

US EPA ARCHIVE DOCUMENT



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  
75 Hawthorne Street  
San Francisco, CA 94105

**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.

20  
8/25/2011 10:15 am  
Sims Metal Management  
Luis Garcia-Barrameda  
Ermas Noyle

08/25/2011 10:14

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Sims Metal Management Port of Redwood City 8.25.11



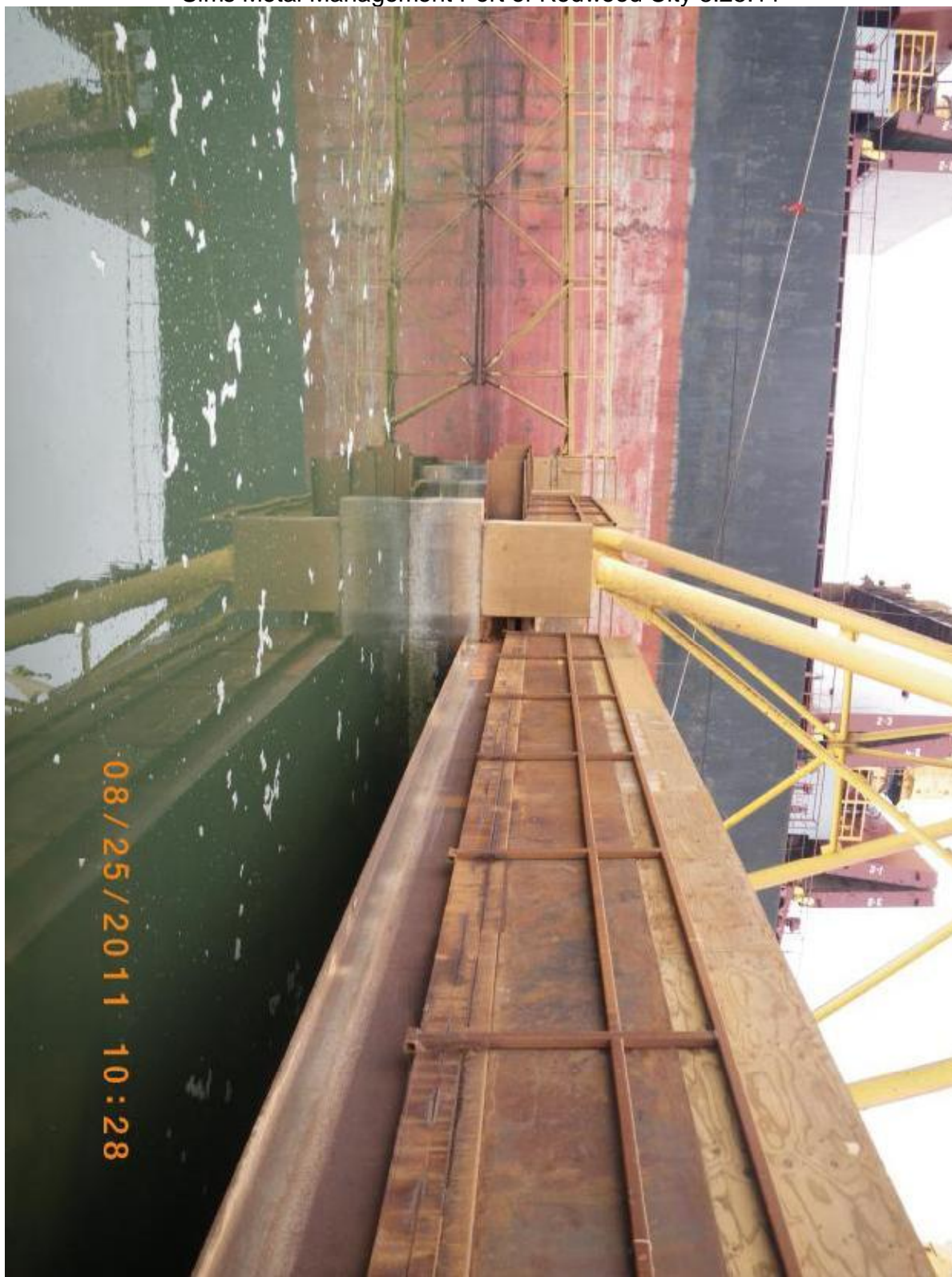
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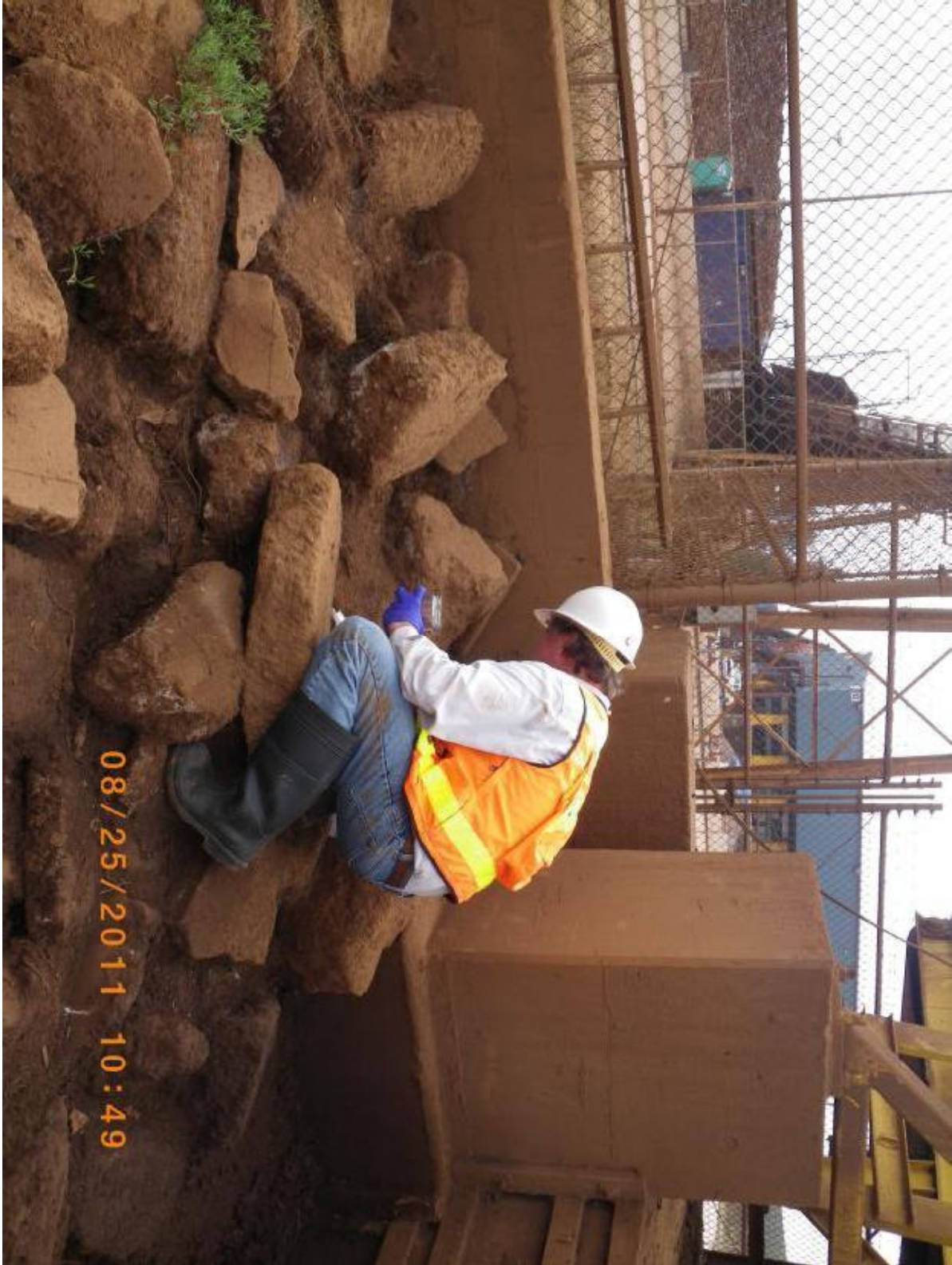
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Sims Metal Management Port of Redwood City 8.25.11



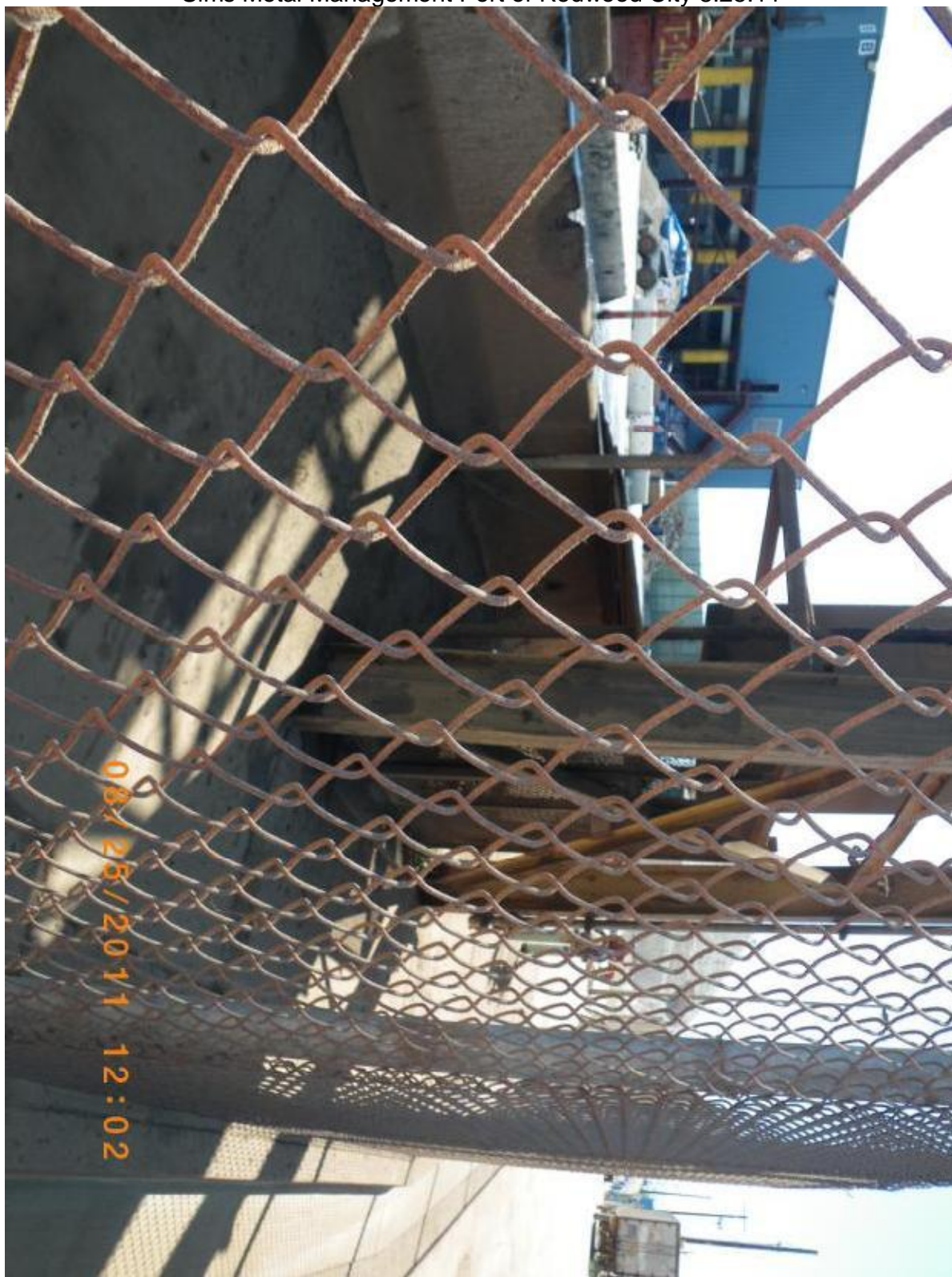
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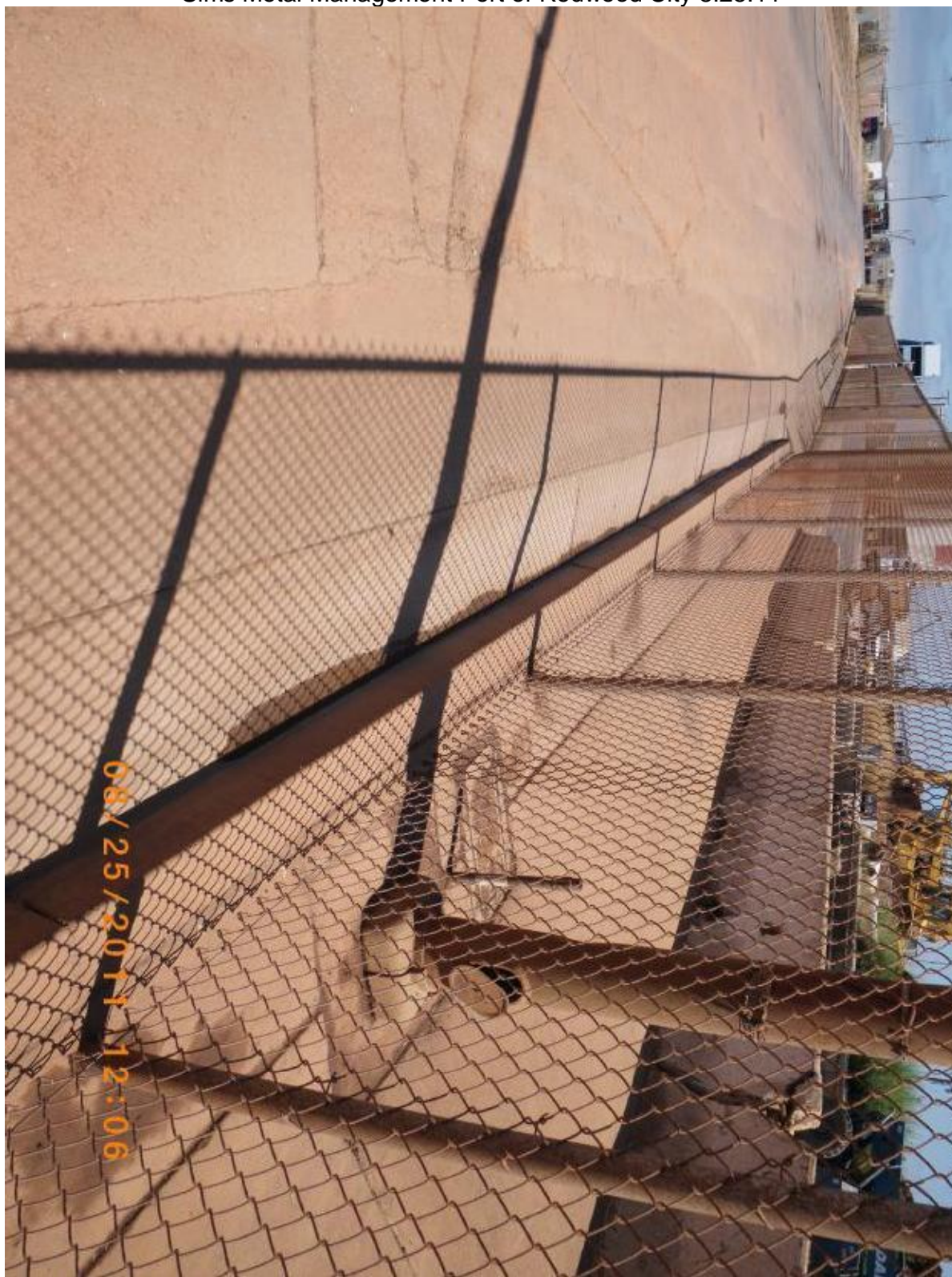
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

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.





WATA0775SVI



**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

## Table of Contents

1	Introduction .....	1
2	Site Location and Background.....	1
3	Scope and Objectives .....	1
4	Sampling Strategy.....	2
4.1	Number of Samples.....	2
5	Field Methods and Procedures.....	2
5.1	Sample Collection .....	2
5.2	Quality Control Samples .....	3
5.3	Methods of Analysis .....	3
5.4	Packing and Shipping.....	3
6	Data Evaluation.....	3
7	Personnel .....	3
8	Health and Safety .....	3
9	Schedule.....	4
10	References.....	4
	Figure 1 – Sims Facility.....	5
	Attachment A – Health and Safety Plan .....	6

## 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	<b>Mercury by 7473</b>	
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  $4\pm 2^{\circ}\text{C}$  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

**SSHP 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

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

## 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



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

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID:</b> 1108072-01		<b>Soil - Sampled: 08/25/11 10:30</b>						
<b>Sample ID:</b> SIMS-1		<b>Metals by EPA 6000/7000 Series Methods</b>						
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
<b>Sample ID:</b> SIMS-1		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		94		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID:</b> 1108072-02		<b>Soil - Sampled: 08/25/11 10:45</b>						
<b>Sample ID:</b> SIMS-2		<b>Metals by EPA 6000/7000 Series Methods</b>						
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
<b>Sample ID:</b> SIMS-2		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		95		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID:</b> 1108072-03		<b>Soil - Sampled: 08/25/11 11:00</b>						
<b>Sample ID:</b> SIMS-3		<b>Metals by EPA 6000/7000 Series Methods</b>						
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
<b>Sample ID:</b> SIMS-3		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		90		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID:</b> 1108072-04		<b>Soil - Sampled: 08/25/11 11:30</b>						
<b>Sample ID:</b> SIMS-CB12		<b>Metals by EPA 6000/7000 Series Methods</b>						
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
<b>Sample ID:</b> SIMS-CB12		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		99		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID:</b> 1108072-05		<b>Soil - Sampled: 08/25/11 11:45</b>						
<b>Sample ID:</b> SIMS-CB13		<b>Metals by EPA 6000/7000 Series Methods</b>						



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

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID: 1108072-05</b>								
<b>Soil - Sampled: 08/25/11 11:45</b>								
<b>Metals by EPA 6000/7000 Series Methods</b>								
Mercury		1.3		0.025	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	RE1	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	RE1	8,000		81	"	"	"	09/20/11 6010C/SOP503
<b>Sample ID: SIMS-CB13</b>								
<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>								
% Solids		99		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID: 1108072-06</b>								
<b>Soil - Sampled: 08/25/11 12:00</b>								
<b>Metals by EPA 6000/7000 Series Methods</b>								
Mercury		6.3		0.026	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	RE1	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	RE1	24,000		82	"	"	"	09/20/11 6010C/SOP503
<b>Sample ID: SIMS-CB14</b>								
<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>								
% Solids		97		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID: 1108072-07</b>								
<b>Soil - Sampled: 08/25/11 12:15</b>								
<b>Metals by EPA 6000/7000 Series Methods</b>								
Mercury		2.3		0.036	mg/kg dry	B110010	09/02/11	09/02/11 7473/SOP535
Cadmium	RE1	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	RE1	23,000		120	"	"	"	09/20/11 6010C/SOP503
<b>Sample ID: SIMS-CB15/16</b>								
<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>								
% Solids		69		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID: 1108072-08</b>								
<b>Soil - Sampled: 08/25/11 13:00</b>								
<b>Metals by EPA 6000/7000 Series Methods</b>								
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
<b>Sample ID: SIMS-DD</b>								
<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>								
% Solids		46		1	%	B110022	09/07/11	09/08/11 3550C/SOP460





# United States Environmental Protection Agency Region 9 Laboratory

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<b>Project Number:</b> R11W09	<b>75 Hawthorne Street</b>	<b>Reported:</b> 10/04/11 16:03
<b>Project:</b> Sims Metal Management	<b>San Francisco CA, 94105</b>	

## Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD Limit	RPD Limit
<b>Batch B110010 - 7473 Hg Prep - Mercury</b>										
<b>Prepared &amp; Analyzed: 09/02/11</b>										
<b>Metals by EPA 6000/7000 Series Methods - Quality Control</b>										
<b>Blank (B110010-BLK1)</b>										
Mercury	ND	U	0.025	mg/kg wet						
<b>Matrix Spike (B110010-MS1)</b>										
<b>Source: 1108072-04</b>										
Mercury	2.71		0.025	mg/kg dry	1.15	1.27	126	80-120		20
<b>Matrix Spike Dup (B110010-MSD1)</b>										
<b>Source: 1108072-04</b>										
Mercury	2.3		0.025	mg/kg dry	1.08	1.27	95	80-120	28	20
<b>Reference (B110010-SRM1)</b>										
Mercury	1.12		0.025	mg/kg wet	1.10		101	80-120		
<b>Batch B110019 - 3050B Sld Acid Dig - Metals by 6010</b>										
<b>Prepared: 09/07/11 Analyzed: 09/19/11</b>										
<b>Metals by EPA 6000/7000 Series Methods - Quality Control</b>										
<b>Blank (B110019-BLK1)</b>										
Cadmium	ND	U	0.5	mg/kg wet						
Chromium	ND	U	1	"						
Copper	ND	U	4	"						
Lead	ND	U	3	"						
Zinc	ND	U	8	"						
<b>Matrix Spike (B110019-MS1)</b>										
<b>Source: 1108072-05</b>										
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
<b>Matrix Spike (B110019-MS2)</b>										
<b>Source: 1108072-05RE1</b>										
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
<b>Matrix Spike Dup (B110019-MSD1)</b>										
<b>Source: 1108072-05</b>										
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
<b>Matrix Spike Dup (B110019-MSD2)</b>										
<b>Source: 1108072-05RE1</b>										
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
<b>Reference (B110019-SRM1)</b>										
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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## Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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### 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

#### Reference (B110019-SRM1)

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	
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### 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	%					
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#### Duplicate (B110022-DUP1)

Source: 1108072-03

% Solids	90			1	%		90		0.07	20
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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

**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.

United States Environmental Protection Agency  
Region 3 Laboratory

1000 Walnut Street  
Philadelphia, PA 19106

Phone: (215) 261-2000  
Fax: (215) 261-2001

Website: www.epa.gov/region3

The Region 3 Laboratory is a part of the United States Environmental Protection Agency. It is located in Philadelphia, Pennsylvania. The laboratory is responsible for the testing and analysis of environmental samples. It provides a wide range of services to the public and to other agencies. The laboratory is staffed by highly trained and experienced scientists and technicians. It is equipped with state-of-the-art analytical instruments and facilities. The laboratory is committed to providing accurate and reliable results in a timely and cost-effective manner.

For more information, please contact the Region 3 Laboratory at the address or phone number listed above. We are always happy to assist you with your environmental testing needs.



**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.

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:**

Percent Solids

Semivolatile Organic Compounds by GC/MS

Semivolatile Organic Compounds by GC/MS



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

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

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

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
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**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
<i>Surrogate: 2-Fluorophenol</i>	REI		64 %	20-118%		"	"	"	
<i>Surrogate: Phenol-d5</i>	REI		66 %	20-117%		"	"	"	
<i>Surrogate: 2-Chlorophenol-d4</i>	REI		67 %	20-111%		"	"	"	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	REI		65 %	20-110%		"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>	REI		55 %	20-131%		"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>	REI		76 %	31-110%		"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>	REI		80 %	20-144%		"	"	"	
<i>Surrogate: Terphenyl-d14</i>	REI		86 %	20-125%		"	"	"	

**Sample ID:** SIMS-1 **Conventional Chemistry Parameters by APHA/EPA Methods**  
 % Solids 94 1 % 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



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

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID: 1108072-02</b>		<b>Soil - Sampled: 08/25/11 10:45</b>						
<b>Sample ID: SIMS-2</b>		<b>Semivolatile Organic Compounds by EPA Method 8270D</b>						
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
<i>Surrogate: 2-Fluorophenol</i>			34 %	20-118%		"	"	"
<i>Surrogate: Phenol-d5</i>			37 %	20-117%		"	"	"
<i>Surrogate: 2-Chlorophenol-d4</i>			36 %	20-111%		"	"	"
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			38 %	20-110%		"	"	"
<i>Surrogate: Nitrobenzene-d5</i>			30 %	20-131%		"	"	"
<i>Surrogate: 2-Fluorobiphenyl</i>			45 %	31-110%		"	"	"
<i>Surrogate: 2,4,6-Tribromophenol</i>			39 %	20-144%		"	"	"
<i>Surrogate: Terphenyl-d14</i>			53 %	20-125%		"	"	"

<b>Sample ID: SIMS-2</b>		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids	95	1	%	B110022	09/07/11	09/08/11	3550C/SOP460	

<b>Lab ID: 1108072-03</b>		<b>Soil - Sampled: 08/25/11 11:00</b>						
<b>Sample ID: SIMS-3</b>		<b>Semivolatile Organic Compounds by EPA Method 8270D</b>						
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





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## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
<b>Lab ID: 1108072-03</b>									
<b>Soil - Sampled: 08/25/11 11:00</b>									
<b>Semivolatile Organic Compounds by EPA Method 8270D</b>									
<b>Sample ID:</b> SIMS-3									
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
<i>Surrogate: 2-Fluorophenol</i>			46 %	20-118%		"	"	"	
<i>Surrogate: Phenol-d5</i>			51 %	20-117%		"	"	"	
<i>Surrogate: 2-Chlorophenol-d4</i>			49 %	20-111%		"	"	"	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			45 %	20-110%		"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>			40 %	20-131%		"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>			58 %	31-110%		"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>			71 %	20-144%		"	"	"	
<i>Surrogate: Terphenyl-d14</i>			70 %	20-125%		"	"	"	
<b>Sample ID: SIMS-3</b>									
<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>									
% Solids		90		1	%	B1H0022	09/07/11	09/08/11	3550C/SOP460
<b>Lab ID: 1108072-04</b>									
<b>Soil - Sampled: 08/25/11 11:30</b>									
<b>Semivolatile Organic Compounds by EPA Method 8270D</b>									
<b>Sample ID:</b> SIMS-CB12									
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	C1, J	330	"	"	"	"	8270D/SOP315
Chrysene		490		330	"	"	"	"	8270D/SOP315
Benzo(b)fluoranthene		470		330	"	"	"	"	8270D/SOP315
Benzo(k)fluoranthene		240	C1, J	330	"	"	"	"	8270D/SOP315
Benzo(a)pyrene		260	C1, J	330	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene		190	C1, J	330	"	"	"	"	8270D/SOP315
Dibenz(a,h)anthracene		ND	U	330	"	"	"	"	8270D/SOP315
Benzo(g,h,i)perylene		240	C1, J	330	"	"	"	"	8270D/SOP315
<i>Surrogate: 2-Fluorophenol</i>			43 %	20-118%		"	"	"	
<i>Surrogate: Phenol-d5</i>			48 %	20-117%		"	"	"	
<i>Surrogate: 2-Chlorophenol-d4</i>			47 %	20-111%		"	"	"	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>			46 %	20-110%		"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>			40 %	20-131%		"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>			57 %	31-110%		"	"	"	



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## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
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<b>Lab ID:</b> 1108072-04	<b>Soil - Sampled:</b> 08/25/11 11:30
<b>Sample ID:</b> SIMS-CB12	<b>Semivolatle Organic Compounds by EPA Method 8270D</b>
<i>Surrogate: 2,4,6-Tribromophenol</i>	B1H0161 08/31/11 09/08/11
<i>Surrogate: Terphenyl-d14</i>	" " "

<b>Sample ID:</b> SIMS-CB12	<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>
% Solids	B110022 09/07/11 09/08/11 3550C/SOP460

<b>Lab ID:</b> 1108072-05	<b>Soil - Sampled:</b> 08/25/11 11:45
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<b>Sample ID:</b> SIMS-CB13	<b>Semivolatle Organic Compounds by EPA Method 8270D</b>
Naphthalene	ug/kg dry B1H0161 08/31/11 09/08/11 8270D/SOP315
2-Methylnaphthalene	8270D/SOP315
1-Methylnaphthalene	8270D/SOP315
Acenaphthylene	8270D/SOP315
Acenaphthene	8270D/SOP315
Fluorene	8270D/SOP315
Phenanthrene	8270D/SOP315
Anthracene	8270D/SOP315
Fluoranthene	8270D/SOP315
Pyrene	8270D/SOP315
Benzo(a)anthracene	8270D/SOP315
Chrysene	8270D/SOP315
Benzo(b)fluoranthene	8270D/SOP315
Benzo(k)fluoranthene	8270D/SOP315
Benzo(a)pyrene	8270D/SOP315
Indeno(1,2,3-cd)pyrene	8270D/SOP315
Dibenz(a,h)anthracene	8270D/SOP315
Benzo(g,h,i)perylene	8270D/SOP315
<i>Surrogate: 2-Fluorophenol</i>	" " "
<i>Surrogate: Phenol-d5</i>	" " "
<i>Surrogate: 2-Chlorophenol-d4</i>	" " "
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	" " "
<i>Surrogate: Nitrobenzene-d5</i>	" " "
<i>Surrogate: 2-Fluorobiphenyl</i>	" " "
<i>Surrogate: 2,4,6-Tribromophenol</i>	" " "
<i>Surrogate: Terphenyl-d14</i>	" " "

<b>Sample ID:</b> SIMS-CB13	<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>
% Solids	B110022 09/07/11 09/08/11 3550C/SOP460

<b>Lab ID:</b> 1108072-06	<b>Soil - Sampled:</b> 08/25/11 12:00
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<b>Sample ID:</b> SIMS-CB14	<b>Semivolatle Organic Compounds by EPA Method 8270D</b>
Naphthalene	ug/kg dry B1H0161 08/31/11 09/12/11 8270D/SOP315
2-Methylnaphthalene	8270D/SOP315



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## 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	Cl, J, Q4	340	"	"	"	"	8270D/SOP315
Benzo(a)pyrene	RE1	480	J, Q4	340	"	"	"	"	8270D/SOP315
Indeno(1,2,3-cd)pyrene	RE1	330	Cl, 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
<i>Surrogate: 2-Fluorophenol</i>	RE1		52 %	20-118%		"	"	"	
<i>Surrogate: Phenol-d5</i>	RE1		56 %	20-117%		"	"	"	
<i>Surrogate: 2-Chlorophenol-d4</i>	RE1		58 %	20-111%		"	"	"	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	RE1		56 %	20-110%		"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>	RE1		48 %	20-131%		"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>	RE1		68 %	31-110%		"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>	RE1		69 %	20-144%		"	"	"	
<i>Surrogate: Terphenyl-d14</i>	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
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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

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	Cl, J	560	"	"	"	"	8270D/SOP315
Anthracene		ND	U	560	"	"	"	"	8270D/SOP315
Fluoranthene		460	Cl, J	560	"	"	"	"	8270D/SOP315
Pyrene		610		560	"	"	"	"	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

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

Semivolatile Organic Compounds by EPA Method 8270D								
Sample ID:	SIMS-CB15/16							
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
<i>Surrogate: 2-Fluorophenol</i>		58 %		20-118%		"	"	"
<i>Surrogate: Phenol-d5</i>		61 %		20-117%		"	"	"
<i>Surrogate: 2-Chlorophenol-d4</i>		60 %		20-111%		"	"	"
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>		50 %		20-110%		"	"	"
<i>Surrogate: Nitrobenzene-d5</i>		31 %		20-131%		"	"	"
<i>Surrogate: 2-Fluorobiphenyl</i>		58 %		31-110%		"	"	"
<i>Surrogate: 2,4,6-Tribromophenol</i>		72 %		20-144%		"	"	"
<i>Surrogate: Terphenyl-d14</i>		66 %		20-125%		"	"	"

Conventional Chemistry Parameters by APHA/EPA Methods								
Sample ID:	SIMS-CB15/16							
% Solids		69		1	%	B1H0022	09/07/11	09/08/11 3550C/SOP460

**Lab ID:** 1108072-08 **Soil - Sampled:** 08/25/11 13:00

Semivolatile Organic Compounds by EPA Method 8270D								
Sample ID:	SIMS-DD							
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**

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

**Sample Results**

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

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

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch BIH0161 - 3545A ASE/PFE - SVOCs

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

Semivolatile Organic Compounds by EPA Method 8270D - Quality Control

**LCS (BIH0161-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 (BIH0161-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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<b>Project Manager:</b> Luis Garcia-Bakarich <b>Project Number:</b> R11W09 <b>Project:</b> Sims Metal Management	<b>CWA Compliance Office</b> <b>75 Hawthorne Street</b> <b>San Francisco CA, 94105</b>	<b>SDG:</b> 11241A <b>Reported:</b> 09/29/11 14:30
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## 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

Matrix Spike (B1H0161-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 (B1H0161-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
Dibenz(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	





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

**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  
Laboratory

1600 Spring Valley Road  
Washington, D.C. 20460

Project No.	100-100000000
Field No.	100-100000000
Date	10/10/1999
Collector	J. Smith
Location	100-100000000
State	100-100000000
County	100-100000000
Site	100-100000000
Remarks	100-100000000

Field Notes

The sample was collected from a stream bed in a wooded area. The stream is approximately 10 feet wide and 2 feet deep. The water is clear and the stream bed is composed of sand and gravel. The surrounding area is heavily wooded with deciduous trees. The sample was collected using a hand net and preserved in formalin.



**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 *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.

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:**

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PCB Aroclors by GC/ECD

PCB Aroclors by GC/ECD

Percent Solids



# United States Environmental Protection Agency Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804  
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<b>Project Manager:</b> Luis Garcia-Bakarich <b>Project Number:</b> R11W09 <b>Project:</b> Sims Metal Management	<b>CWA Compliance Office</b> 75 Hawthorne Street San Francisco CA, 94105	<b>SDG:</b> 11241A <b>Reported:</b> 09/30/11 12:56
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## 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

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<b>Project Manager:</b> Luis Garcia-Bakarich <b>Project Number:</b> R11W09 <b>Project:</b> Sims Metal Management	<b>CWA Compliance Office</b> 75 Hawthorne Street San Francisco CA, 94105	<b>SDG:</b> 11241A <b>Reported:</b> 09/30/11 12:56
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## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID: 1108072-01</b>		<b>Soil - Sampled: 08/25/11 10:30</b>						
<b>Sample ID: SIMS-1</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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%		"	"	"
<b>Sample ID: SIMS-1</b>		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		94		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID: 1108072-02</b>		<b>Soil - Sampled: 08/25/11 10:45</b>						
<b>Sample ID: SIMS-2</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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%		"	"	"
<b>Sample ID: SIMS-2</b>		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		95		1	%	B110022	09/07/11	09/08/11 3550C/SOP460
<b>Lab ID: 1108072-03</b>		<b>Soil - Sampled: 08/25/11 11:00</b>						
<b>Sample ID: SIMS-3</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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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Phone: (510) 412-2300 Fax: (510) 412-2302

<b>Project Manager:</b> Luis Garcia-Bakarich <b>Project Number:</b> R11W09 <b>Project:</b> Sims Metal Management	<b>CWA Compliance Office</b> 75 Hawthorne Street San Francisco CA, 94105	<b>SDG:</b> 11241A <b>Reported:</b> 09/30/11 12:56
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## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
<b>Lab ID: 1108072-03</b> <span style="float: right;"><b>Soil - Sampled: 08/25/11 11:00</b></span>									
<b>Sample ID: SIMS-3</b>									
Aroclor 1262		ND	U	33	ug/kg dry	B1H0167	08/31/11	09/07/11	8082A/SOP335
Aroclor 1268		ND	U	33	"	"	"	"	8082A/SOP335
<i>Surrogate: Tetrachloro-m-xylene</i>		69 %		20-151%		"	"	"	
<i>Surrogate: Decachlorobiphenyl</i>		76 %		28.8-154%		"	"	"	
<b>Sample ID: SIMS-3</b> <span style="float: right;"><b>Conventional Chemistry Parameters by APHA/EPA Methods</b></span>									
% Solids		90		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
<b>Lab ID: 1108072-04</b> <span style="float: right;"><b>Soil - Sampled: 08/25/11 11:30</b></span>									
<b>Sample ID: SIMS-CB12</b>									
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
<i>Surrogate: Tetrachloro-m-xylene</i>		54 %		20-151%		"	"	"	
<i>Surrogate: Decachlorobiphenyl</i>		52 %		28.8-154%		"	"	"	
<b>Sample ID: SIMS-CB12</b> <span style="float: right;"><b>Conventional Chemistry Parameters by APHA/EPA Methods</b></span>									
% Solids		99		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
<b>Lab ID: 1108072-05</b> <span style="float: right;"><b>Soil - Sampled: 08/25/11 11:45</b></span>									
<b>Sample ID: SIMS-CB13</b>									
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
<i>Surrogate: Tetrachloro-m-xylene</i>		57 %		20-151%		"	"	"	
<i>Surrogate: Decachlorobiphenyl</i>		52 %		28.8-154%		"	"	"	
<b>Sample ID: SIMS-CB13</b> <span style="float: right;"><b>Conventional Chemistry Parameters by APHA/EPA Methods</b></span>									
% Solids		99		1	%	B110022	09/07/11	09/08/11	3550C/SOP460
<b>Lab ID: 1108072-06</b> <span style="float: right;"><b>Soil - Sampled: 08/25/11 12:00</b></span>									



# United States Environmental Protection Agency Region 9 Laboratory

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<b>Project Manager:</b> Luis Garcia-Bakarich	<b>CWA Compliance Office</b>	<b>SDG:</b> 11241A
<b>Project Number:</b> R11W09	<b>75 Hawthorne Street</b>	<b>Reported:</b> 09/30/11 12:56
<b>Project:</b> Sims Metal Management	<b>San Francisco CA, 94105</b>	

## Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID: 1108072-06</b>		<b>Soil - Sampled: 08/25/11 12:00</b>						
<b>Sample ID: SIMS-CB14</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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%		"	"	"
<b>Sample ID: SIMS-CB14</b>		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		97		1	%	B110022	09/07/11 09/08/11	3550C/SOP460
<b>Lab ID: 1108072-07</b>		<b>Soil - Sampled: 08/25/11 12:15</b>						
<b>Sample ID: SIMS-CB15/16</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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%		"	"	"
<b>Sample ID: SIMS-CB15/16</b>		<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>						
% Solids		69		1	%	B110022	09/07/11 09/08/11	3550C/SOP460
<b>Lab ID: 1108072-08</b>		<b>Soil - Sampled: 08/25/11 13:00</b>						
<b>Sample ID: SIMS-DD</b>		<b>Polychlorinated Biphenyls by EPA Method 8082A</b>						
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



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

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<b>Project Manager:</b> Luis Garcia-Bakarich	<b>CWA Compliance Office</b>	<b>SDG:</b> 11241A
<b>Project Number:</b> R11W09	<b>75 Hawthorne Street</b>	<b>Reported:</b> 09/30/11 12:56
<b>Project:</b> Sims Metal Management	<b>San Francisco CA, 94105</b>	

**Sample Results**

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed Method
<b>Lab ID:</b> 1108072-08								<b>Soil - Sampled: 08/25/11 13:00</b>
<b>Sample ID:</b> SIMS-DD								<b>Polychlorinated Biphenyls by EPA Method 8082A</b>
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
<i>Surrogate: Tetrachloro-m-xylene</i>			43 %	20-151%		"	"	"
<i>Surrogate: Decachlorobiphenyl</i>			42 %	28.8-154%		"	"	"
<b>Sample ID:</b> SIMS-DD								<b>Conventional Chemistry Parameters by APHA/EPA Methods</b>
% Solids		46		1	%	B110022	09/07/11 09/08/11	3550C/SOP460





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<b>Project Manager:</b> Luis Garcia-Bakarich <b>Project Number:</b> R11W09 <b>Project:</b> Sims Metal Management	<b>CWA Compliance Office</b> 75 Hawthorne Street San Francisco CA, 94105	<b>SDG:</b> 11241A <b>Reported:</b> 09/30/11 12:56
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## Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch BIH0167 - 3545A ASE/PFE - PCBs</b>										
<b>Prepared: 08/31/11 Analyzed: 09/07/11</b>										
<b>Polychlorinated Biphenyls by EPA Method 8082A - Quality Control</b>										
<b>Blank (BIH0167-BLK1)</b>										
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 "						
<hr/>										
<i>Surrogate: Tetrachloro-m-xylene</i>	5.91			"	6.67		89	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	5.67			"	6.67		85	28.8-154		
<hr/>										
<b>LCS (BIH0167-BS1)</b>										
Aroclor 1016	24.6			3 ug/kg wet	33.3		74	24.8-143		
Aroclor 1260	23.9			3 "	33.3		72	20-159		
<hr/>										
<i>Surrogate: Tetrachloro-m-xylene</i>	4.48			"	6.67		67	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	4.52			"	6.67		68	28.8-154		
<hr/>										
<b>Matrix Spike (BIH0167-MS1) Source: 1108072-03</b>										
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		
<hr/>										
<i>Surrogate: Tetrachloro-m-xylene</i>	5.19			"	7.49		69	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	11.6			"	7.49		155	28.8-154		
<hr/>										
<b>Matrix Spike Dup (BIH0167-MSD1) Source: 1108072-03</b>										
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
<hr/>										
<i>Surrogate: Tetrachloro-m-xylene</i>	3.27			"	7.48		44	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	7.44			"	7.48		99	28.8-154		
<hr/>										
<b>Batch B110004 - 3545A ASE/PFE - PCBs</b>										
<b>Prepared: 09/01/11 Analyzed: 09/07/11</b>										
<b>Polychlorinated Biphenyls by EPA Method 8082A - Quality Control</b>										
<b>Blank (B110004-BLK1)</b>										
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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<b>Project Number:</b> R11W09	<b>75 Hawthorne Street</b>	<b>Reported:</b> 09/30/11 12:56
<b>Project:</b> Sims Metal Management	<b>San Francisco CA, 94105</b>	

**Quality Control**

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B110004 - 3545A ASE/PFE - PCBs**

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

**Polychlorinated Biphenyls by EPA Method 8082A - Quality Control**

**Blank (B110004-BLK1)**

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 "						

<i>Surrogate: Tetrachloro-m-xylene</i>	5.76			"	6.67		86	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	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		

<i>Surrogate: Tetrachloro-m-xylene</i>	5.81			"	6.67		87	20-151		
<i>Surrogate: Decachlorobiphenyl</i>	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 %						
<b>Duplicate (B110022-DUP1)</b>										
Source: 1108072-03										
% Solids	90			1 %		90			0.07	20



United States Environmental Protection Agency  
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**Project Number:** R11W09  
**Project:** Sims Metal Management

**CWA Compliance Office**  
75 Hawthorne Street  
San Francisco CA, 94105

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

**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



Project Name	Project Number	Project Location

Analysis and Comments

Analysis and Comments



Jun 19, 2011

CB12

CB13

Sims 3

CB14

Sims 2

Sims 1

Sims DD

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37°30'40.30"N

122°12'28.23"W

elev. 8 ft

Eye alt. 1037 ft