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THE SUTTON GROUP

SOILS, FOUNDATIONS, DRAINAGE, SLOPES, CONTAINMENTS
CIVIL, GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

3708 Mount Diablo Blvd
Suite 215
Lafayette, CA, 94549

May 8, 2008

Mr. Steven Plunkett
Alameda County Environmental Health Department
Division of Environmental Protection
1131 Harbor Bay Parkway, 2nd floor
Alameda, CA 94502

RECEIVED

4:03 pm, May 08, 2008

Alameda County
Environmental Health

**Report of Well Closure and Soil Boring
Fuel Tank Remediation Project at the Oro Loma Sanitary District's Offices
2655 Grant Avenue
San Lorenzo, California
LOP Site No. RO0000288 ST ID 1996**

Dear Mr. Plunkett:

On behalf of property owner, Oro Loma Sanitary District, The Sutton Group is pleased to provide this letter report documenting the closure of Monitoring Well MW4 at the above noted address. This work was performed in accordance with the Interim Corrective Action Plan dated August 28, 2007, which was accepted by Alameda County Environmental Health Department in their letter dated November 5, 2007.

BACKGROUND

Monitoring well MW4 was located in the asphalt paved parking lot adjacent to the District's Engineering Offices and its Maintenance Building, and within the planned bulk soil excavation area related to the former gasoline tank. Bulk excavation is planned to extend to eight feet depth in the area of the well. The 2-inch diameter well had been installed by this firm on October 16, 2002.

In order to characterize the source removal soil for disposal, a soil boring, designated SB-10, was advanced by the same drill rig in the vicinity of MW-4, which is where prior investigations had indicated the highest concentrations of contaminants. Figure 1 is a site plan which shows the location of the work.

Alameda County Public Works Agency (ACPWA) issued two permits for the work, Nos. W2008-0199 and W2008-0200 for the well closure and the boring, respectively.

FIELD ACTIVITIES

Monitoring Well MW-04 Closure

The Sutton Group sub-contracted closure of monitoring well MW-04 and drilling of the soil boring to Exploration Geoservices ("EG"), a California C57-licensed driller with hazardous waste operations certification.

On April 16, 2008 The Sutton Group and EG mobilized to the site for the closure of MW-04. Following removal of the well cover, the 2-inch diameter monitoring well MW-04 was over drilled to a depth of 15 feet bgs using an 8-inch OD x 3¼-inch ID hollow-stemmed auger. The well head, casing and demolition materials were placed in a DOT 55-gallon drum. The drum was labeled and will be held on site for disposal with the bulk of excavated soils in the next phase of the project, which will be within 60 days from the date of well closure. Neat cement grout was tremied through a pipe as the hollow-stemmed auger was extracted from the shaft. The top-most 1½ feet of the grouted shaft was capped with concrete.

Figure 2 is a log of the well closure for MW-4.

Soil Sampling

Soil boring SB-10 was located 5 feet from the MW-4 location, where the highest concentrations of ground contaminants that had been found in previous investigations. SB-10 was advanced to 8 feet depth, the planned depth of bulk soil removal, by EG under the observation of Staff Scientist, Bonnie Loox. Samples were collected from the auger flights, into clean glass containers, labeled, and placed on ice for transport to the laboratory. A chain of custody was prepared onsite and accompanied the samples to the laboratory.

Figure 3 is the log of the boring. Following sample collection, the shaft was closed with tremie-placed cement grout and topped with concrete.

Per agreement, Mr. James Yoo of the ACPWA was contacted by phone upon completion of the work.

Sample Analysis

Two of the three samples collected from boring SB-10 were analyzed for CAM 17 metals, total petroleum hydrocarbons gasoline range (TPH-G), total petroleum hydrocarbons diesel range (TPH-D), oil and grease (O&G), volatile organic compounds (VOC), and semi-volatile compounds (SVOC) in accordance with the request from the proposed landfill. The third sample was placed on-hold for possible future analysis. Analytical results are summarized in the table below. The laboratory report is included in the appendix

Table 1: SB-10 Soil Sampling Results Summary

Soil Boring	Depth (feet bgs)	TPH-G (ppm)	TPH-D (ppm)	O&G (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	MTBE (ppm)
SB-10-GF	4	2.3	2.7	82	ND	ND	0.01	0.038	1
SB-10-7	7	2,700	260	110	12	11	60	270	ND<5.0

CONCLUSION

Based upon the above data, The Sutton Group believes that monitoring well MW-04 was closed in accordance with the ICAP and the ACPWA Well Permit, and the project is ready to continue to the next phase, bulk soil excavation.

CLOSURE

This evaluation has been performed expressly for the Oro Loma Sanitary District in accordance with generally accepted, engineering principles and practices of similarly licensed professionals in this local area for the agreed work scope. No other warranty, either expressed or implied is made.

Please call if you have questions or if we can assist you in any other way.

Yours truly,
THE SUTTON GROUP

Bonnie Loox
Environmental Specialist

JOHN R. SUTTON
REGISTERED PROFESSIONAL ENGINEER
LIC. No. 40324
EXP. 12/31/08
CIVIL
STATE OF CALIFORNIA

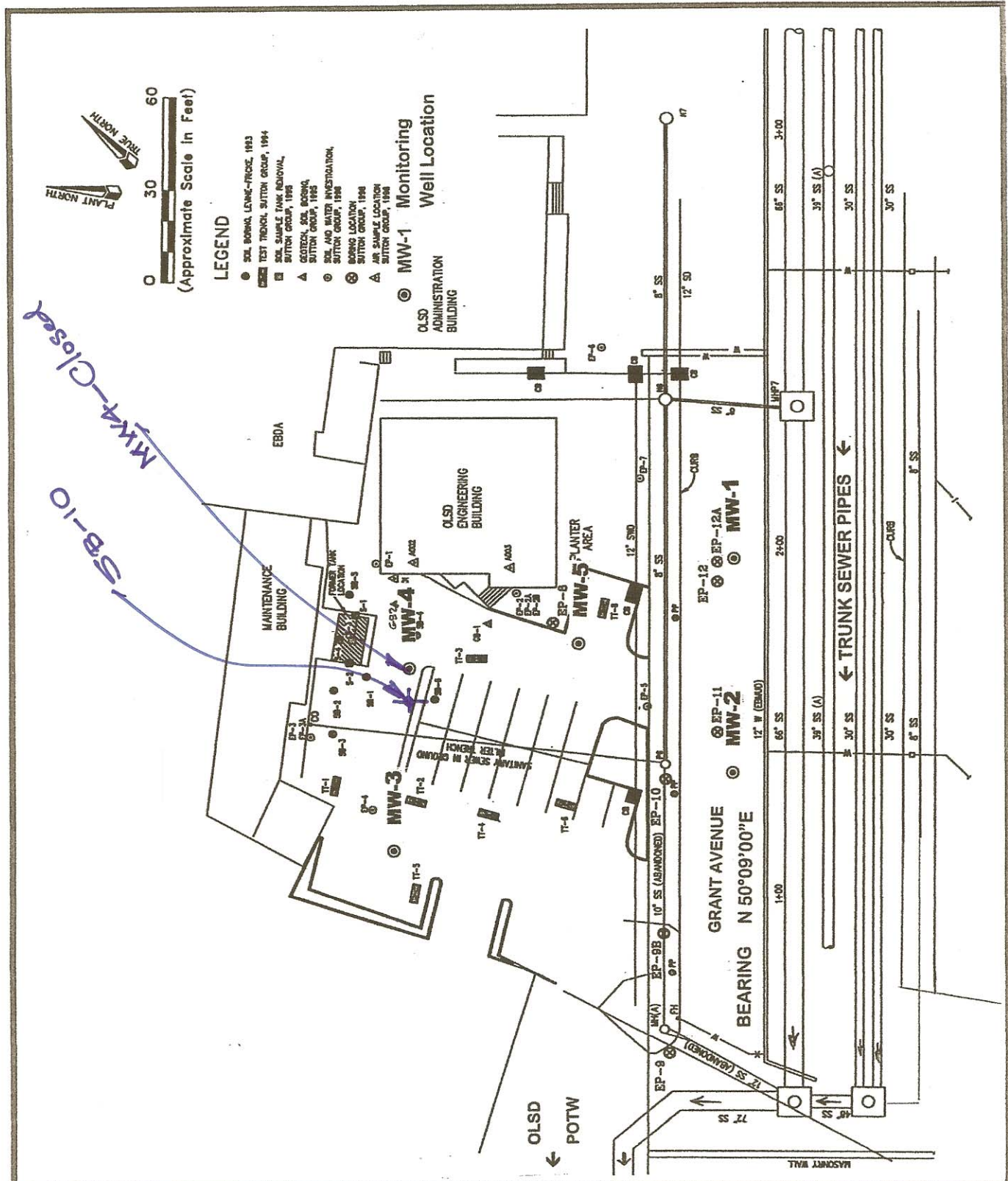
JOHN R. SUTTON
REGISTERED PROFESSIONAL ENGINEER
GE 812
EXP. 12/31/08
GEOTECHNICAL
STATE OF CALIFORNIA

John R Sutton
Principal Engineer
RCE 40324, GE812, exp 12/31/2008

Attachments:

- Figure 1 Well Location Plan, Former Gasoline Tank Area
- Figure 2 Log, MW-4 Closed
- Figure 3 Log, Soil Boring SB-10
- Appendix: Analytical Laboratory Report (McC Campbell)
DWR-188 Well Logs: MW-4, SB-10

Copy to Mr. Jason Warner, PE , Oro Loma Sanitary District
Copy to Mr. James Yoo, ACPWA
Copy uploaded to Alameda Co Health Services ftp web site.
Data uploaded to California DWR Geotracker database



THE SUTTON GROUP
 Engineering and Environmental Services
 3708 Mount Diablo Blvd, Suite 215
 Lafayette, California, 94549
 Phone: (925).284-4208
 Fax: (925).284-4189

WELL LOCATION PLAN
 SERVICE CENTER AREA
 ORO LOMA SANITARY DISTRICT
 2600 GRANT AVENUE,
 SAN LORENZO, CA

PROJECT No. 3022.10

FIGURE 1

8/2/03

THE SUTTON GROUP
 3708 Mt. Diablo Blvd,
 SUITE 215
 Lafayette, CA, 94549
 (925) 284-4208

WELL DESTRUCTION LOG

WELL No. MW-4
 Sheet 1 of 1

Project No.	3022.13	Drilling Company	Exploration Geoservices, Inc.
Date Drilled	4/16/2008	Driller	Dave Yeager Lic. No. C57: 484288
Client	Oro Loma Sanitary District	Drill Rig Model	Mobile B61
Site address	2655 Grant Avenue San Lorenzo, CA, 94580	Drilling Method /Dia.	8"x3¼" Hollow stemmed auger
Boring Location	Engrg./Mntc. Bldg Pkg. lot, near fmr tank loc.	Sampling Method	
		Rim Elevation	9.40 Datum: msl

Logged By	Bonnie Loox	Water depth	5'			
		Time/Date	4/16/2008			

DEPT H FEET	SAMPLE #, TYPE	BLOWS / 6 IN./ N	SYMBOL	USCS CLASS	DESCRIPTION	MW4 WELL DETAILS	WELL DESTRUCT -ION	DEPTH FEET
0					Asphalt over Aggregate base, total thickness 8in			0
				GP- -GM	FILL, crushed rock to 2" max size, moist, tan to blue green Slight petroleum odor	@ 1 ½'		TOP 1 ½' FILLED WITH CONCRETE
					increased odor	@ 3 ½'		
5						@ 4' SLOTTE TO 14 ft		5
				CH -OH	CLAY, silty, soft, some peat, mod to strong petroleum odor, wet, gray/black BAY MUD			
10					Casing and sand-pack drilled out to 15 ft depth			10
15					Tremie- grouted up to 1½ ft depth Top 1½' filled with concrete.			15
20					Total Depth drilled = 15 ft.			20

SAMPLER Type: S = 2" OD SPT; CA = 2" ID California, 25 = 2½ " ID California, ST = Shelby, P = Pitcher Sample

THE SUTTON GROUP
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 Suite 215
 Lafayette, CA, 94549
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BORING LOG

BORING No.: **SB-10**

Sheet 1 of 1

Project No.	3022.13	Drilling Company	Exploration Geoservices, Inc.	
Date Drilled	4/16/2008	Driller	Dave Yeager	Lic. No. 484288
Client	Oro Loma Sanitary District	Drill Rig Model	Mobile B61	
Site address	2655 Grant Avenue San Lorenzo, CA, 94580	Drilling Method	8"x3/4" Hollow stemmed auger	
Boring Location	Engrg./Mntc. Bldg Pkg. lot, 4 ft from MW-4	Borehole Diameter		
		Sampling Method	Grab sample from auger flights	
		Start Drilling	11am	End drilling 11:20am
		Surface Elevation	9.4±	Datum msl

Logged By	Bonnie Loox	water level	~5'				
		Time/Date	Drill				

DEPTH FEET	SAMPLE TYPE	BLOW / N	BLOWC OUNT	USCS CLASS	DESCRIPTION	DEPTH FEET
0				AC AB	Asphalt on well-graded aggregate base, dark grey Total depth approx 9".	0
				GP	GRAVEL, very sandy-crushed rock to 2" max size, light brown	
	10-GF				@ 3.5': Gas = 2.3 ppm; B=ND, T=ND, EB=0.010, X=0.038, MTBE=1.0	
5	10-4			CH	CLAY, very moist, high plastic, green, strong gasoline odor Strong Petroleum odor. Sample on HOLD	5
	10-7				CLAY, very moist, medium stiff, very silty, gray-green @ 7' : Gas = 2,700 ppm; B=12, T=11, EB=60, X=270, MTBE=ND<5.0	
10					Boring terminated at 8ft depth Backfilled with cement grout, topped with concrete.	10
15						15
						20

SAMPLER Type: S = 2" OD SPT; CA = 2" ID California, 25 = 2 1/2 " ID California, ST = Shelby, P = Pitcher Sample



McC Campbell Analytical, Inc.

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received: 04/16/08
	Client P.O.:	Date Reported: 04/18/08
		Date Completed: 04/18/08

WorkOrder: 0804386

April 18, 2008

Dear John:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: **#CA1905-1; Oro Loma SD Excavatio**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0804386

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (877) 252-9262

Fax: (925) 252-9269

RUSH

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF PDF Excel Write On (DW)

Report To: John Sutton Bill To: John Sutton

Company: The Sutton Group
3708 Mt. Diablo Blvd. #215 ← suttangeo@sbcglobal.net
Lafayette, CA 94549 E-Mail: blax@ceresasociates.com

Tele: () Fax: ()

Project #: CA 1905-1 Project Name: Dro Loma SD Excavation

Project Location: Sage Lorenzo

Sampler Signature: [Signature]

Analysis Request Other Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other					
SB-10-GF	Eof MW-4	4/16/08		2	GL	X					X								
SB-10-4	"	4/16/08		2	GL	X					X								
SB-10-7	"	4/16/08		2	GL	X					X								

Analysis Request	Other	Comments
MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)		Filter Samples for Metals analysis: Yes / No
MTBE / BTEX ONLY (EPA 602 / 8021)		
TPH as Diesel / Motor Oil (8015) + G		
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)		
Total Petroleum Hydrocarbons (418.1)		
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)		
EPA 505 / 608 / 8081 (CI Pesticides)		
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners		
EPA 507 / 8141 (NP Pesticides)		
EPA 515 / 8151 (Acidic CI Herbicides)		
EPA 524.2 / 624 / 8260 (VOCs)	X	
EPA 525.2 / 625 / 8270 (SVOCs)	X	
EPA 8270 SIM / 8310 (PAHs / PNAs)	X	
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	X	
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)		
Lead (200.7 / 200.8 / 6010 / 6020)		

Relinquished By: [Signature] Date: 4/16/08 Time: 13:00 Received By: [Signature]

ICE# 10-25 ✓
 GOOD CONDITION ✓
 HEAD SPACE ABSENT ✓
 DECHLORINATED IN LAB ✓
 APPROPRIATE CONTAINERS ✓
 PRESERVED IN LAB ✓

COMMENTS: GL = 4oz glass jars

VOAS O&G METALS OTHER
 PRESERVATION pH<2

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1534 Willow Pass Rd
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CHAIN-OF-CUSTODY RECORD

WorkOrder: 0804386

ClientCode: TSG

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	John Sutton	Email: suttongeo@sbcglobal.net	Bill to:	Accounts Payable	Requested TAT:	2 days
	The Sutton Group	TEL: (925) 944-2856 FAX: 925-284-4189		The Sutton Group	<i>Date Received:</i>	04/16/2008
	3708 Mt. Diablo Blvd, Ste. 215	PO:		3708 Mt. Diablo Blvd, Ste. 215	<i>Date Printed:</i>	04/16/2008
	Lafayette, CA 94549	ProjectNo: #CA1905-1; Oro Loma SD Excavation		Lafayette, CA 94549		

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0804386-001	SB-10-GF	Solid	4/16/2008	<input type="checkbox"/>		A		A		A		A		A		A	
0804386-003	SB-10-7	Sludge	4/16/2008	<input type="checkbox"/>	A		A		A		A		A		A		

Test Legend:

1	5520E_SG_SLUDGE	2	5520E_SG_Solid	3	8260B_Sludge	4	8260B_Solid	5	8270D_Sludge
6	8270D_Solid	7	CAM17MS_Sludge	8	CAM17MS_Solid	9	G-MBTEX_Sludge	10	G-MBTEX_Solid
11		12							

The following SampleIDs: 001A, 003A contain testgroup.

Prepared by: Melissa Valles

Comments: [please cc: bloox@ceresassociates.com](mailto:bloox@ceresassociates.com)

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **The Sutton Group** Date and Time Received: **4/16/08 1:26:48 PM**
 Project Name: **#CA1905-1; Oro Loma SD Excavation** Checklist completed and reviewed by: **Melissa Valles**
 WorkOrder N°: **0804386** Matrix Sludge/Solid Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 10.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted: Date contacted: Contacted by:

Comments:



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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received: 04/16/08
	Client P.O.:	Date Extracted: 04/16/08
		Date Analyzed 04/17/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0804386

Lab ID	0804386-001A
Client ID	SB-10-GF
Matrix	Solid

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	Acrolein (Propenal)	ND	1.0	0.05
Acrylonitrile	ND	1.0	0.02	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	0.0077	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	2-Chloroethyl Vinyl Ether	ND	1.0	0.01
Chloroform	ND	1.0	0.005	Chloromethane	ND	1.0	0.005
2-Chlorotoluene	ND	1.0	0.005	4-Chlorotoluene	ND	1.0	0.005
Dibromochloromethane	ND	1.0	0.005	1,2-Dibromo-3-chloropropane	ND	1.0	0.004
1,2-Dibromoethane (EDB)	ND	1.0	0.004	Dibromomethane	ND	1.0	0.005
1,2-Dichlorobenzene	ND	1.0	0.005	1,3-Dichlorobenzene	ND	1.0	0.005
1,4-Dichlorobenzene	ND	1.0	0.005	Dichlorodifluoromethane	ND	1.0	0.005
1,1-Dichloroethane	ND	1.0	0.005	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004
1,1-Dichloroethene	ND	1.0	0.005	cis-1,2-Dichloroethene	ND	1.0	0.005
trans-1,2-Dichloroethene	ND	1.0	0.005	1,2-Dichloropropane	ND	1.0	0.005
1,3-Dichloropropane	ND	1.0	0.005	2,2-Dichloropropane	ND	1.0	0.005
1,1-Dichloropropene	ND	1.0	0.005	cis-1,3-Dichloropropene	ND	1.0	0.005
trans-1,3-Dichloropropene	ND	1.0	0.005	Diisopropyl ether (DIPE)	ND	1.0	0.005
Ethylbenzene	0.010	1.0	0.005	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005
Freon 113	ND	1.0	0.1	Hexachlorobutadiene	ND	1.0	0.005
Hexachloroethane	ND	1.0	0.005	2-Hexanone	ND	1.0	0.005
Isopropylbenzene	ND	1.0	0.005	4-Isopropyl toluene	ND	1.0	0.005
Methyl-t-butyl ether (MTBE)	ND	1.0	0.005	Methylene chloride	ND	1.0	0.005
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005	Naphthalene	0.012	1.0	0.005
Nitrobenzene	ND	1.0	0.1	n-Propyl benzene	0.0061	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	0.073	1.0	0.005	1,3,5-Trimethylbenzene	0.024	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes	0.038	1.0	0.005

Surrogate Recoveries (%)

%SS1:	108	%SS2:	99
%SS3:	96		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received: 04/16/08
	Client P.O.:	Date Extracted: 04/16/08
		Date Analyzed 04/17/08

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0804386

Lab ID	0804386-003A
Client ID	SB-10-7
Matrix	Sludge

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<50	1000	0.05	Acrolein (Propenal)	ND<50	1000	0.05
Acrylonitrile	ND<20	1000	0.02	tert-Amyl methyl ether (TAME)	ND<5.0	1000	0.005
Benzene	12	1000	0.005	Bromobenzene	ND<5.0	1000	0.005
Bromochloromethane	ND<5.0	1000	0.005	Bromodichloromethane	ND<5.0	1000	0.005
Bromoform	ND<5.0	1000	0.005	Bromomethane	ND<5.0	1000	0.005
2-Butanone (MEK)	ND<20	1000	0.02	t-Butyl alcohol (TBA)	ND<50	1000	0.05
n-Butyl benzene	9.1	1000	0.005	sec-Butyl benzene	ND<5.0	1000	0.005
tert-Butyl benzene	ND<5.0	1000	0.005	Carbon Disulfide	ND<5.0	1000	0.005
Carbon Tetrachloride	ND<5.0	1000	0.005	Chlorobenzene	ND<5.0	1000	0.005
Chloroethane	ND<5.0	1000	0.005	2-Chloroethyl Vinyl Ether	ND<10	1000	0.01
Chloroform	ND<5.0	1000	0.005	Chloromethane	ND<5.0	1000	0.005
2-Chlorotoluene	ND<5.0	1000	0.005	4-Chlorotoluene	ND<5.0	1000	0.005
Dibromochloromethane	ND<5.0	1000	0.005	1,2-Dibromo-3-chloropropane	ND<4.0	1000	0.004
1,2-Dibromoethane (EDB)	ND<4.0	1000	0.004	Dibromomethane	ND<5.0	1000	0.005
1,2-Dichlorobenzene	ND<5.0	1000	0.005	1,3-Dichlorobenzene	ND<5.0	1000	0.005
1,4-Dichlorobenzene	ND<5.0	1000	0.005	Dichlorodifluoromethane	ND<5.0	1000	0.005
1,1-Dichloroethane	ND<5.0	1000	0.005	1,2-Dichloroethane (1,2-DCA)	ND<4.0	1000	0.004
1,1-Dichloroethene	ND<5.0	1000	0.005	cis-1,2-Dichloroethene	ND<5.0	1000	0.005
trans-1,2-Dichloroethene	ND<5.0	1000	0.005	1,2-Dichloropropane	ND<5.0	1000	0.005
1,3-Dichloropropane	ND<5.0	1000	0.005	2,2-Dichloropropane	ND<5.0	1000	0.005
1,1-Dichloropropene	ND<5.0	1000	0.005	cis-1,3-Dichloropropene	ND<5.0	1000	0.005
trans-1,3-Dichloropropene	ND<5.0	1000	0.005	Diisopropyl ether (DIPE)	ND<5.0	1000	0.005
Ethylbenzene	60	1000	0.005	Ethyl tert-butyl ether (ETBE)	ND<5.0	1000	0.005
Freon 113	ND<100	1000	0.1	Hexachlorobutadiene	ND<5.0	1000	0.005
Hexachloroethane	ND<5.0	1000	0.005	2-Hexanone	ND<5.0	1000	0.005
Isopropylbenzene	5.7	1000	0.005	4-Isopropyl toluene	ND<5.0	1000	0.005
Methyl-t-butyl ether (MTBE)	ND<5.0	1000	0.005	Methylene chloride	ND<5.0	1000	0.005
4-Methyl-2-pentanone (MIBK)	ND<5.0	1000	0.005	Naphthalene	14	1000	0.005
Nitrobenzene	ND<100	1000	0.1	n-Propyl benzene	19	1000	0.005
Styrene	ND<5.0	1000	0.005	1,1,1,2-Tetrachloroethane	ND<5.0	1000	0.005
1,1,2,2-Tetrachloroethane	ND<5.0	1000	0.005	Tetrachloroethene	ND<5.0	1000	0.005
Toluene	11	1000	0.005	1,2,3-Trichlorobenzene	ND<5.0	1000	0.005
1,2,4-Trichlorobenzene	ND<5.0	1000	0.005	1,1,1-Trichloroethane	ND<5.0	1000	0.005
1,1,2-Trichloroethane	ND<5.0	1000	0.005	Trichloroethene	ND<5.0	1000	0.005
Trichlorofluoromethane	ND<5.0	1000	0.005	1,2,3-Trichloropropane	ND<5.0	1000	0.005
1,2,4-Trimethylbenzene	100	1000	0.005	1,3,5-Trimethylbenzene	35	1000	0.005
Vinyl Chloride	ND<5.0	1000	0.005	Xylenes	270	1000	0.005

Surrogate Recoveries (%)

%SS1:	107	%SS2:	100
%SS3:	95		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received: 04/16/08
	Client P.O.:	Date Analyzed 04/17/08
		Date Extracted: 04/16/08

Semi-Volatile Organics by GC/MS (Basic Target List)*

Extraction Method: SW3550C

Analytical Method: SW8270C

Work Order: 0804386

Lab ID	0804386-001A
Client ID	SB-10-GF
Matrix	Solid

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.33	Acenaphthylene	ND	1.0	0.33
Acetochlor	ND	1.0	0.33	Anthracene	ND	1.0	0.33
Benzidine	ND	1.0	1.6	Benzoic Acid	ND	1.0	1.6
Benzo(a)anthracene	ND	1.0	0.33	Benzo(b)fluoranthene	ND	1.0	0.33
Benzo(k)fluoranthene	ND	1.0	0.33	Benzo(g,h,i)perylene	ND	1.0	0.33
Benzo(a)pyrene	ND	1.0	0.33	Benzyl Alcohol	ND	1.0	1.6
1,1-Biphenyl	ND	1.0	0.33	Bis (2-chloroethoxy) Methane	ND	1.0	0.33
Bis (2-chloroethyl) Ether	ND	1.0	0.33	Bis (2-chloroisopropyl) Ether	ND	1.0	0.33
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.33	4-Bromophenyl Phenyl Ether	ND	1.0	0.33
Butylbenzyl Phthalate	ND	1.0	0.33	4-Chloroaniline	ND	1.0	0.66
4-Chloro-3-methylphenol	ND	1.0	0.33	2-Chloronaphthalene	ND	1.0	0.33
2-Chlorophenol	ND	1.0	0.33	4-Chlorophenyl Phenyl Ether	ND	1.0	0.33
Chrysene	ND	1.0	0.33	Dibenzo(a,h)anthracene	ND	1.0	0.33
Dibenzofuran	ND	1.0	0.33	Di-n-butyl Phthalate	ND	1.0	0.33
1,2-Dichlorobenzene	ND	1.0	0.33	1,3-Dichlorobenzene	ND	1.0	0.33
1,4-Dichlorobenzene	ND	1.0	0.33	3,3-Dichlorobenzidine	ND	1.0	0.66
2,4-Dichlorophenol	ND	1.0	0.33	Diethyl Phthalate	ND	1.0	0.33
2,4-Dimethylphenol	ND	1.0	0.33	Dimethyl Phthalate	ND	1.0	0.33
4,6-Dinitro-2-methylphenol	ND	1.0	1.6	2,4-Dinitrophenol	ND	1.0	1.6
2,4-Dinitrotoluene	ND	1.0	0.33	2,6-Dinitrotoluene	ND	1.0	0.33
Di-n-octyl Phthalate	ND	1.0	0.33	1,2-Diphenylhydrazine	ND	1.0	0.33
Fluoranthene	ND	1.0	0.33	Fluorene	ND	1.0	0.33
Hexachlorobenzene	ND	1.0	0.33	Hexachlorobutadiene	ND	1.0	0.33
Hexachlorocyclopentadiene	ND	1.0	1.6	Hexachloroethane	ND	1.0	0.33
Indeno (1,2,3-cd) pyrene	ND	1.0	0.33	Isophorone	ND	1.0	0.33
2-Methylnaphthalene	ND	1.0	0.33	2-Methylphenol (o-Cresol)	ND	1.0	0.33
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.33	Naphthalene	ND	1.0	0.33
2-Nitroaniline	ND	1.0	1.6	3-Nitroaniline	ND	1.0	1.6
4-Nitroaniline	ND	1.0	1.6	Nitrobenzene	ND	1.0	0.33
2-Nitrophenol	ND	1.0	1.6	4-Nitrophenol	ND	1.0	1.6
N-Nitrosodiphenylamine	ND	1.0	0.33	N-Nitrosodi-n-propylamine	ND	1.0	0.33
Pentachlorophenol	ND	1.0	1.6	Phenanthrene	ND	1.0	0.33
Phenol	ND	1.0	0.33	Pvrene	ND	1.0	0.33
1,2,4-Trichlorobenzene	ND	1.0	0.33	2,4,5-Trichlorophenol	ND	1.0	0.33
2,4,6-Trichlorophenol	ND	1.0	0.33				

Surrogate Recoveries (%)

%SS1:	72	%SS2:	77
%SS3:	77	%SS4:	86
%SS5:	66	%SS6:	83

Comments:

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; r) results are reported on a dry weight basis.



The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received: 04/16/08
	Client P.O.:	Date Analyzed 04/17/08
		Date Extracted: 04/16/08

Semi-Volatile Organics by GC/MS (Basic Target List)*

Extraction Method: SW3550C

Analytical Method: SW8270C

Work Order: 0804386

Lab ID	0804386-003A
Client ID	SB-10-7
Matrix	Sludge

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND<3.3	10	0.33	Acenaphthylene	ND<3.3	10	0.33
Acetochlor	ND<3.3	10	0.33	Anthracene	ND<3.3	10	0.33
Benzidine	ND<16	10	1.6	Benzoic Acid	ND<16	10	1.6
Benzo(a)anthracene	ND<3.3	10	0.33	Benzo(b)fluoranthene	ND<3.3	10	0.33
Benzo(k)fluoranthene	ND<3.3	10	0.33	Benzo(g,h,i)perylene	ND<3.3	10	0.33
Benzo(a)pyrene	ND<3.3	10	0.33	Benzyl Alcohol	ND<16	10	1.6
1,1-Biphenyl	ND<3.3	10	0.33	Bis (2-chloroethoxy) Methane	ND<3.3	10	0.33
Bis (2-chloroethyl) Ether	ND<3.3	10	0.33	Bis (2-chloroisopropyl) Ether	ND<3.3	10	0.33
Bis (2-ethylhexyl) Phthalate	ND<3.3	10	0.33	4-Bromophenyl Phenyl Ether	ND<3.3	10	0.33
Butylbenzyl Phthalate	ND<3.3	10	0.33	4-Chloroaniline	ND<6.6	10	0.66
4-Chloro-3-methylphenol	ND<3.3	10	0.33	2-Chloronaphthalene	ND<3.3	10	0.33
2-Chlorophenol	ND<3.3	10	0.33	4-Chlorophenyl Phenyl Ether	ND<3.3	10	0.33
Chrysene	ND<3.3	10	0.33	Dibenzo(a,h)anthracene	ND<3.3	10	0.33
Dibenzofuran	ND<3.3	10	0.33	Di-n-butyl Phthalate	ND<3.3	10	0.33
1,2-Dichlorobenzene	ND<3.3	10	0.33	1,3-Dichlorobenzene	ND<3.3	10	0.33
1,4-Dichlorobenzene	ND<3.3	10	0.33	3,3-Dichlorobenzidine	ND<6.6	10	0.66
2,4-Dichlorophenol	ND<3.3	10	0.33	Diethyl Phthalate	ND<3.3	10	0.33
2,4-Dimethylphenol	ND<3.3	10	0.33	Dimethyl Phthalate	ND<3.3	10	0.33
4,6-Dinitro-2-methylphenol	ND<16	10	1.6	2,4-Dinitrophenol	ND<16	10	1.6
2,4-Dinitrotoluene	ND<3.3	10	0.33	2,6-Dinitrotoluene	ND<3.3	10	0.33
Di-n-octyl Phthalate	ND<3.3	10	0.33	1,2-Diphenylhydrazine	ND<3.3	10	0.33
Fluoranthene	ND<3.3	10	0.33	Fluorene	ND<3.3	10	0.33
Hexachlorobenzene	ND<3.3	10	0.33	Hexachlorobutadiene	ND<3.3	10	0.33
Hexachlorocyclopentadiene	ND<16	10	1.6	Hexachloroethane	ND<3.3	10	0.33
Indeno (1,2,3-cd) pyrene	ND<3.3	10	0.33	Isophorone	ND<3.3	10	0.33
2-Methylnaphthalene	5.9	10	0.33	2-Methylphenol (o-Cresol)	ND<3.3	10	0.33
3 &/or 4-Methylphenol (m,p-Cresol)	ND<3.3	10	0.33	Naphthalene	ND<3.3	10	0.33
2-Nitroaniline	ND<16	10	1.6	3-Nitroaniline	ND<16	10	1.6
4-Nitroaniline	ND<16	10	1.6	Nitrobenzene	ND<3.3	10	0.33
2-Nitrophenol	ND<16	10	1.6	4-Nitrophenol	ND<16	10	1.6
N-Nitrosodiphenylamine	ND<3.3	10	0.33	N-Nitrosodi-n-propylamine	ND<3.3	10	0.33
Pentachlorophenol	ND<16	10	1.6	Phenanthrene	ND<3.3	10	0.33
Phenol	ND<3.3	10	0.33	Pvrene	ND<3.3	10	0.33
1,2,4-Trichlorobenzene	ND<3.3	10	0.33	2,4,5-Trichlorophenol	ND<3.3	10	0.33
2,4,6-Trichlorophenol	ND<3.3	10	0.33				

Surrogate Recoveries (%)

%SS1:	45	%SS2:	---#
%SS3:	59	%SS4:	85
%SS5:	---#	%SS6:	69

Comments:

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; r) results are reported on a dry weight basis.



McC Campbell Analytical, Inc.

"When Quality Counts"

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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received 04/16/08
	Client P.O.:	Date Extracted 04/16/08
		Date Analyzed 04/17/08

CAM / CCR 17 Metals*

Lab ID	0804386-003A				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	SB-10-7					
Matrix	Sludge			Sludge		W
Extraction Type	TOTAL			mg/Kg		mg/L

ICP-MS Metals, Concentration*

Analytical Method: 6020A	Extraction Method: SW3050B	Work Order: 0804386	
Dilution Factor	1	1	1
Antimony	ND		0.5 NA
Arsenic	3.9		0.5 NA
Barium	130		5.0 NA
Beryllium	ND		0.5 NA
Cadmium	ND		0.25 NA
Chromium	29		0.5 NA
Cobalt	6.7		0.5 NA
Copper	12		0.5 NA
Lead	18		0.5 NA
Mercury	ND		0.05 NA
Molybdenum	ND		0.5 NA
Nickel	27		0.5 NA
Selenium	ND		0.5 NA
Silver	ND		0.5 NA
Thallium	ND		0.5 NA
Vanadium	28		0.5 NA
Zinc	43		5.0 NA
%SS:	129		

Comments

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.
WET = Waste Extraction Test (STLC).
DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #CA1905-1; Oro Loma SD Excavation	Date Sampled: 04/16/08
	Client Contact: John Sutton	Date Received 04/16/08
	Client P.O.:	Date Extracted 04/16/08
		Date Analyzed 04/17/08

CAM / CCR 17 Metals*

Lab ID	0804386-001A				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	SB-10-GF					
Matrix	S				S	W
Extraction Type	TOTAL				mg/Kg	mg/L

ICP-MS Metals, Concentration*

Analytical Method: 6020A		Extraction Method: SW3050B			Work Order: 0804386	
Dilution Factor	10				1	1
Antimony	ND<5.0				0.5	NA
Arsenic	ND<5.0				0.5	NA
Barium	ND<50				5.0	NA
Beryllium	ND<5.0				0.5	NA
Cadmium	ND<2.5				0.25	NA
Chromium	72				0.5	NA
Cobalt	26				0.5	NA
Copper	130				0.5	NA
Lead	ND<5.0				0.5	NA
Mercury	ND<0.50				0.05	NA
Molybdenum	ND<5.0				0.5	NA
Nickel	58				0.5	NA
Selenium	ND<5.0				0.5	NA
Silver	ND<5.0				0.5	NA
Thallium	ND<5.0				0.5	NA
Vanadium	60				0.5	NA
Zinc	ND<50				5.0	NA
%SS:	104					

Comments

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.
WET = Waste Extraction Test (STLC).
DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative; J) "J-Flag" - estimated value detected between the RL & MDL.



QC SUMMARY REPORT FOR SM5520E/F

W.O. Sample Matrix: Sludge/Solid

QC Matrix: Soil

WorkOrder 0804386

EPA Method SM5520E/F		Extraction SM5520E/F			BatchID: 35020			Spiked Sample ID: 0804377-021A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	ND	1000	110	112	2.26	89.9	92.2	2.54	70 - 130	30	70 - 130	30
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE												

BATCH 35020 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/16/08 7:35 PM	0804386-003A	04/16/08	04/16/08	04/16/08 7:40 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Sludge/Solid

QC Matrix: Soil

WorkOrder 0804386

EPA Method SW8015C		Extraction SW3550C			BatchID: 35019			Spiked Sample ID: 0804377-035A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	ND	20	110	115	4.12	116	104	11.3	70 - 130	30	70 - 130	30
%SS:	115	50	115	108	6.47	105	97	8.26	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 35019 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/17/08 10:28 AM	0804386-003A	04/16/08	04/16/08	04/16/08 7:39 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount\ Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Sludge/Solid

QC Matrix: Soil

WorkOrder 0804386

EPA Method SW8260B	Extraction SW5030B			BatchID: 35035			Spiked Sample ID: 0804377-037A						
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	120	119	0.857	116	115	0.732	60 - 130	30	60 - 130	30	
Benzene	ND	0.050	117	110	6.29	114	112	1.99	60 - 130	30	60 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	78.2	83	5.96	81.4	93	13.3	60 - 130	30	60 - 130	30	
Chlorobenzene	ND	0.050	107	102	4.50	103	101	1.63	60 - 130	30	60 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	110	108	1.86	108	107	0.990	60 - 130	30	60 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	121	118	2.58	118	117	0.406	60 - 130	30	60 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	116	113	2.71	112	111	1.70	60 - 130	30	60 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	121	119	1.76	118	117	0.983	60 - 130	30	60 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	120	119	0.840	117	119	0.947	60 - 130	30	60 - 130	30	
Toluene	ND	0.050	128	120	6.45	122	120	1.50	60 - 130	30	60 - 130	30	
Trichloroethene	ND	0.050	110	104	5.33	106	107	0.109	60 - 130	30	60 - 130	30	
%SS1:	99	0.050	103	103	0	99	98	0.806	70 - 130	30	70 - 130	30	
%SS2:	107	0.050	113	113	0	111	111	0	70 - 130	30	70 - 130	30	
%SS3:	118	0.050	73	74	0.589	76	77	1.01	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 35035 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/17/08 10:04 PM	0804386-003A	04/16/08	04/16/08	04/17/08 9:20 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Sludge/Solid

QC Matrix: Soil

WorkOrder 0804386

EPA Method SW8021B/8015Cm	Extraction SW5030B			BatchID: 35037			Spiked Sample ID: 0804377-037A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	102	108	6.14	106	108	1.36	70 - 130	20	70 - 130	20
MTBE	ND	0.10	95.5	103	7.13	105	109	3.68	70 - 130	20	70 - 130	20
Benzene	ND	0.10	89.7	95.1	5.90	99.1	101	1.46	70 - 130	20	70 - 130	20
Toluene	ND	0.10	105	111	6.07	115	116	1.02	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	99.8	106	6.26	108	111	2.48	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	109	117	6.46	119	121	1.66	70 - 130	20	70 - 130	20
%SS:	87	0.10	90	93	3.41	99	99	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 35037 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/16/08 8:39 PM	0804386-003A	04/16/08	04/16/08	04/16/08 9:10 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Sludge/Solid

QC Matrix: Soil

WorkOrder: 0804386

EPA Method SW8270C	Extraction SW3550C			BatchID: 35036			Spiked Sample ID: 0804453-001A					
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Acenaphthene	ND<16	2	97	96	1.04	72.9	72.7	0.357	30 - 130	30	30 - 130	30
4-Chloro-3-methylphenol	ND<16	4	73.8	77.2	4.64	66.7	67.7	1.53	30 - 130	30	30 - 130	30
2-Chlorophenol	ND<16	4	92.2	92.5	0.271	77.2	79.3	2.71	30 - 130	30	30 - 130	30
1,4-Dichlorobenzene	ND<16	2	98	99	1.02	75.5	75.7	0.278	30 - 130	30	30 - 130	30
2,4-Dinitrotoluene	ND<16	2	NR	NR	NR	72.9	73.2	0.438	30 - 130	30	30 - 130	30
4-Nitrophenol	ND<80	4	57.5	67.5	16.0	91.3	91	0.324	30 - 130	30	30 - 130	30
N-Nitrosodi-n-propylamine	ND<16	2	96.5	101	4.56	75.5	76.2	1.00	30 - 130	30	30 - 130	30
Pentachlorophenol	ND<80	4	NR	NR	NR	48.2	45.4	6.03	30 - 130	30	30 - 130	30
Phenol	ND<16	4	90.8	91.5	0.823	65.6	67.1	2.25	30 - 130	30	30 - 130	30
Pyrene	ND<16	2	69	69	0	63.9	62.8	1.78	30 - 130	30	30 - 130	30
1,2,4-Trichlorobenzene	ND<16	2	87.5	86.5	1.15	69	68.7	0.479	30 - 130	30	30 - 130	30
%SS1:	82	200	84	82	1.73	92	94	2.21	30 - 130	30	30 - 130	30
%SS2:	76	200	78	74	5.30	87	90	2.77	30 - 130	30	30 - 130	30
%SS3:	76	200	77	78	2.42	88	88	0	30 - 130	30	30 - 130	30
%SS4:	105	200	92	91	0.769	94	92	1.51	30 - 130	30	30 - 130	30
%SS5:	43	200	49	53	8.35	86	85	0.550	30 - 130	30	30 - 130	30
%SS6:	68	200	62	58	7.19	81	81	0	30 - 130	30	30 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 35036 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/17/08 5:11 PM	0804386-003A	04/16/08	04/16/08	04/17/08 6:35 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



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QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Sludge

QC Matrix: Soil

WorkOrder 0804386

EPA Method 6020A			Extraction SW3050B			BatchID: 35021			Spiked Sample ID 0804377-028A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	50	97.6	102	4.79	10	103	107	4.01	70 - 130	20	80 - 120	20
Arsenic	3.3	50	97.2	102	4.85	10	103	108	4.37	70 - 130	20	80 - 120	20
Barium	140	500	99.3	106	5.28	100	102	105	2.80	70 - 130	20	80 - 120	20
Beryllium	ND	50	87.3	89.8	2.89	10	100	104	3.44	70 - 130	20	80 - 120	20
Cadmium	ND	50	92.5	97.1	4.86	10	102	104	2.24	70 - 130	20	80 - 120	20
Chromium	100	50	105	123	5.69	10	99.3	106	6.72	70 - 130	20	80 - 120	20
Cobalt	11	50	89.3	93.8	3.97	10	102	105	2.90	70 - 130	20	80 - 120	20
Copper	28	50	95.3	105	5.95	10	98.6	105	6.21	70 - 130	20	80 - 120	20
Lead	4.4	50	94.7	101	5.52	10	101	104	2.83	70 - 130	20	80 - 120	20
Mercury	0.14	1.25	94.1	99.8	5.27	0.25	102	103	0.973	70 - 130	20	80 - 120	20
Molybdenum	ND	50	95	99.7	4.85	10	99.5	104	4.73	70 - 130	20	80 - 120	20
Nickel	59	50	103	117	6.17	10	101	107	5.89	70 - 130	20	80 - 120	20
Selenium	ND	50	94.5	96.9	2.43	10	99.9	108	7.41	70 - 130	20	80 - 120	20
Silver	ND	50	88.7	92.8	4.54	10	98.6	102	3.79	70 - 130	20	80 - 120	20
Thallium	ND	50	95.2	101	5.86	10	97.7	102	3.85	70 - 130	20	80 - 120	20
Vanadium	56	50	99.6	112	5.49	10	99.4	107	7.29	70 - 130	20	80 - 120	20
Zinc	37	500	93.9	98	3.99	100	103	106	2.78	70 - 130	20	80 - 120	20
%SS:	98	250	105	112	6.76	250	94	98	3.91	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 35021 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-003A	04/16/08	04/16/08	04/17/08 2:09 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

JR



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QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Solid

QC Matrix: Soil

WorkOrder 0804386

EPA Method 6020A		Extraction SW3050B				BatchID: 35021			Spiked Sample ID 0804377-028A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	50	97.6	102	4.79	10	103	107	4.01	70 - 130	20	80 - 120	20
Arsenic	3.3	50	97.2	102	4.85	10	103	108	4.37	70 - 130	20	80 - 120	20
Barium	140	500	99.3	106	5.28	100	102	105	2.80	70 - 130	20	80 - 120	20
Beryllium	ND	50	87.3	89.8	2.89	10	100	104	3.44	70 - 130	20	80 - 120	20
Cadmium	ND	50	92.5	97.1	4.86	10	102	104	2.24	70 - 130	20	80 - 120	20
Chromium	100	50	105	123	5.69	10	99.3	106	6.72	70 - 130	20	80 - 120	20
Cobalt	11	50	89.3	93.8	3.97	10	102	105	2.90	70 - 130	20	80 - 120	20
Copper	28	50	95.3	105	5.95	10	98.6	105	6.21	70 - 130	20	80 - 120	20
Lead	4.4	50	94.7	101	5.52	10	101	104	2.83	70 - 130	20	80 - 120	20
Mercury	0.14	1.25	94.1	99.8	5.27	0.25	102	103	0.973	70 - 130	20	80 - 120	20
Molybdenum	ND	50	95	99.7	4.85	10	99.5	104	4.73	70 - 130	20	80 - 120	20
Nickel	59	50	103	117	6.17	10	101	107	5.89	70 - 130	20	80 - 120	20
Selenium	ND	50	94.5	96.9	2.43	10	99.9	108	7.41	70 - 130	20	80 - 120	20
Silver	ND	50	88.7	92.8	4.54	10	98.6	102	3.79	70 - 130	20	80 - 120	20
Thallium	ND	50	95.2	101	5.86	10	97.7	102	3.85	70 - 130	20	80 - 120	20
Vanadium	56	50	99.6	112	5.49	10	99.4	107	7.29	70 - 130	20	80 - 120	20
Zinc	37	500	93.9	98	3.99	100	103	106	2.78	70 - 130	20	80 - 120	20
%SS:	98	250	105	112	6.76	250	94	98	3.91	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 35021 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804386-001A	04/16/08	04/16/08	04/17/08 1:55 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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