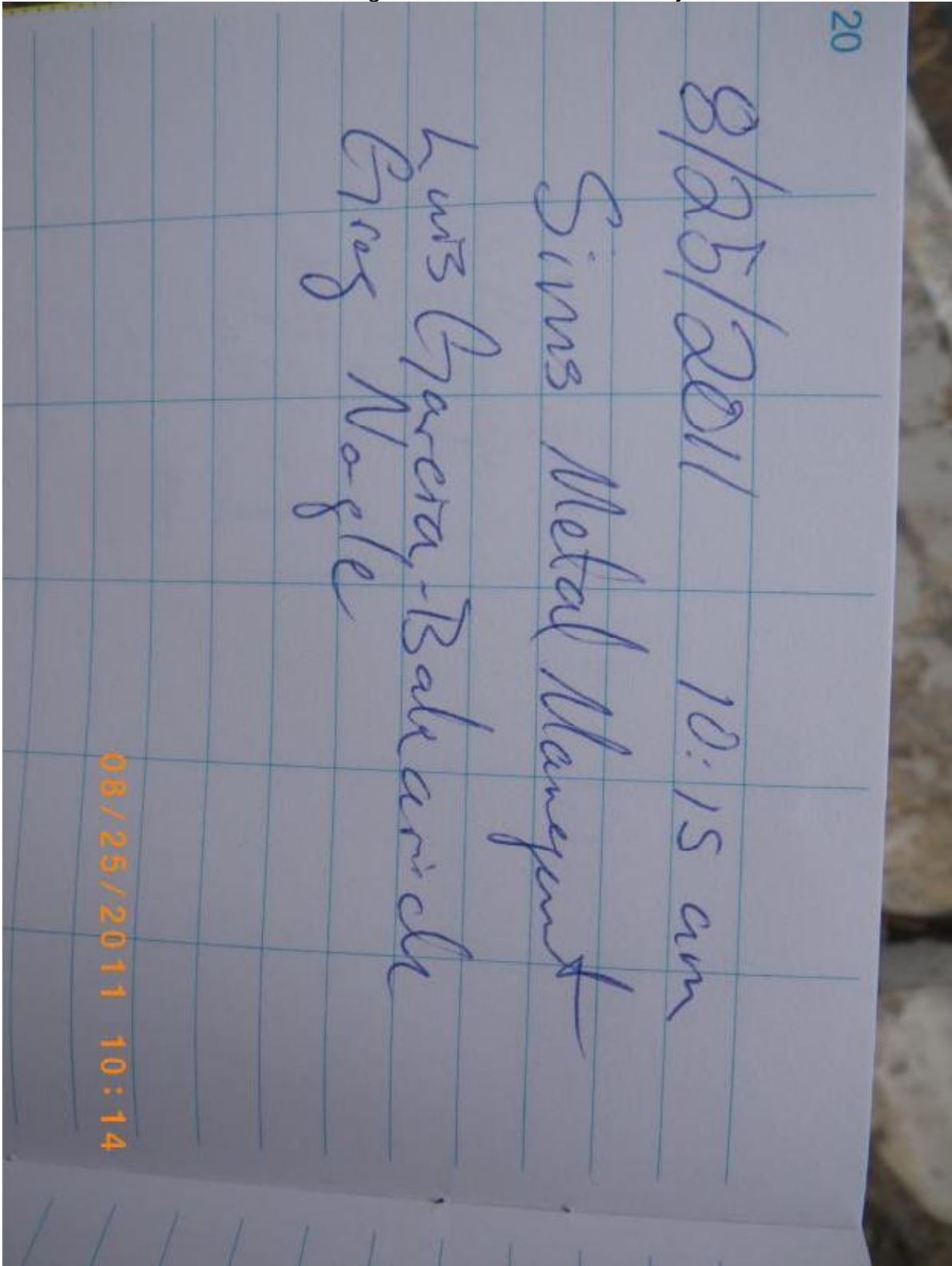
IMGP0752: Stormwater discharge lines that discharge to Redwood Creek.

IMGP0753: Street sweeper operating along Herkner Drive under the ship loading conveyor.

IMGP0754: Discarded rails in the drainage ditch along the eastern boundary of the Sims facility.

IMGP0755: More discarded rails in the drainage ditch along the eastern boundary of the Sims facility.

IMGP0756: Sample Sims DD - sample location near the south east emergency access gate.



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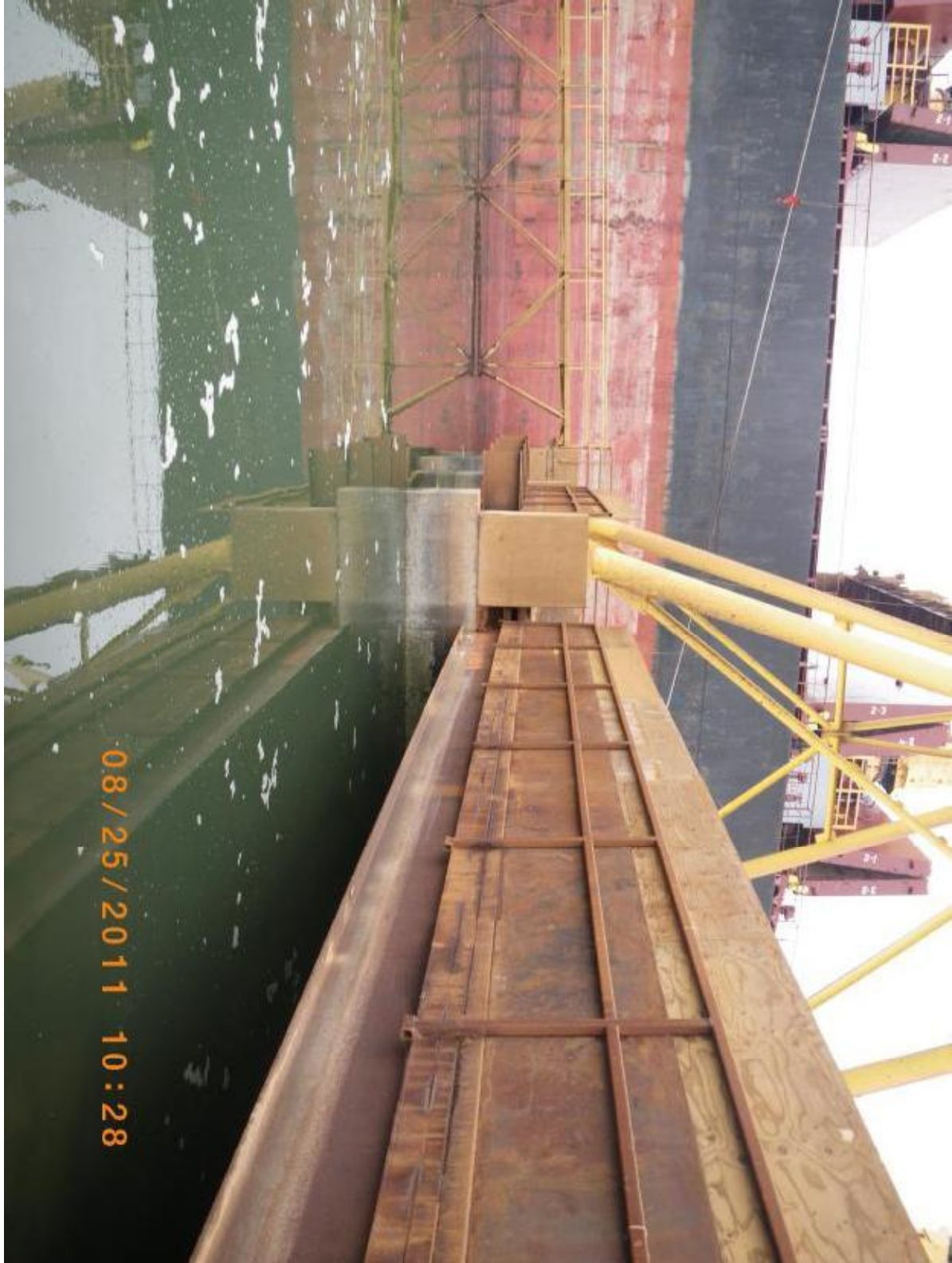
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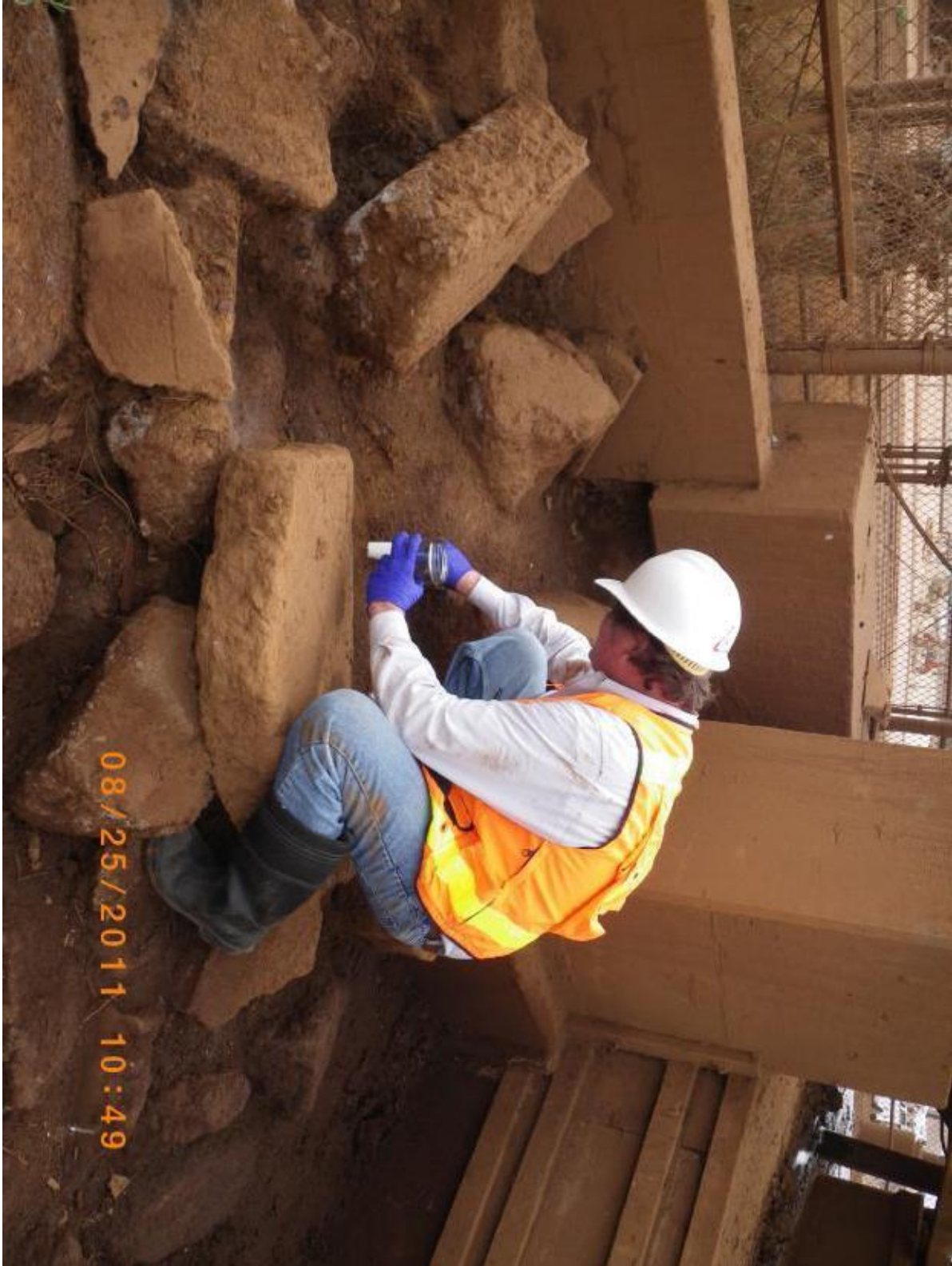
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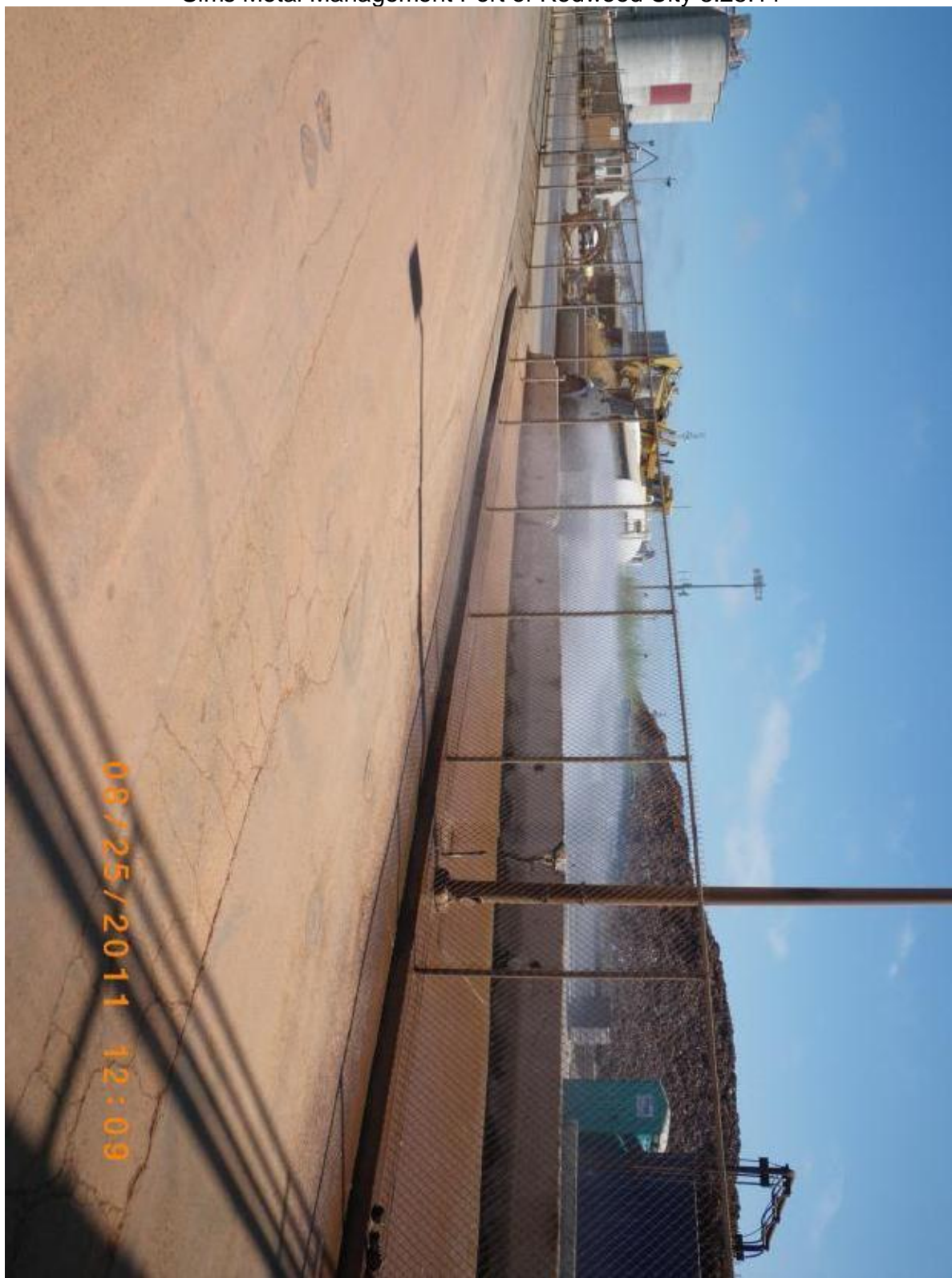
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

August 23, 2011

MEMORANDUM

SUBJECT: Review of Sampling and Analysis Plan (SAP) for the Sims Metal Management Facility, Redwood City, California, QA Office Document Control Number [DCN] WATR0775SV1

FROM: Joe Eidelberg, Chemist
Quality Assurance Office, MTS-3

THROUGH: Eugenia McNaughton, Ph.D., Manager
Quality Assurance Office, MTS-3 *Eugenia McNaughton*

TO: Luis Garcia-Bakarich, Life Scientist
CWA Compliance Office, WATR-7

The subject SAP, prepared by EPA and dated August 2011, was reviewed. This review was based on guidance provided in "EPA Requirements for Quality Assurance Project Plans," (EPA QA/R-5, March 2001), "Guidance for Quality Assurance Project Plans," (EPA QA/G-5, December 2002) and "Guidance for the Data Quality Objectives Process" (EPA QA/G-4, August 2000).

The subject SAP is approved.

Questions or comments concerning this review should be directed to me at 415-972-3809.



WATA0775SV1



SAMPLING AND ANALYSIS PLAN

Sims Metal Management Facility

699 Seaport Blvd.
Redwood City, California

Clean Water Act Compliance Office
August, 2011

Prepared by:
Luis Garcia-Bakarich
U.S. EPA Clean Water Act Compliance Office
75 Hawthorne St.
San Francisco, CA 94105

Approved by: Eugenia McNaughton Date: 8/24/11
Eugenia McNaughton, Ph.D., Quality Assurance Manager

Approved by: Luis Garcia-Bakarich Date: 8/25/2011
Luis Garcia-Bakarich, Life Scientist, Clean Water Act Compliance Office

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1 Introduction

The United States Environmental Protection Agency (EPA) Region 9 Laboratory, Field, and Biology (FAB) Team prepared this Sampling and Analysis Plan (SAP) at the request of the EPA Region 9 Clean Water Act (CWA) Compliance Office. The purpose of the SAP is to specify the sampling strategy, chemical testing, and number samples anticipated. This SAP is applicable to the collection of residue samples from the operating and maintenance of a ship loading conveyor at the Sims Metals Management (Sims) Facility, Redwood City, California. This one-time sampling event will occur on August 19, 2011. The EPA will conduct sample analysis at the EPA Region 9 Laboratory in Richmond, California.

2 Site Location and Background

Sims is located at 699 Seaport Blvd Redwood City, California (See Figure 1). On March 4, 2011, a NPDES Storm Water Compliance Evaluation Inspection (CEI) was conducted by inspectors from the EPA Region 9 CWA Compliance Office, accompanied by representatives from the San Mateo County Environmental Health Services Division. The purpose of the CEI was to determine the compliance of the Sims facility with CWA section 402 NPDES Industrial Storm Water Permit.

During the inspection, EPA noted numerous areas of accumulated residue from the operation and maintenance of a conveyor that loads sea-faring ships with shredded automobiles and other scrap metal. Residues accumulate from the ship loading operations and maintenance of the conveyor. The residues can contain metals such as copper, lead, chromium, and mercury, and other chemicals such as PAHs and PCBs. The residue was noted in multiple locations where it either has been or is likely to discharge to waters of the US.

3 Scope and Objectives

The scope of the sampling includes analysis of residue samples for metals specifically, cadmium, chromium, copper, lead, mercury, zinc, polynuclear aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). The objective of the sampling is to determine the concentration of the contaminants listed below in the residue. The table below presents the methods, analytes and reporting limits.

PAHs by 8270D/SOP 375	RL (ug/kg)	PCBs by 8082/SOP 335	RL (ug/kg)
Naphthalene	2.5	Aroclor 1016	3.0
2-Methylnaphthalene	2.5	Aroclor 1221	6.0
1-Methylnaphthalene	2.5	Aroclor 1232	3.0
Acenaphthylene	2.5	Aroclor 1242	3.0
Acenaphthene	2.5	Aroclor 1248	3.0
Fluorene	2.5	Aroclor 1254	3.0
Phenanthrene	2.5	Aroclor 1260	3.0
Anthracene	2.5	Aroclor 1262	3.0
Fluoranthene	2.5	Aroclor 1268	3.0

PAHs by 8270D/SOP 375	RL (ug/kg)	Metals by 6020B	RL (mg/kg)
Pyrene	2.5	Cadmium	0.50
Benzo(a)anthracene	2.5	Chromium	1.0
Chrysene	2.5	Copper	4.0
Benzo(b)fluoranthene	2.5	Lead	3.0
Benzo(k)fluoranthene	2.5	Zinc	8.0
Benzo(a)pyrene	2.5	Mercury by 7473	
Indeno(1,2,3-cd)pyrene	2.5	Mercury	0.025
Dibenz(a,h)anthracene	2.5		
Benzo(g,h,i)perylene	2.5		

4 Sampling Strategy

4.1 Number of Samples

The field team will use a biased judgmental sampling approach to collect the residue samples. The sampling team will choose sample locations in the field based on visual observation. Samples will generally be obtained from public roads, rail road right of way, and shoreline under the municipal control of the Port of Redwood City. Samples may be collected from structures under the exclusive control of the Sims facility. The number of samples collected will depend on the distribution of the residue encountered, and the availability of the material. EPA does not anticipate that the number of discrete grab samples collected will exceed ten. EPA will label sample containers alphabetically as follows:

<u>Field ID</u>	<u>Description</u>
A	Material from area 1
B	Material from area 2
C	Material from area 3
D	Material from area 4
E	Material from area 5
F	Material from area 6
G	Material from area 7
H	Material from area 8
I	Material from area 9
J	Material from area 10
X1	Duplicate from one of the areas above

EPA may obtain samples of other materials (storm water discharge, rinsate) at the discretion of the EPA Inspector based on observations made at the time of sample collection.

5 Field Methods and Procedures

5.1 Sample Collection

The EPA will utilize a grab sampling approach collecting sample from the surface to a depth

Sims SAP 8.19.11

of approximately one inch. The sampler will place the material directly into the pre-labeled, 16 ounce amber glass jars using a single-use, disposable plastic scoop, take a GPS location of the sample location and note the time of collection. The EPA will transport samples to the laboratory under chain-of-custody (COC) and deliver to the laboratory the following day. No chemical preservation is required.

5.2 Quality Control Samples

Appropriate quality control (QC) samples are additional volume at one location for matrix spike/matrix spike duplicate purposes, and a separate discrete container for a field duplicate comparison. No trip blank is required.

5.3 Methods of Analysis

The EPA will analyze the samples for cadmium, chromium, copper, lead, and zinc using 6010C/SOP503, Inductively Coupled Argon Plasma (ICAP), mercury by 7473/SOP535 polychlorinated biphenyls (PCBs) by 8082C/SOP 335 and polynuclear aromatic hydrocarbons (PAHs) at the Region 9 Laboratory in Richmond, California. The laboratory manually reviews data in accordance with SOPs 846 Internal Laboratory EPA Review of ESAT and EPA Generated Data, and 845 Final Chemistry Review and Report Generation.

5.4 Packing and Shipping

The EPA will ship samples in coolers at ambient temperature. Cooling the samples to $4\pm2^{\circ}\text{C}$ is unnecessary. The samples will remain in the custody of the EPA representative until delivery to the laboratory. A COC form will accompany the samples from the point of origin to the designated laboratory in a plastic bag inside of the cooler. The cooler will have a custody seal affixed across the cooler lid, and on the Ziplock® bag(s) containing the samples prior to shipment.

6 Data Evaluation

The laboratory will report the results of the total analysis on a dry-weight basis.

7 Personnel

Mr. Luis Garcia-Bakarich of the EPA Region 9 CWA Enforcement Office and Mr. Greg Nagle of the EPA Region 9 FAB Team will perform the fieldwork. Mr. Garcia-Bakarich is responsible for coordinating field activities with the Sims, Port of Redwood City, San Mateo County, and for identifying the specific sample locations and any photo-documentation. Mr. Nagle is responsible all health and safety, sample collection, chain-of-custody, sample shipment and laboratory coordination related activities.

8 Health and Safety

The EPA prepared a brief Health and Safety Plan (HSP) provided as Attachment A. The EPA will be review the HSP with all field participants' prior initiation of sampling activities.

9 Schedule

Field sampling activities will occur on August 19, 2011 and should be complete within two to three hours time. The Region 9 FAB Team will submit a Field Report to the CWA Compliance Office within 21 days of sampling and the laboratory will report the results of the analysis within 30 business days of sample receipt.

10 References

EPA, Test Methods for Evaluating Solid Waste, Volume II: Field Manual, Physical/Chemical Methods, November 1986, Office of Solid Waste and Emergency Response, SW-846.

EPA, Sampling and Analytical Plan (SAP) Guidance and Template Version 1, EPA Analytical Services Used. R9QA/001.1 (April 2000).

Figure 1 – Sims Facility



Area	Rationale
1	Drainage swale downwind of the shredding mill.
2	Conveyor tensioner location near CB 15/16; accumulated residue observed 3.4.11
3	Near CB 14; accumulated residue observed 3.4.11
4	Shore line south of conveyor and structures, accumulated residue observed 3.4.11
5	Shoreline north of conveyor and structures, accumulated residue observed 3.4.11
6	Platform that underlies conveyor, accumulated residue observed 3.4.11
7	Near CB 12, potential industrial activity noted in this vicinity
8	Near CB-13, potential industrial activity noted in this vicinity
9	Local representative sample south of the site
10	Local representative sample north of the site

Attachment A – Heath and Safety Plan

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
MANAGEMENT TECHNICAL SERVICES DIVISION
HEALTH AND SAFETY OFFICE

SITE SAFETY AND HEALTH PLAN

I. DESCRIPTION OF FIELD ACTIVITY

Site: Sims Facility

Site Phone: (510) 912- 2161 Field Phone

Location: 699 Seaport Blvd Redwood City, CA

Date of Proposed Sampling: August 19, 2011

SSHHP Prepared By: Greg Nagle

Purpose/Objective: To collect residue samples for the CWA Compliance Office to determine the toxicity of pollutants that have been discharged or have potential to be discharged to waters of the US.

Background Review: Complete Preliminary X

Background Material Attached: Yes No X

Indicate which of the following information source(S) were consulted: State and/or Local Agency, State and/or Federal OSHA, NIOSH, EPA files, Site Operator and Local Fire Department.

Sims Metal Management
Port of Redwood City
San Mateo County Health Dept.

Overall Hazard Summary: Low X High ____ Medium ____ Unknown ____

Route of Exposure: Inhalation X Skin Contact X Ingestion ____

Map or Sketch Attached: Yes X No ____

II SITE CHARACTERISTICS

A. **Facility Description:** Waste and scrap metal shredding and wholesale.

B. **Status:** Active X Inactive _____ Unknown _____

C. **History:** (Include accidents or injuries on-site, complaints from public, previous releases and agency reports):

EPA CWA inspectors visited the Sims facility with San Mateo County personnel to perform a storm water inspection and accumulated residue was observed. Two parties related to the EPA that a neighbor had filed a 60-day notice of intent to sue under the Clean Air Act for emissions of dust and residue from the metal shredding operation resulting in the deposition of lead laden material in ponds used to produce food-grade salt.

D. **Is personal protective equipment required by Facility/Site Management? List equipment and specific areas where required:**

EPA personnel will don modified level D personal protective equipment (i.e., nitrile gloves, safety glasses, steel toed boots, hard hats, and high visibility vests) while collecting the samples. EPA staff will also wear dust masks around their necks for easy access and don in the event of dusty conditions.

E. **Are employees working at the facility/site monitored for exposure to airborne contaminants? If so, describe situation:** Unknown

F. **Do employees working at the facility/site participate in an occupational medical monitoring program? If so, are special biological tests performed or Biologic Limit Values (BLVs) used?:** Unknown

G. **Describe medical monitoring procedures for evidence of personnel exposure:** Unknown

H. **Is there an on-site emergency alarm system? If so, describe alarm:** Unknown.

I. **Is there an eyewash/safety shower available on site? If not, explain alternate procedures (where applicable):** Yes.

III. HEALTH AND SAFETY CONSIDERATIONS

A. **Hazard Assessment (Toxic effects, TLV, odor threshold, reactivity, stability, flammability, and operations hazards with sampling decontamination, etc.) Attach Material Safety Data Sheets for compounds:** NA

Areas of Concern	Hazard Potential	Precautions
Explosive	<u>LOW</u>	<u>EPA staff will work in pairs. No confined spaces.</u>
Oxygen Deficient (e.g., confined spaces)	<u>NA</u>	
Particulates	<u>LOW</u>	<u>EPA staff will also wear dust masks around their necks for easy access and don in the event of dusty conditions.</u>
Toxic Gases/Vapors:	<u>NA</u>	
Skin/Eye Contact:	<u>LOW</u>	<u>Safety glasses and nitrile gloves will be worn when sampling and will be removed and disposed on-site. Hands will be thoroughly washed prior to eating or drinking.</u>
Ultraviolet (UV):	<u>LOW</u>	<u>High protection sunscreen and UV rated sunglasses will be worn.</u>
Heat Stress:	<u>MED</u>	<u>Drink lots of fluids. Avoid extended workperiods in direct sun. Use sunscreen and wear hat. Field work will be completed within 1-2 hours.</u>
Falling Objects:	<u>MED</u>	<u>EPA staff will be collecting samples under a conveyor system used to load shredded metal onto ships. It is uncertain if loading operations or maintenance will be underway during sampling event, but hazard potential from falling objects will be elevated if so. EPA staff will be wearing hard hats and may act as a spotter to provide warning if falling objects are observed while the other collects the samples.</u>
Falls: pits, ponds, stepping in sediments; elevated work places.	<u>MED</u>	<u>EPA staff will be collecting samples around railroad tracks, along a rocky shoreline, and on an over-water platform.</u>
Radioactive Hazard:	Hazard?	Exposure Rate
Background	<u>NO</u>	
Alpha Particles	<u>NO</u>	
Beta particles	<u>NO</u>	

Gamma particles NO

IV. WORKPLAN INSTRUCTIONS

Hazardous Substance Sampling and Field Investigations

Level of protection: A _____ B _____ C _____ D X

Modifications: Nitrile gloves, steel toed, steel boots, safety glasses, and high visibility vests will be worn during sampling.

Surveillance Equipment and Materials: N/A

Entry procedures:

The facility and Port personnel will be consulted about potentially hazardous areas and any special precautions that should be taken.

Field Investigation and Decontamination Procedures: N/A. Only disposable equipment will be used. No decon.

Perimeter Establishment: Zones of Contamination Identified? NA

Public perimeter identified? NA

Map/Sketch Attached? NA

EPA Sampling Personnel

Name	Field Duties	Cert. Level	Initial 24/40 train.	Last 8-hr training	Last Resp. fit-test	Medical exam
Greg Nagle	Sampling	I	6/93	02/11	6/93	10/09

E. Work Schedule/Limitations: Heat Stress

F. Communications: Cell Phone (707) 373-7801

G. Spill Containment Procedures: (loose particulate absorbent, spill control pillows, spill pads/blankets): NA

H. Decontamination Procedures: (contaminated protective clothing, instruments, equipment, etc): NA – Only single use disposable equipment will be used. PPE disposed of on-site.

Disposal Procedures: (contaminated equipment, supplies, disposal items, waste water, etc.): All used gloves and miscellaneous garbage will be collected in plastic garbage bags and disposed on-site.

VII. EMERGENCY PRECAUTIONS:

A. Nearest Hospital Emergency Room. Note: for remote locations, give directions to hospital and attach map.

Name: Kaiser Permanente
Address: 1150 Veterans Blvd Redwood City, CA
Phone: (650) 299-2000

B. Emergency Services (Telephone Numbers)

Fire: 911
Police: 911
Ambulance: 911

C. Health and Safety Office:

Jeff Woodlee (415) 972-3740

E. Regional Radiation Representative:

Mike Bandrowski (415)947-4194
Steve Dean (415)972-3071



**United States Environmental Protection Agency
Region 9 Laboratory**

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 10/4/2011
Subject: Analytical Testing Results - Project R11W09
SDG: 11241A
From: Brenda Bettencourt, Director
EPA Region 9 Laboratory *Bettencourt*
MTS-2
To: Luis Garcia-Bakarich
CWA Compliance Office
WTR-7

Attached are the results from the analysis of samples from the **Sims Metal Management** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Mercury by CVAA
Percent Solids

Metals by ICP



United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 10/04/11 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
SIMS-1	1108072-01	Soil	08/25/11 10:30	08/25/11 15:30
SIMS-2	1108072-02	Soil	08/25/11 10:45	08/25/11 15:30
SIMS-3	1108072-03	Soil	08/25/11 11:00	08/25/11 15:30
SIMS-CB12	1108072-04	Soil	08/25/11 11:30	08/25/11 15:30
SIMS-CB13	1108072-05	Soil	08/25/11 11:45	08/25/11 15:30
SIMS-CB14	1108072-06	Soil	08/25/11 12:00	08/25/11 15:30
SIMS-CB15/16	1108072-07	Soil	08/25/11 12:15	08/25/11 15:30
SIMS-DD	1108072-08	Soil	08/25/11 13:00	08/25/11 15:30

SDG ID 11241A

Samples were prepared by removing fibers, wires, foam, twigs and leafy material. Samples 1108072-02 and -05 had a minimal amount of remaining soil to digest.

Work Order(s)

1108072



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 10/04/11 16:03

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-01 Soil - Sampled: 08/25/11 10:30								
Sample ID: SIMS-1 Metals by EPA 6000/7000 Series Methods								
Mercury		9.3		0.027	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	72		5.3	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		1,200		1.1	"	"	"	09/19/11 6010C/SOP503
Copper		4,100		4.2	"	"	"	6010C/SOP503
Lead		1,500		3.2	"	"	"	6010C/SOP503
Zinc	REI	27,000		85	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-1 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		94		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-02 Soil - Sampled: 08/25/11 10:45								
Sample ID: SIMS-2 Metals by EPA 6000/7000 Series Methods								
Mercury		2.8		0.026	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	130		5.3	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		730		1.1	"	"	"	09/19/11 6010C/SOP503
Copper		1,800		4.2	"	"	"	6010C/SOP503
Lead		2,300		3.2	"	"	"	6010C/SOP503
Zinc	REI	39,000		84	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-2 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		95		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-03 Soil - Sampled: 08/25/11 11:00								
Sample ID: SIMS-3 Metals by EPA 6000/7000 Series Methods								
Mercury		11		0.028	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	28		5.5	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		1,200		1.1	"	"	"	09/19/11 6010C/SOP503
Copper		4,300		4.4	"	"	"	6010C/SOP503
Lead		1,100		3.3	"	"	"	6010C/SOP503
Zinc	REI	14,000		88	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-3 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		90		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-04 Soil - Sampled: 08/25/11 11:30								
Sample ID: SIMS-CB12 Metals by EPA 6000/7000 Series Methods								
Mercury		1.3	J, Q4, Q6	0.025	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium		15		0.50	"	B110019	09/07/11	09/19/11 6010C/SOP503
Chromium		130		1	"	"	"	6010C/SOP503
Copper		880		4	"	"	"	6010C/SOP503
Lead		440		3	"	"	"	6010C/SOP503
Zinc	REI	6,800		81	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-CB12 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		99		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-05 Soil - Sampled: 08/25/11 11:45								
Sample ID: SIMS-CB13 Metals by EPA 6000/7000 Series Methods								



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Luis Garcia-Bakarich	CWA Compliance Office	SDG: 11241A
Project Number: R11W09	75 Hawthorne Street	Reported: 10/04/11 16:03
Project: Sims Metal Management	San Francisco CA, 94105	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-05								
Sample ID: SIMS-CB13								
Soil - Sampled: 08/25/11 11:45								
Metals by EPA 6000/7000 Series Methods								
Mercury		1.3		0.025	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	19		5	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		180	J, Q4, Q6	1	"	"	"	09/19/11 6010C/SOP503
Copper		590		4	"	"	"	6010C/SOP503
Lead		650		3	"	"	"	6010C/SOP503
Zinc	REI	8,000		81	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-CB13								
% Solids								
		99		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Conventional Chemistry Parameters by APHA/EPA Methods								
Lab ID: 1108072-06								
Sample ID: SIMS-CB14								
Soil - Sampled: 08/25/11 12:00								
Metals by EPA 6000/7000 Series Methods								
Mercury		6.3		0.026	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	57		5.1	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		760		1	"	"	"	09/19/11 6010C/SOP503
Copper		2,500		4.1	"	"	"	6010C/SOP503
Lead		1,200		3.1	"	"	"	6010C/SOP503
Zinc	REI	24,000		82	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-CB14								
% Solids								
		97		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Conventional Chemistry Parameters by APHA/EPA Methods								
Lab ID: 1108072-07								
Sample ID: SIMS-CB15/16								
Soil - Sampled: 08/25/11 12:15								
Metals by EPA 6000/7000 Series Methods								
Mercury		2.3		0.036	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	REI	47		7.2	"	B110019	09/07/11	09/20/11 6010C/SOP503
Chromium		540		1.4	"	"	"	09/19/11 6010C/SOP503
Copper		1,100		5.8	"	"	"	6010C/SOP503
Lead		1,100		4.3	"	"	"	6010C/SOP503
Zinc	REI	23,000		120	"	"	"	09/20/11 6010C/SOP503
Sample ID: SIMS-CB15/16								
% Solids								
		69		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Conventional Chemistry Parameters by APHA/EPA Methods								
Lab ID: 1108072-08								
Sample ID: SIMS-DD								
Soil - Sampled: 08/25/11 13:00								
Metals by EPA 6000/7000 Series Methods								
Mercury		8.0		0.054	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium		15		1.1	"	B110019	09/07/11	09/19/11 6010C/SOP503
Chromium		100		2.2	"	"	"	6010C/SOP503
Copper		320		8.6	"	"	"	6010C/SOP503
Lead		540		6.5	"	"	"	6010C/SOP503
Zinc		3,900		17	"	"	"	6010C/SOP503
Sample ID: SIMS-DD								
% Solids								
		46		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Conventional Chemistry Parameters by APHA/EPA Methods								



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 10/04/11 16:03

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110010 - 7473 Hg Prep - Mercury						Prepared & Analyzed: 09/02/11				
						Metals by EPA 6000/7000 Series Methods - Quality Control				
Blank (B110010-BLK1)										
Mercury	ND	U		0.025 mg/kg wet						
Matrix Spike (B110010-MS1)										
			Source: 1108072-04							
Mercury	2.71			0.025 mg/kg dry	1.15	1.27	126	80-120		20
Matrix Spike Dup (B110010-MSD1)										
			Source: 1108072-04							
Mercury	2.3			0.025 mg/kg dry	1.08	1.27	95	80-120	28	20
Reference (B110010-SRM1)										
Mercury	1.12			0.025 mg/kg wet	1.10		101	80-120		
Batch B110019 - 3050B Sld Acid Dig - Metals by 6010						Prepared: 09/07/11 Analyzed: 09/19/11				
						Metals by EPA 6000/7000 Series Methods - Quality Control				
Blank (B110019-BLK1)										
Cadmium	ND	U		0.5 mg/kg wet						
Chromium	ND	U		1 "						
Copper	ND	U		4 "						
Lead	ND	U		3 "						
Zinc	ND	U		8 "						
Matrix Spike (B110019-MS1)										
			Source: 1108072-05							
Chromium	198			1 mg/kg dry	39.6	180	46	75-125		20
Copper	671	Q10		4 "	49.5	595	155	75-125		20
Lead	657	Q10		3 "	99.0	649	8	75-125		20
Matrix Spike (B110019-MS2)										
			Source: 1108072-05RE1							
Cadmium	30			5 mg/kg dry	9.90	18.7	115	75-125		20
Zinc	8,300	Q10		81 "	99.0	7,960	336	75-125		20
Matrix Spike Dup (B110019-MSD1)										
			Source: 1108072-05							
Chromium	237			1 mg/kg dry	40.0	180	142	75-125	18	20
Copper	922	Q10		4 "	50.0	595	655	75-125	31	20
Lead	684	Q10		3 "	99.9	649	35	75-125	4	20
Matrix Spike Dup (B110019-MSD2)										
			Source: 1108072-05RE1							
Cadmium	29.1			5 mg/kg dry	9.99	18.7	104	75-125	3	20
Zinc	8,570	Q10		81 "	99.9	7,960	609	75-125	3	20
Reference (B110019-SRM1)										
Antimony	57.7			2 mg/kg wet	66.0		87	41.2-158		
Arsenic	276			2 "	253		109	60.9-139		
Barium	ND	U		5 "	1.60			62.5-138		
Beryllium	4.99			0.1 "	4.90		102	61.2-139		
Cadmium	10.3			0.5 "	10.9		95	70.6-128		



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Project: Sims Metal Management

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SDG: 11241A
Reported: 10/04/11 16:03

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110019 - 3050B Sld Acid Dig - Metals by 6010					Prepared: 09/07/11 Analyzed: 09/19/11					
Reference (B110019-SRM1)					Metals by EPA 6000/7000 Series Methods - Quality Control					
Calcium	46,900			100 "	44200		106	68.6-132		
Chromium	29.1			1 "	27.1		107	68.3-132		
Cobalt	37.2			2 "	37.4		99	64.7-135		
Copper	1,580			4 "	1770		89	74.6-126		
Iron	7,060			100 "	6470		109	66.2-134		
Lead	57.6			3 "	56.9		101	72.8-127		
Magnesium	27,800			50 "	29200		95	70.2-130		
Manganese	60.3			5 "	61.0		99	68.2-132		
Nickel	16			5 "	16.3		98	55.2-145		
Potassium	ND	U		500 "	39.7			0-215		
Selenium	12.6			2 "	10.0		126	41-159		
Silver	6.12			1 "	5.90		104	45.8-154		
Thallium	7.22			5 "	9.50		76	30.5-169		
Vanadium	18.4			2 "	17.6		105	65.9-135		
Zinc	47.8			8 "	47.5		101	43.2-157		
Reference (B110019-SRM2)										
Sodium	ND	U		50 mg/kg wet	72.5			0-298		
Batch B110022 - Solids, Dry Weight (Prep) - Solids, Dry Weight					Prepared: 09/07/11 Analyzed: 09/08/11					
Blank (B110022-BLK1)					Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control					
% Solids	ND	U		1 %						
Duplicate (B110022-DUP1)					Source: 1108072-03					
% Solids	90			1 %		90			0.07	20



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Qualifiers and Comments

- Q6 Matrix spike/matrix spike duplicate precision criteria were not met for this analyte (see MS/MSD results for this batch in QC summary).
- Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
- Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
- J The reported result for this analyte should be considered an estimated value.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

Section 1.1 Introduction

The purpose of this section is to provide a brief overview of the project and its objectives.

The project aims to develop a new system that will improve the efficiency of the current process.

The system will be designed to handle a large volume of data and to provide accurate results.

The system will be implemented in a way that minimizes the risk of failure.

The system will be tested thoroughly before being deployed to the production environment.

The system will be monitored closely after deployment to ensure that it is performing as expected.

The system will be updated regularly to keep it current and to address any issues that arise.

The system will be supported by a team of experts who will provide assistance and guidance as needed.

The system will be documented thoroughly to ensure that it can be maintained and updated in the future.

The system will be evaluated regularly to determine its effectiveness and to identify areas for improvement.

The system will be used to improve the efficiency of the current process and to provide accurate results.

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**United States Environmental Protection Agency
Region 9 Laboratory**

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 9/29/2011

Subject: Analytical Testing Results - Project R11W09
SDG: 11241A

From: Brenda Bettencourt, Director
EPA Region 9 Laboratory *B. Bettencourt*
MTS-2

To: Luis Garcia-Bakarich
CWA Compliance Office
WTR-7

Attached are the results from the analysis of samples from the **Sims Metal Management** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

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If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Percent Solids

Semivolatile Organic Compounds by GC/MS

Semivolatile Organic Compounds by GC/MS



United States Environmental Protection Agency
Region 9 Laboratory

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SDG: 11241A
Reported: 09/29/11 14:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
SIMS-1	1108072-01	Soil	08/25/11 10:30	08/25/11 15:30
SIMS-2	1108072-02	Soil	08/25/11 10:45	08/25/11 15:30
SIMS-3	1108072-03	Soil	08/25/11 11:00	08/25/11 15:30
SIMS-CB12	1108072-04	Soil	08/25/11 11:30	08/25/11 15:30
SIMS-CB13	1108072-05	Soil	08/25/11 11:45	08/25/11 15:30
SIMS-CB14	1108072-06	Soil	08/25/11 12:00	08/25/11 15:30
SIMS-CB15/16	1108072-07	Soil	08/25/11 12:15	08/25/11 15:30
SIMS-DD	1108072-08	Soil	08/25/11 13:00	08/25/11 15:30

SDG ID 11241A

Sample extracts were dark and viscous. All samples and MS/MSDs were run at a 10X dilution to prevent contamination of the analytical instrumentation.

Several analytes in the MS/MSD didn't meet QC recovery criteria. Data is flagged accordingly.

Work Order(s)

1108072



United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone: (510) 412-2300 Fax: (510) 412-2302

Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1108072-01		Soil - Sampled: 08/25/11 10:30							
Sample ID: SIMS-1		Semivolatile Organic Compounds by EPA Method 8270D							
Naphthalene	REI	ND	U	350	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
2-Methylnaphthalene	REI	ND	U	350	"	"	"	"	8270D/SOP315
1-Methylnaphthalene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Acenaphthylene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Acenaphthene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Fluorene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Phenanthrene	REI	190	C1, J	350	"	"	"	"	8270D/SOP315
Anthracene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Fluoranthene	REI	290	C1, J	350	"	"	"	"	8270D/SOP315
Pyrene		ND	U	3,500	"	"	"	09/08/11	8270D/SOP315
Pyrene	REI	370		350	"	"	"	09/08/11	8270D/SOP315
Benzo(a)anthracene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Chrysene	REI	270	C1, J	350	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	REI	290	C1, J	350	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene	REI	ND	U	350	"	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene	REI	230	C1, J	350	"	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol	REI	64 %		20-118%		"	"	"	
Surrogate: Phenol-d5	REI	66 %		20-117%		"	"	"	
Surrogate: 2-Chlorophenol-d4	REI	67 %		20-111%		"	"	"	
Surrogate: 1,2-Dichlorobenzene-d4	REI	65 %		20-110%		"	"	"	
Surrogate: Nitrobenzene-d5	REI	55 %		20-131%		"	"	"	
Surrogate: 2-Fluorobiphenyl	REI	76 %		31-110%		"	"	"	
Surrogate: 2,4,6-Tribromophenol	REI	80 %		20-144%		"	"	"	
Surrogate: Terphenyl-d14	REI	86 %		20-125%		"	"	"	

Sample ID: SIMS-1	Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids	94	I	%	B1H0022	09/07/11	09/08/11	3550C/SOP460		

Lab ID: 1108072-02

Soil - Sampled: 08/25/11 10:45

Sample ID: SIMS-2

		Semivolatile Organic Compounds by EPA Method 8270D							
Naphthalene		ND	U	350	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
2-Methylnaphthalene		ND	U	350	"	"	"	"	8270D/SOP315
1-Methylnaphthalene		ND	U	350	"	"	"	"	8270D/SOP315
Acenaphthylene		ND	U	350	"	"	"	"	8270D/SOP315
Acenaphthene		ND	U	350	"	"	"	"	8270D/SOP315
Fluorene		ND	U	350	"	"	"	"	8270D/SOP315
Phenanthrene		ND	U	350	"	"	"	"	8270D/SOP315



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
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Lab ID: 1108072-02

Soil - Sampled: 08/25/11 10:45

Sample ID: SIMS-2

Semivolatile Organic Compounds by EPA Method 8270D								
Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method	
Anthracene	ND	U	350	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
Fluoranthene	320	Cl, J	350	"	"	"	"	8270D/SOP315
Pyrene	310	Cl, J	350	"	"	"	"	8270D/SOP315
Benzo(a)anthracene	ND	U	350	"	"	"	"	8270D/SOP315
Chrysene	240	Cl, J	350	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	280	Cl, J	350	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	ND	U	350	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	200	Cl, J	350	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	ND	U	350	"	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene	ND	U	350	"	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene	180	Cl, J	350	"	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol	34 %		20-118%		"	"	"	
Surrogate: Phenol-d5	37 %		20-117%		"	"	"	
Surrogate: 2-Chlorophenol-d4	36 %		20-111%		"	"	"	
Surrogate: 1,2-Dichlorobenzene-d4	38 %		20-110%		"	"	"	
Surrogate: Nitrobenzene-d5	30 %		20-131%		"	"	"	
Surrogate: 2-Fluorobiphenyl	45 %		31-110%		"	"	"	
Surrogate: 2,4,6-Tribromophenol	39 %		20-144%		"	"	"	
Surrogate: Terphenyl-d14	53 %		20-125%		"	"	"	

Sample ID: SIMS-2

Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids	95		1	%	B110022	09/07/11	09/08/11	3550C/SOP460

Lab ID: 1108072-03

Soil - Sampled: 08/25/11 11:00

Sample ID: SIMS-3

Semivolatile Organic Compounds by EPA Method 8270D								
Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method	
Naphthalene	ND	U	360	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
2-Methylnaphthalene	ND	U	360	"	"	"	"	8270D/SOP315
1-Methylnaphthalene	ND	U	360	"	"	"	"	8270D/SOP315
Acenaphthylene	ND	U	360	"	"	"	"	8270D/SOP315
Acenaphthene	ND	U	360	"	"	"	"	8270D/SOP315
Fluorene	ND	U	360	"	"	"	"	8270D/SOP315
Phenanthrene	440		360	"	"	"	"	8270D/SOP315
Anthracene	ND	U	360	"	"	"	"	8270D/SOP315
Fluoranthene	600		360	"	"	"	"	8270D/SOP315
Pyrene	740		360	"	"	"	"	8270D/SOP315
Benzo(a)anthracene	340	Cl, J	360	"	"	"	"	8270D/SOP315
Chrysene	500		360	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	520		360	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	220	Cl, J	360	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	330	Cl, J	360	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	280	Cl, J	360	"	"	"	"	8270D/SOP315

1108072 FINAL 09 29 11 1430



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-03						Soil - Sampled: 08/25/11 11:00		
Sample ID: SIMS-3						Semivolatile Organic Compounds by EPA Method 8270D		
Dibenz(a,h)anthracene		ND	U	360	ug/kg dry	B1H0161	08/31/11	09/08/11 8270D/SOP315
Benzo(g,h,i)perylene		390		360	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol		46 %		20-118%		"	"	"
Surrogate: Phenol-d5		51 %		20-117%		"	"	"
Surrogate: 2-Chlorophenol-d4		49 %		20-111%		"	"	"
Surrogate: 1,2-Dichlorobenzene-d4		45 %		20-110%		"	"	"
Surrogate: Nitrobenzene-d5		40 %		20-131%		"	"	"
Surrogate: 2-Fluorobiphenyl		58 %		31-110%		"	"	"
Surrogate: 2,4,6-Tribromophenol		71 %		20-144%		"	"	"
Surrogate: Terphenyl-d14		70 %		20-125%		"	"	"
Sample ID: SIMS-3						Conventional Chemistry Parameters by APHA/EPA Methods		
% Solids		90		1	%	B1H0022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-04						Soil - Sampled: 08/25/11 11:30		
Sample ID: SIMS-CB12						Semivolatile Organic Compounds by EPA Method 8270D		
Naphthalene		ND	U	330	ug/kg dry	B1H0161	08/31/11	09/08/11 8270D/SOP315
2-Methylnaphthalene		ND	U	330	"	"	"	8270D/SOP315
1-Methylnaphthalene		ND	U	330	"	"	"	8270D/SOP315
Acenaphthylene		ND	U	330	"	"	"	8270D/SOP315
Acenaphthene		ND	U	330	"	"	"	8270D/SOP315
Fluorene		ND	U	330	"	"	"	8270D/SOP315
Phenanthrene		390		330	"	"	"	8270D/SOP315
Anthracene		ND	U	330	"	"	"	8270D/SOP315
Fluoranthene		700		330	"	"	"	8270D/SOP315
Pyrene		670		330	"	"	"	8270D/SOP315
Benzo(a)anthracene		300	Cl, J	330	"	"	"	8270D/SOP315
Chrysene		490		330	"	"	"	8270D/SOP315
Benzo(b)fluoranthene		470		330	"	"	"	8270D/SOP315
Benzo(k)fluoranthene		240	Cl, J	330	"	"	"	8270D/SOP315
Benzo(a)pyrene		260	Cl, J	330	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene		190	Cl, J	330	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene		ND	U	330	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene		240	Cl, J	330	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol		43 %		20-118%		"	"	"
Surrogate: Phenol-d5		48 %		20-117%		"	"	"
Surrogate: 2-Chlorophenol-d4		47 %		20-111%		"	"	"
Surrogate: 1,2-Dichlorobenzene-d4		46 %		20-110%		"	"	"
Surrogate: Nitrobenzene-d5		40 %		20-131%		"	"	"
Surrogate: 2-Fluorobiphenyl		57 %		31-110%		"	"	"



United States Environmental Protection Agency
Region 9 Laboratory

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Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-04								
Sample ID: SIMS-CB12								
Surrogate: 2,4,6-Tribromophenol		65 %		20-144%				Semivolatiles Organic Compounds by EPA Method 8270D
Surrogate: Terphenyl-d14		66 %		20-125%				B1H0161 08/31/11 09/08/11
Sample ID: SIMS-CB12								
% Solids		99		1	%	B110022	09/07/11 09/08/11	Conventional Chemistry Parameters by APHA/EPA Methods 3550C/SOP460
Lab ID: 1108072-05								
Sample ID: SIMS-CB13								
Naphthalene		ND	U	500	ug/kg dry	B1H0161	08/31/11 09/08/11	Semivolatiles Organic Compounds by EPA Method 8270D 8270D/SOP315
2-Methylnaphthalene		ND	U	500	"	"	"	8270D/SOP315
1-Methylnaphthalene		ND	U	500	"	"	"	8270D/SOP315
Acenaphthylene		ND	U	500	"	"	"	8270D/SOP315
Acenaphthene		ND	U	500	"	"	"	8270D/SOP315
Fluorene		ND	U	500	"	"	"	8270D/SOP315
Phenanthrene		570		500	"	"	"	8270D/SOP315
Anthracene		ND	U	500	"	"	"	8270D/SOP315
Fluoranthene		840		500	"	"	"	8270D/SOP315
Pyrene		950		500	"	"	"	8270D/SOP315
Benzo(a)anthracene		400	C1, J	500	"	"	"	8270D/SOP315
Chrysene		690		500	"	"	"	8270D/SOP315
Benzo(b)fluoranthene		700		500	"	"	"	8270D/SOP315
Benzo(k)fluoranthene		270	C1, J	500	"	"	"	8270D/SOP315
Benzo(a)pyrene		350	C1, J	500	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene		260	C1, J	500	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene		ND	U	500	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene		290	C1, J	500	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol		52 %		20-118%		"	"	"
Surrogate: Phenol-d5		55 %		20-117%		"	"	"
Surrogate: 2-Chlorophenol-d4		54 %		20-111%		"	"	"
Surrogate: 1,2-Dichlorobenzene-d4		57 %		20-110%		"	"	"
Surrogate: Nitrobenzene-d5		47 %		20-131%		"	"	"
Surrogate: 2-Fluorobiphenyl		63 %		31-110%		"	"	"
Surrogate: 2,4,6-Tribromophenol		69 %		20-144%		"	"	"
Surrogate: Terphenyl-d14		75 %		20-125%		"	"	"
Sample ID: SIMS-CB13								
% Solids		99		1	%	B110022	09/07/11 09/08/11	Conventional Chemistry Parameters by APHA/EPA Methods 3550C/SOP460
Lab ID: 1108072-06								
Sample ID: SIMS-CB14								
Naphthalene	REI	ND	U	340	ug/kg dry	B1H0161	08/31/11 09/12/11	Semivolatiles Organic Compounds by EPA Method 8270D 8270D/SOP315
2-Methylnaphthalene	REI	ND	U	340	"	"	"	8270D/SOP315



United States Environmental Protection Agency Region 9 Laboratory

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Project: Sims Metal Management

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75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
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Lab ID: 1108072-06

Soil - Sampled: 08/25/11 12:00

Sample ID: SIMS-CB14

Semivolatile Organic Compounds by EPA Method 8270D								
1-Methylnaphthalene	RE1	ND	U	340	ug/kg dry	B1H0161	08/31/11	09/12/11 8270D/SOP315
Acenaphthylene	RE1	ND	J, Q4, U	340	"	"	"	8270D/SOP315
Acenaphthene	RE1	ND	U	340	"	"	"	8270D/SOP315
Fluorene	RE1	ND	U	340	"	"	"	8270D/SOP315
Phenanthrene	RE1	550	J, Q4	340	"	"	"	8270D/SOP315
Anthracene	RE1	ND	J, Q4, U	340	"	"	"	8270D/SOP315
Fluoranthene	RE1	980	J, Q10	340	"	"	"	8270D/SOP315
Pyrene	RE1	1,400	J, Q10	340	"	"	"	8270D/SOP315
Benzo(a)anthracene	RE1	520	J, Q4	340	"	"	"	8270D/SOP315
Chrysene	RE1	790	J, Q4	340	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	RE1	770	J, Q4	340	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	RE1	310	C1, J, Q4	340	"	"	"	8270D/SOP315
Benzo(a)pyrene	RE1	480	J, Q4	340	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	RE1	330	C1, J, Q4	340	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene	RE1	ND	U	340	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene	RE1	380	J, Q4	340	"	"	"	8270D/SOP315
Surrogate: 2-Fluorophenol	RE1	52 %	20-118%			"	"	"
Surrogate: Phenol-d5	RE1	56 %	20-117%			"	"	"
Surrogate: 2-Chlorophenol-d4	RE1	58 %	20-111%			"	"	"
Surrogate: 1,2-Dichlorobenzene-d4	RE1	56 %	20-110%			"	"	"
Surrogate: Nitrobenzene-d5	RE1	48 %	20-131%			"	"	"
Surrogate: 2-Fluorobiphenyl	RE1	68 %	31-110%			"	"	"
Surrogate: 2,4,6-Tribromophenol	RE1	69 %	20-144%			"	"	"
Surrogate: Terphenyl-d14	RE1	84 %	20-125%			"	"	"

Sample ID: SIMS-CB14

Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids	97	1	%	B110022	09/07/11	09/08/11	3550C/SOP460	

Lab ID: 1108072-07

Soil - Sampled: 08/25/11 12:15

Sample ID: SIMS-CB15/16

Semivolatile Organic Compounds by EPA Method 8270D								
Naphthalene		ND	U	560	ug/kg dry	B1H0161	08/31/11	09/08/11 8270D/SOP315
2-Methylnaphthalene		ND	U	560	"	"	"	8270D/SOP315
1-Methylnaphthalene		ND	U	560	"	"	"	8270D/SOP315
Acenaphthylene		ND	U	560	"	"	"	8270D/SOP315
Acenaphthene		ND	U	560	"	"	"	8270D/SOP315
Fluorene		ND	U	560	"	"	"	8270D/SOP315
Phenanthrene		330	C1, J	560	"	"	"	8270D/SOP315
Anthracene		ND	U	560	"	"	"	8270D/SOP315
Fluoranthene		460	C1, J	560	"	"	"	8270D/SOP315
Pyrene		610		560	"	"	"	8270D/SOP315



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Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
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Lab ID: 1108072-07

Soil - Sampled: 08/25/11 12:15

Sample ID: SIMS-CB15/16

Semivolatile Organic Compounds by EPA Method 8270D

Benzo(a)anthracene	290	Cl, J	560	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
Chrysene	420	Cl, J	560	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	320	Cl, J	560	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	ND	U	560	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	ND	U	560	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	ND	U	560	"	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene	ND	U	560	"	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene	ND	U	560	"	"	"	"	8270D/SOP315

Surrogate: 2-Fluorophenol

58 % 20-118%

Surrogate: Phenol-d5

61 % 20-117%

Surrogate: 2-Chlorophenol-d4

60 % 20-111%

Surrogate: 1,2-Dichlorobenzene-d4

50 % 20-110%

Surrogate: Nitrobenzene-d5

31 % 20-131%

Surrogate: 2-Fluorobiphenyl

58 % 31-110%

Surrogate: 2,4,6-Tribromophenol

72 % 20-144%

Surrogate: Terphenyl-d14

66 % 20-125%

Sample ID: SIMS-CB15/16

Conventional Chemistry Parameters by APHA/EPA Methods

% Solids	69	1	%	B1H0022	09/07/11	09/08/11	3550C/SOP460
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Lab ID: 1108072-08

Soil - Sampled: 08/25/11 13:00

Sample ID: SIMS-DD

Semivolatile Organic Compounds by EPA Method 8270D

Naphthalene	ND	U	710	ug/kg dry	B1H0161	08/31/11	09/08/11	8270D/SOP315
2-Methylnaphthalene	ND	U	710	"	"	"	"	8270D/SOP315
1-Methylnaphthalene	ND	U	710	"	"	"	"	8270D/SOP315
Acenaphthylene	ND	U	710	"	"	"	"	8270D/SOP315
Acenaphthene	ND	U	710	"	"	"	"	8270D/SOP315
Fluorene	ND	U	710	"	"	"	"	8270D/SOP315
Phenanthrene	ND	U	710	"	"	"	"	8270D/SOP315
Anthracene	ND	U	710	"	"	"	"	8270D/SOP315
Fluoranthene	ND	U	710	"	"	"	"	8270D/SOP315
Pyrene	ND	U	710	"	"	"	"	8270D/SOP315
Benzo(a)anthracene	ND	U	710	"	"	"	"	8270D/SOP315
Chrysene	ND	U	710	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene	ND	U	710	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene	ND	U	710	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	ND	U	710	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	ND	U	710	"	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene	ND	U	710	"	"	"	"	8270D/SOP315



United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone: (510) 412-2300 Fax: (510) 412-2302

Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-08		Soil - Sampled: 08/25/11 13:00						
Sample ID: SIMS-DD		Semivolatile Organic Compounds by EPA Method 8270D						
Benzo(g,h,i)perylene		ND	U	710	ug/kg dry	B1H0161	08/31/11 09/08/11	8270D/SOP315
Surrogate: 2-Fluorophenol		44 %		20-118%		"	"	"
Surrogate: Phenol-d5		46 %		20-117%		"	"	"
Surrogate: 2-Chlorophenol-d4		44 %		20-111%		"	"	"
Surrogate: 1,2-Dichlorobenzene-d4		39 %		20-110%		"	"	"
Surrogate: Nitrobenzene-d5		27 %		20-131%		"	"	"
Surrogate: 2-Fluorobiphenyl		46 %		31-110%		"	"	"
Surrogate: 2,4,6-Tribromophenol		58 %		20-144%		"	"	"
Surrogate: Terphenyl-d14		52 %		20-125%		"	"	"
Sample ID: SIMS-DD		Conventional Chemistry Parameters by APHA/EPA Methods						
% Solids		46		1	%	B110022	09/07/11 09/08/11	3550C/SOP460



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Project Manager: Luis Garcia-Bakarich	CWA Compliance Office	SDG: 11241A
Project Number: R11W09	75 Hawthorne Street	Reported: 09/29/11 14:30
Project: Sims Metal Management	San Francisco CA, 94105	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch B1H0161 - 3545A ASE/PFE - SVOCs

Prepared: 08/31/11 Analyzed: 09/08/11

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

Blank (B1H0161-BLK1)

Naphthalene	ND	U	33	ug/kg wet						
2-Methylnaphthalene	ND	U	33	"						
1-Methylnaphthalene	ND	U	33	"						
Acenaphthylene	ND	U	33	"						
Acenaphthene	ND	U	33	"						
Fluorene	ND	U	33	"						
Phenanthrene	ND	U	33	"						
Anthracene	ND	U	33	"						
Fluoranthene	ND	U	33	"						
Pyrene	ND	U	33	"						
Benzo(a)anthracene	ND	U	33	"						
Chrysene	ND	U	33	"						
Benzo(b)fluoranthene	ND	U	33	"						
Benzo(k)fluoranthene	ND	U	33	"						
Benzo(a)pyrene	ND	U	33	"						
Indeno(1,2,3-cd)pyrene	ND	U	33	"						
Dibenz(a,h)anthracene	ND	U	33	"						
Benzo(g,h,i)perylene	ND	U	33	"						

Surrogate: 1,4-Dioxane-d8	108	"	167	65	20-110
Surrogate: 2-Fluorophenol	1280	"	1670	77	20-118
Surrogate: Phenol-d5	1390	"	1670	84	20-117
Surrogate: 2-Chlorophenol-d4	1340	"	1670	80	20-111
Surrogate: 1,2-Dichlorobenzene-d4	1420	"	1670	85	20-110
Surrogate: Nitrobenzene-d5	1290	"	1670	77	20-131
Surrogate: 2-Fluorobiphenyl	1380	"	1670	83	31-110
Surrogate: 2,4,6-Tribromophenol	1250	"	1670	75	20-144
Surrogate: Terphenyl-d14	1500	"	1670	90	20-125

LCS (B1H0161-BS1)

Naphthalene	279	33	ug/kg wet	333	84	70-130
2-Methylnaphthalene	276	33	"	333	83	70-130
Acenaphthylene	271	33	"	333	81	70-130
Acenaphthene	348	33	"	333	104	70-130
Fluorene	283	33	"	333	85	70-130
Phenanthrene	296	33	"	333	89	70-130
Anthracene	303	33	"	333	91	70-130
Fluoranthene	334	33	"	333	100	70-130
Pyrene	334	33	"	333	100	70-130
Benzo(a)anthracene	305	33	"	333	92	70-130



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Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/29/11 14:30

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch B1H0161 - 3545A ASE/PFE - SVOCs

Prepared: 08/31/11 Analyzed: 09/08/11

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

LCS (B1H0161-BS1)

Chrysene	316		33	"	333		95	70-130
Benzo(b)fluoranthene	315		33	"	333		94	70-130
Benzo(k)fluoranthene	336		33	"	333		101	70-130
Benzo(a)pyrene	292		33	"	333		88	70-130
Indeno(1,2,3-cd)pyrene	307		33	"	333		92	70-130
Dibenz(a,h)anthracene	314		33	"	333		94	70-130
Benzo(g,h,i)perylene	255		33	"	333		76	70-130

Surrogate: 2-Fluorophenol	1270			"	1670		76	20-118
Surrogate: Phenol-d5	1330			"	1670		80	20-117
Surrogate: 2-Chlorophenol-d4	1310			"	1670		78	20-111
Surrogate: 1,2-Dichlorobenzene-d4	1300			"	1670		78	20-110
Surrogate: Nitrobenzene-d5	1220			"	1670		73	20-131
Surrogate: 2-Fluorobiphenyl	1310			"	1670		78	31-110
Surrogate: 2,4,6-Tribromophenol	1610			"	1670		97	20-144
Surrogate: Terphenyl-d14	1460			"	1670		87	20-125

Matrix Spike (B1H0161-MS1)

Source: 1108072-06

Naphthalene	301	Cl, J	340	ug/kg dry	346	ND	87	70-130
2-Methylnaphthalene	305	Cl, J	340	"	346	ND	88	70-130
Acenaphthylene	215	Cl, J	340	"	346	ND	62	70-130
Acenaphthene	253	Cl, J	340	"	346	ND	73	70-130
Fluorene	253	Cl, J	340	"	346	ND	73	70-130
Phenanthrene	637		340	"	346	559	23	70-130
Anthracene	239	Cl, J	340	"	346	ND	69	70-130
Fluoranthene	956		340	"	346	997	NR	70-130
Pyrene	1,320		340	"	346	1,360	NR	70-130
Benzo(a)anthracene	634		340	"	346	500	39	70-130
Chrysene	856		340	"	346	806	14	70-130
Benzo(b)fluoranthene	859		340	"	346	768	26	70-130
Benzo(k)fluoranthene	443		340	"	346	264	52	70-130
Benzo(a)pyrene	534		340	"	346	368	48	70-130
Indeno(1,2,3-cd)pyrene	485		340	"	346	306	52	70-130
Dibenz(a,h)anthracene	305	Cl, J	340	"	346	ND	88	70-130
Benzo(g,h,i)perylene	495		340	"	346	351	42	70-130

Surrogate: 2-Fluorophenol	838			"	1730		48	20-118
Surrogate: Phenol-d5	877			"	1730		51	20-117
Surrogate: 2-Chlorophenol-d4	911			"	1730		53	20-111
Surrogate: 1,2-Dichlorobenzene-d4	901			"	1730		52	20-110



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Project Manager: Luis Garcia-Bakarich	CWA Compliance Office	SDG: 11241A
Project Number: R11W09	75 Hawthorne Street	Reported: 09/29/11 14:30
Project: Sims Metal Management	San Francisco CA, 94105	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch B11H0161 - 3545A ASE/PFE - SVOCs

Prepared: 08/31/11 Analyzed: 09/08/11

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

Matrix Spike (B11H0161-MS1)

Source: 1108072-06

Surrogate: Nitrobenzene-d5	773			"	1730		45	20-131		
Surrogate: 2-Fluorobiphenyl	1020			"	1730		59	31-110		
Surrogate: 2,4,6-Tribromophenol	1150			"	1730		66	20-144		
Surrogate: Terphenyl-d14	1170			"	1730		68	20-125		
Matrix Spike Dup (B11H0161-MSD1)										
Source: 1108072-06										
Naphthalene	316	Cl, J	340	ug/kg dry	348	ND	91	70-130	5	20
2-Methylnaphthalene	341		340	"	348	ND	98	70-130	11	20
Acenaphthylene	236	Cl, J	340	"	348	ND	68	70-130	10	20
Acenaphthene	289	Cl, J	340	"	348	ND	83	70-130	13	20
Fluorene	289	Cl, J	340	"	348	ND	83	70-130	13	20
Phenanthrene	733		340	"	348	559	50	70-130	14	20
Anthracene	264	Cl, J	340	"	348	ND	76	70-130	10	20
Fluoranthene	1,010		340	"	348	997	4	70-130	6	20
Pyrene	1,370		340	"	348	1,360	4	70-130	4	20
Benzo(a)anthracene	664		340	"	348	500	47	70-130	5	20
Chrysene	904		340	"	348	806	28	70-130	5	20
Benzo(b)fluoranthene	845		340	"	348	768	22	70-130	2	20
Benzo(k)fluoranthene	525		340	"	348	264	75	70-130	17	20
Benzo(a)pyrene	535		340	"	348	368	48	70-130	0.3	20
Indeno(1,2,3-cd)pyrene	511		340	"	348	306	59	70-130	5	20
Dibenzo(a,h)anthracene	323	Cl, J	340	"	348	ND	93	70-130	6	20
Benzo(g,h,i)perylene	528		340	"	348	351	51	70-130	6	20
Surrogate: 2-Fluorophenol	893			"	1740		51	20-118		
Surrogate: Phenol-d5	949			"	1740		55	20-117		
Surrogate: 2-Chlorophenol-d4	966			"	1740		56	20-111		
Surrogate: 1,2-Dichlorobenzene-d4	946			"	1740		54	20-110		
Surrogate: Nitrobenzene-d5	820			"	1740		47	20-131		
Surrogate: 2-Fluorobiphenyl	1090			"	1740		63	31-110		
Surrogate: 2,4,6-Tribromophenol	1280			"	1740		73	20-144		
Surrogate: Terphenyl-d14	1290			"	1740		74	20-125		

Batch B110022 - Solids, Dry Weight (Prep) - Solids, Dry Weight

Prepared: 09/07/11 Analyzed: 09/08/11

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Blank (B110022-BLK1)

% Solids	ND	U	1 %							
Duplicate (B110022-DUP1)										
Source: 1108072-03										
% Solids	90		1 %			90			0.07	20



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Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich

Project Number: R11W09

Project: Sims Metal Management

CWA Compliance Office

**75 Hawthorne Street
San Francisco CA, 94105**

SDG: 11241A

Reported: 09/29/11 14:30

Qualifiers and Comments

- Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
- Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
- J The reported result for this analyte should be considered an estimated value.
- C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.



**United States Environmental Protection Agency
Region 9 Laboratory**

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 9/30/2011
Subject: Analytical Testing Results - Project R11W09
SDG: 11241A
From: Brenda Bettencourt, Director
EPA Region 9 Laboratory MTS-2 *B. Bettencourt*
To: Luis Garcia-Bakarich
CWA Compliance Office
WTR-7

Attached are the results from the analysis of samples from the **Sims Metal Management** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

PCB Aroclors by GC/ECD
Percent Solids

PCB Aroclors by GC/ECD



United States Environmental Protection Agency
Region 9 Laboratory

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Phone: (510) 412-2300 Fax: (510) 412-2302

Project Manager: Luis Garcia-Bakarich

Project Number: R11W09

Project: Sims Metal Management

CWA Compliance Office

75 Hawthorne Street

San Francisco CA, 94105

SDG: 11241A

Reported: 09/30/11 12:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
SIMS-1	1108072-01	Soil	08/25/11 10:30	08/25/11 15:30
SIMS-2	1108072-02	Soil	08/25/11 10:45	08/25/11 15:30
SIMS-3	1108072-03	Soil	08/25/11 11:00	08/25/11 15:30
SIMS-CB12	1108072-04	Soil	08/25/11 11:30	08/25/11 15:30
SIMS-CB13	1108072-05	Soil	08/25/11 11:45	08/25/11 15:30
SIMS-CB14	1108072-06	Soil	08/25/11 12:00	08/25/11 15:30
SIMS-CB15/16	1108072-07	Soil	08/25/11 12:15	08/25/11 15:30
SIMS-DD	1108072-08	Soil	08/25/11 13:00	08/25/11 15:30

SDG ID 11241A

Sample extracts were dark and viscous. Most samples were run at a 10X dilution to prevent contamination of the analytical instrumentation.

The MS/MSD recovery and RPD were not evaluated because the native concentration of this analyte in the matrix spike sample exceeded the linear calibration range.

Work Order(s)

1108072



United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/30/11 12:56

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-01 Soil - Sampled: 08/25/11 10:30								
Sample ID: SIMS-1 Polychlorinated Biphenyls by EPA Method 8082A								
Aroclor 1016		ND	U	32	ug/kg dry	B1H0167	08/31/11	09/07/11 8082A/SOP335
Aroclor 1221		ND	U	64	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	32	"	"	"	8082A/SOP335
Aroclor 1242	RE1	9,200		320	"	"	"	09/15/11 8082A/SOP335
Aroclor 1248		ND	U	32	"	"	"	09/07/11 8082A/SOP335
Aroclor 1254	RE1	3,400		320	"	"	"	09/15/11 8082A/SOP335
Aroclor 1260		990		32	"	"	"	09/07/11 8082A/SOP335
Aroclor 1262		ND	U	32	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	32	"	"	"	8082A/SOP335
<i>Surrogate: Tetrachloro-m-xylene</i> 70 % 20-151% " " "								
<i>Surrogate: Decachlorobiphenyl</i> 94 % 28.8-154% " " "								
Sample ID: SIMS-1 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		94		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-02 Soil - Sampled: 08/25/11 10:45								
Sample ID: SIMS-2 Polychlorinated Biphenyls by EPA Method 8082A								
Aroclor 1016		ND	U	32	ug/kg dry	B1H0167	08/31/11	09/07/11 8082A/SOP335
Aroclor 1221		ND	U	63	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	32	"	"	"	8082A/SOP335
Aroclor 1242	RE1	5,200		320	"	"	"	09/15/11 8082A/SOP335
Aroclor 1248		ND	U	32	"	"	"	09/07/11 8082A/SOP335
Aroclor 1254		1,100		32	"	"	"	8082A/SOP335
Aroclor 1260		230		32	"	"	"	8082A/SOP335
Aroclor 1262		ND	U	32	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	32	"	"	"	8082A/SOP335
<i>Surrogate: Tetrachloro-m-xylene</i> 57 % 20-151% " " "								
<i>Surrogate: Decachlorobiphenyl</i> 54 % 28.8-154% " " "								
Sample ID: SIMS-2 Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids		95		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
Lab ID: 1108072-03 Soil - Sampled: 08/25/11 11:00								
Sample ID: SIMS-3 Polychlorinated Biphenyls by EPA Method 8082A								
Aroclor 1016		ND	U	33	ug/kg dry	B1H0167	08/31/11	09/07/11 8082A/SOP335
Aroclor 1221		ND	U	66	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	33	"	"	"	8082A/SOP335
Aroclor 1242	RE3	25,000		1,700	"	"	"	09/20/11 8082A/SOP335
Aroclor 1248		ND	U	33	"	"	"	09/07/11 8082A/SOP335
Aroclor 1254	RE2	10,000		330	"	"	"	09/15/11 8082A/SOP335
Aroclor 1260		830		33	"	"	"	09/07/11 8082A/SOP335



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/30/11 12:56

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1108072-03						Soil - Sampled: 08/25/11 11:00			
Sample ID: SIMS-3						Polychlorinated Biphenyls by EPA Method 8082A			
Aroclor 1262		ND	U	33	ug/kg dry	B1H0167	08/31/11	09/07/11	8082A/SOP335
Aroclor 1268		ND	U	33	"	"	"	"	8082A/SOP335
Surrogate: Tetrachloro-m-xylene		69 %		20-151%		"	"	"	
Surrogate: Decachlorobiphenyl		76 %		28.8-154%		"	"	"	
Sample ID: SIMS-3						Conventional Chemistry Parameters by APHA/EPA Methods			
% Solids		90		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
Lab ID: 1108072-04						Soil - Sampled: 08/25/11 11:30			
Sample ID: SIMS-CB12						Polychlorinated Biphenyls by EPA Method 8082A			
Aroclor 1016		ND	U	30	ug/kg dry	B110004	09/01/11	09/07/11	8082A/SOP335
Aroclor 1221		ND	U	60	"	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	30	"	"	"	"	8082A/SOP335
Aroclor 1242		1,300		30	"	"	"	"	8082A/SOP335
Aroclor 1248		ND	U	30	"	"	"	"	8082A/SOP335
Aroclor 1254		600		30	"	"	"	"	8082A/SOP335
Aroclor 1260		220		30	"	"	"	"	8082A/SOP335
Aroclor 1262		ND	U	30	"	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	30	"	"	"	"	8082A/SOP335
Surrogate: Tetrachloro-m-xylene		54 %		20-151%		"	"	"	
Surrogate: Decachlorobiphenyl		52 %		28.8-154%		"	"	"	
Sample ID: SIMS-CB12						Conventional Chemistry Parameters by APHA/EPA Methods			
% Solids		99		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
Lab ID: 1108072-05						Soil - Sampled: 08/25/11 11:45			
Sample ID: SIMS-CB13						Polychlorinated Biphenyls by EPA Method 8082A			
Aroclor 1016		ND	U	30	ug/kg dry	B1H0167	08/31/11	09/07/11	8082A/SOP335
Aroclor 1221		ND	U	61	"	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	30	"	"	"	"	8082A/SOP335
Aroclor 1242	REI	2,900		300	"	"	"	09/15/11	8082A/SOP335
Aroclor 1248		ND	U	30	"	"	"	09/07/11	8082A/SOP335
Aroclor 1254		860		30	"	"	"	"	8082A/SOP335
Aroclor 1260		240		30	"	"	"	"	8082A/SOP335
Aroclor 1262		ND	U	30	"	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	30	"	"	"	"	8082A/SOP335
Surrogate: Tetrachloro-m-xylene		57 %		20-151%		"	"	"	
Surrogate: Decachlorobiphenyl		52 %		28.8-154%		"	"	"	
Sample ID: SIMS-CB13						Conventional Chemistry Parameters by APHA/EPA Methods			
% Solids		99		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
Lab ID: 1108072-06						Soil - Sampled: 08/25/11 12:00			



United States Environmental Protection Agency Region 9 Laboratory

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Project Manager: Luis Garcia-Bakarich
Project Number: R11W09
Project: Sims Metal Management

CWA Compliance Office
75 Hawthorne Street
San Francisco CA, 94105

SDG: 11241A
Reported: 09/30/11 12:56

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
Lab ID: 1108072-06		Soil - Sampled: 08/25/11 12:00						
Sample ID: SIMS-CB14		Polychlorinated Biphenyls by EPA Method 8082A						
Aroclor 1016		ND	U	31	ug/kg dry	B1H0167	08/31/11 09/07/11	8082A/SOP335
Aroclor 1221		ND	U	62	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	31	"	"	"	8082A/SOP335
Aroclor 1242	RE1	10,000		310	"	"	09/15/11	8082A/SOP335
Aroclor 1248		ND	U	31	"	"	09/07/11	8082A/SOP335
Aroclor 1254	RE1	3,700		310	"	"	09/15/11	8082A/SOP335
Aroclor 1260		830		31	"	"	09/07/11	8082A/SOP335
Aroclor 1262		ND	U	31	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	31	"	"	"	8082A/SOP335
<i>Surrogate: Tetrachloro-m-xylene</i>		71 %		20-151%		"	"	"
<i>Surrogate: Decachlorobiphenyl</i>		197 %		28.8-154%		"	"	"
Sample ID: SIMS-CB14		Conventional Chemistry Parameters by APHA/EPA Methods						
% Solids		97		1	%	B110022	09/07/11 09/08/11	3550C/SOP460
Lab ID: 1108072-07		Soil - Sampled: 08/25/11 12:15						
Sample ID: SIMS-CB15/16		Polychlorinated Biphenyls by EPA Method 8082A						
Aroclor 1016		ND	U	43	ug/kg dry	B1H0167	08/31/11 09/07/11	8082A/SOP335
Aroclor 1221		ND	U	87	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	43	"	"	"	8082A/SOP335
Aroclor 1242		1,400		43	"	"	"	8082A/SOP335
Aroclor 1248		ND	U	43	"	"	"	8082A/SOP335
Aroclor 1254		400		43	"	"	"	8082A/SOP335
Aroclor 1260		ND	U	43	"	"	"	8082A/SOP335
Aroclor 1262		ND	U	43	"	"	"	8082A/SOP335
Aroclor 1268		ND	U	43	"	"	"	8082A/SOP335
<i>Surrogate: Tetrachloro-m-xylene</i>		43 %		20-151%		"	"	"
<i>Surrogate: Decachlorobiphenyl</i>		43 %		28.8-154%		"	"	"
Sample ID: SIMS-CB15/16		Conventional Chemistry Parameters by APHA/EPA Methods						
% Solids		69		1	%	B110022	09/07/11 09/08/11	3550C/SOP460
Lab ID: 1108072-08		Soil - Sampled: 08/25/11 13:00						
Sample ID: SIMS-DD		Polychlorinated Biphenyls by EPA Method 8082A						
Aroclor 1016		ND	U	6.5	ug/kg dry	B1H0167	08/31/11 09/07/11	8082A/SOP335
Aroclor 1221		ND	U	13	"	"	"	8082A/SOP335
Aroclor 1232		ND	U	6.5	"	"	"	8082A/SOP335
Aroclor 1242		ND	U	6.5	"	"	"	8082A/SOP335
Aroclor 1248		ND	U	6.5	"	"	"	8082A/SOP335
Aroclor 1254		65		6.5	"	"	"	8082A/SOP335
Aroclor 1260		25		6.5	"	"	"	8082A/SOP335



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SDG: 11241A
Reported: 09/30/11 12:56

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1108072-08						Soil - Sampled: 08/25/11 13:00			
Sample ID: SIMS-DD						Polychlorinated Biphenyls by EPA Method 8082A			
Aroclor 1262		ND	U	6.5	ug/kg dry	B1H0167	08/31/11	09/07/11	8082A/SOP335
Aroclor 1268		ND	U	6.5	"	"	"	"	8082A/SOP335
Surrogate: Tetrachloro-m-xylene			43 %	20-151%		"	"	"	
Surrogate: Decachlorobiphenyl			42 %	28.8-154%		"	"	"	
Sample ID: SIMS-DD						Conventional Chemistry Parameters by APHA/EPA Methods			
% Solids		46		1	%	B110022	09/07/11	09/08/11	3550C/SOP460



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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD Limit
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Batch B1H0167 - 3545A ASE/PFE - PCBs

Prepared: 08/31/11 **Analyzed:** 09/07/11

Polychlorinated Biphenyls by EPA Method 8082A - Quality Control

Blank (B1H0167-BLK1)

Aroclor 1016	ND	U		3 ug/kg wet					
Aroclor 1221	ND	U		6 "					
Aroclor 1232	ND	U		3 "					
Aroclor 1242	ND	U		3 "					
Aroclor 1248	ND	U		3 "					
Aroclor 1254	ND	U		3 "					
Aroclor 1260	ND	U		3 "					
Aroclor 1262	ND	U		3 "					
Aroclor 1268	ND	U		3 "					

Surrogate: Tetrachloro-m-xylene	5.91	"	6.67	89	20-151
Surrogate: Decachlorobiphenyl	5.67	"	6.67	85	28.8-154

LCS (B1H0167-BS1)

Aroclor 1016	24.6	3 ug/kg wet	33.3	74	24.8-143
Aroclor 1260	23.9	3 "	33.3	72	20-159

Surrogate: Tetrachloro-m-xylene	4.48	"	6.67	67	20-151
Surrogate: Decachlorobiphenyl	4.52	"	6.67	68	28.8-154

Matrix Spike (B1H0167-MS1)

Source: 1108072-03

Aroclor 1016	Not Reported	33 ug/kg dry	37.4	ND	NR	65-135		
Aroclor 1260	Not Reported	33 "	37.4	833	280	65-135		

Surrogate: Tetrachloro-m-xylene	5.19	"	7.49	69	20-151
Surrogate: Decachlorobiphenyl	11.6	"	7.49	155	28.8-154

Matrix Spike Dup (B1H0167-MSD1)

Source: 1108072-03

Aroclor 1016	Not Reported	33 ug/kg dry	37.4	ND	NR	65-135	0.07	20
Aroclor 1260	Not Reported	33 "	37.4	833	NR	65-135	38	20

Surrogate: Tetrachloro-m-xylene	3.27	"	7.48	44	20-151
Surrogate: Decachlorobiphenyl	7.44	"	7.48	99	28.8-154

Batch B1I0004 - 3545A ASE/PFE - PCBs

Prepared: 09/01/11 **Analyzed:** 09/07/11

Polychlorinated Biphenyls by EPA Method 8082A - Quality Control

Blank (B1I0004-BLK1)

Aroclor 1016	ND	U		3 ug/kg wet					
Aroclor 1221	ND	U		6 "					
Aroclor 1232	ND	U		3 "					
Aroclor 1242	ND	U		3 "					



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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B110004 - 3545A ASE/PFE - PCBs						Prepared: 09/01/11 Analyzed: 09/07/11				
Blank (B110004-BLK1)						Polychlorinated Biphenyls by EPA Method 8082A - Quality Control				
Aroclor 1248	ND	U		3 "						
Aroclor 1254	ND	U		3 "						
Aroclor 1260	ND	U		3 "						
Aroclor 1262	ND	U		3 "						
Aroclor 1268	ND	U		3 "						
Surrogate: Tetrachloro-m-xylene	5.76			"	6.67		86	20-151		
Surrogate: Decachlorobiphenyl	5.63			"	6.67		84	28.8-154		
LCS (B110004-BS1)										
Aroclor-1016	31.8			3 ug/kg wet	33.3		96	24.8-143		
Aroclor 1260	31.6			3 "	33.3		95	20-159		
Surrogate: Tetrachloro-m-xylene	5.81			"	6.67		87	20-151		
Surrogate: Decachlorobiphenyl	5.93			"	6.67		89	28.8-154		
Batch B110022 - Solids, Dry Weight (Prep) - Solids, Dry Weight						Prepared: 09/07/11 Analyzed: 09/08/11				
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B110022-BLK1)										
% Solids	ND	U		1 %						
Duplicate (B110022-DUP1)										
Source: 1108072-03										
% Solids	90			1 %		90			0.07	20



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Qualifiers and Comments

NR Not Reported

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1015 North 3rd Street, Suite 100
Phoenix, Arizona 85004-1098

Project Name	Project Number
Client Name	Client Address
Client Phone	Client Fax
Client Email	Client Website

Analysis and Comments

Date

By

For

Signature of Representative

