Jeffrey Eandi Eandi Metal Works 976 23rd Avenue Oakland CA 94606 Ro Da

15 December 2004

Project No. P279

Letter Report
Sample and Backfill Former Tank Excavation
2004
2440 East Eleventh Street
Oakland CA

Dear Mr. Eandi:

This letter report describes soil sampling, backfilling, and repaving activities associated with a former excavation to remove an underground tank at the subject property (Figures 1-4).

BACKGROUND

A chronology regarding the former 1,000-gallon underground gasoline tank is presented in Table 1.

Eandi Metal Works formerly operated three underground tanks. In May 1992, the three underground tanks were removed. Two of the tanks were removed with nondetectable or insignificant levels of contamination, with no further action required by Alameda County Health Care Services. These two tanks were located at the main Eandi property on Twenty-Third Avenue.

The third tank, a 1,000-gallon underground gasoline tank, was removed from an area immediately outside the northeast corner of the building at 2440 East Eleventh Street. TPH-gasoline, benzene, toluene, ethylbenzene, xylenes, and lead were detected in soil from this excavation. The soil was spread nearby the excavation and allowed to aerate for approximately 9 months. The aerated soil was then replaced in the excavation and trench plates were placed over the top of the excavation. The trench plates covered approximately 2 feet of void space (which accounted for the volume of the tank).

In July 1995, five soil borings were drilled in the vicinity of the former tank. Three of the borings were completed as monitoring wells (MW1, MW2, and MW3). Two of the borings were within the previous tank excavation (E-1 and E-2) (Table 2, Figure 4).

Alameda County Health Care Services subsequently mandated additional investigation prior to closing the tank excavation. Streamborn prepared a workplan, dated 21 January 2003, outlining

Mail: PO Box 8330, Berkeley CA 94707-8330 Office: 900 Santa Fe Avenue, Albany CA 94706

a plan for sampling, backfilling, and repaving activities. The workplan was approved by the Alameda County Health Care Services in a letter dated 11 December 2003.

EXCAVATION CLOSURE

Soil Sampling and Testing

On 9 June 2004, the trench plates were removed. Using a backhoe, we first excavated through the center of the excavation until native soil was encountered (at a depth of ± 8 -feet). A sample was collected from the base of the excavation using the bucket of the backhoe.

Sidewall samples were collected in a similar manner. The backhoe excavated soil away from each sidewall until native soil was exposed. Samples were collected at a depth of approximately 5-feet below ground surface.

Samples from the southwest and northwest sidewalls were collected from the approximate midpoint of the sidewall. The two other sidewall samples were collected from accessible locations, given constraints of the adjacent building, sidewalk, and street, along with encountered caving soil conditions.

Figure 4 shows the sample locations.

Soil samples were analyzed for TPH-diesel, TPH-kerosene, TPH-stoddard solvent, TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260), and total lead. Sample results were nondetect except for total lead (Table 2). Total lead was measured at concentrations indicative of background conditions.

Groundwater was not encountered in the excavation at the time of sampling.

Backfill

On 17 September 2004, soil was re-excavated using a backhoe. The limits of the September 2004 excavation approximately corresponded to the limits of the original tank removal excavation, with some enlargement due to caving. The excavated soil was too wet for immediate replacement and compaction. The excavated soil was spread nearby the excavation and allowed to air-dry for 5 days.

On 22 September 2004, the sidewalk overhanging portions of the excavation was removed and placed in the bottom of the excavation. The excavation was then backfilled using the air-dried soil. The soil was placed in approximate 2-foot lifts and compacted using a whacker. The compacted grade was approximately 14 inches below finish grade.

Repaying

Six inches of imported Class II aggregate base was placed and compacted in the excavation. Reinforcing steel (#5 rebar on 12-inch centers) was placed over the compacted aggregate base.



Eight inches of concrete was placed to reconstruct the pavement and sidewalk. Repaving was performed on 23 September 2004.

BIBLIOGRAPHY

AGI (1995). Monitoring Well Installations and Quarterly Groundwater Monitoring, Eandi Metal Works, Oakland, CA. Prepared for Eandi Metal Works, Oakland CA. Prepared by AGI Technologies, Bellevue WA.

ACHCS (2003). Fuel Leak Case # RO0000029 - 976 23rd Avenue, Oakland, CA 94606. Correspondence to Jeffrey Eandi, Eandi Metal Works, Oakland CA. Correspondence from Amir K. Gholami, Alameda County Health Care Services, Alameda CA. 11 December 2003.

Streamborn (2003). Workplan, Sampling, Testing, and Backfilling of Tank Excavation, 2440 East Eleventh Street, Oakland CA. Prepared for Amir K. Gholami, Alameda County Health Care Services, Alameda CA. Prepared by Streamborn, Berkeley CA. 21 January 2003.

Please contact us with any questions or comments.

Sincerely,

STREAMBORN

Douglas W. Lovell, PE

Geoenvironmental Engineer

ough W Coral

cc: Amir Gholami/Alameda County Health Services, Alameda CA

Expires 12/31/04

OF CALIFOR

Table 1

Environmental Chronology

2440 East Eleventh Street Oakland CA

Date	Performed By	Event
Unknown	Unknown	• 1,000-gallon underground leaded gasoline tank installed.
15 August 1991	Eandi Metal Works	• The 1,000-gallon tank was emptied of product. Use of the tank was discontinued
11 May 1992	Unknown	The 1,000-gallon tank was removed.
		Contamination was discovered.
10 July 1995	AGI Technologies	• Five soil borings were drilled. Soil samples were collected and analyzed for IPH-gasoline, BTEX, MtBE (EPA Method 8020), and total metals.
		• Three of the borings were completed as monitoring wells (MW-1, MW-2, and MW-3)
		• Water levels were measured in wells MW-1, MW-2, and MW-3.
		• MW-1, MW-2, and MW-3 were developed and groundwater samples were collected Samples were analyzed for TPH-gasoline, BTEX, MtBE (EPA Method 8020), and total lead.
		• Elevation survey was conducted for MW-1, MW-2, and MW-3.
17 July 1995	AGI Technologies	• Groundwater levels were measured in MW-1, MW-2, and MW-3.
		 Groundwater samples were collected from MW-1, MW-2, and MW-3. Samples were analyzed for TPH-gasoline, BTEX, MtBE (EPA Method 8020), and total lead
20 October 1995	AGI Technologies	• Groundwater levels were measured in MW-1, MW-2, and MW-3.
		• Groundwater samples were collected from MW-1, MW-2, and MW-3. Samples were analyzed for TPH-gasoline, BTEX, and total lead.
25 January 1996	AGI Technologies	 Groundwater levels were measured in MW-1, MW-2, and MW-3.
		• Groundwater samples were collected from MW-1, MW-2, and MW-3 Samples were analyzed for TPH-gasoline, BTEX, MtBE (EPA Method 8020), and total lead
25 April 1996	AGI Technologies	• Groundwater levels were measured in MW-1, MW-2, and MW-3.
		 Groundwater samples were collected from MW-1, MW-2, and MW-3 Samples were analyzed for TPH-gasoline, BTEX, MtBE (EPA Method 8020), and total lead
11 - 12 June 2001	Kleinfelder	 Groundwater levels were measured in MW-1, MW-2, and MW-3.
		• Groundwater samples were collected from MW-1, MW-2, and MW-3 Samples were analyzed for TPH-gasoline, BTEX, and total lead.
5 February 2002	Kleinfelder	 Groundwater levels were measured in MW-1, MW-2, and MW-3.
		• Groundwater samples were collected from MW-1, MW-2, and MW-3 Samples were analyzed for TPH-gasoline, BTEX, MtBE (EPA Method 8020), and total lead
9 June 2004	Streamborn	• Using a backhoe, the excavation for the former tank was partially excavated.
		• Soil samples were collected from the base (7.5-8 feet below ground surface) and each of the four sidewalls (5-5.5 feet below ground surface) by exposing native soil and driving a 6-inch diameter brass liner into the soil.
		Soil samples were laboratory analyzed for TPH-diesel/kerosene/stoddard solvent. TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260), and total lead
17-23 September 2004	Streamborn	• Using a backhoe, the excavation for the former tank was completely excavated. The excavated soil was air-dried and replaced in ±2-foot lifts. Each lift was compacted using a whacker. Six-inches of Class II aggregate base was placed on top of the soil
		• The pavement and sidewalk were repaved with reinforced concrete. The concrete thickness was 8 inches. The reinforcement was #5 rebar on 12-inch centers

General Notes

- (a) AGI Technologies = AGI Technologies (Bellevue WA).
- (b) Kleinfelder = Kleinfelder (Oakland CA).
- (c) TPH-gasoline = total petroleum hydrocarbons as gasoline.
- (d) BTEX = benzene, toluene, xylenes, and total xylenes.
- (e) MtBE = methyl tert-butyl ether.
- (f) Streamborn = Streamborn (Berkeley CA)

Table 2
Soil Analytical Data

2440 East Eleventh Street Oakland CA

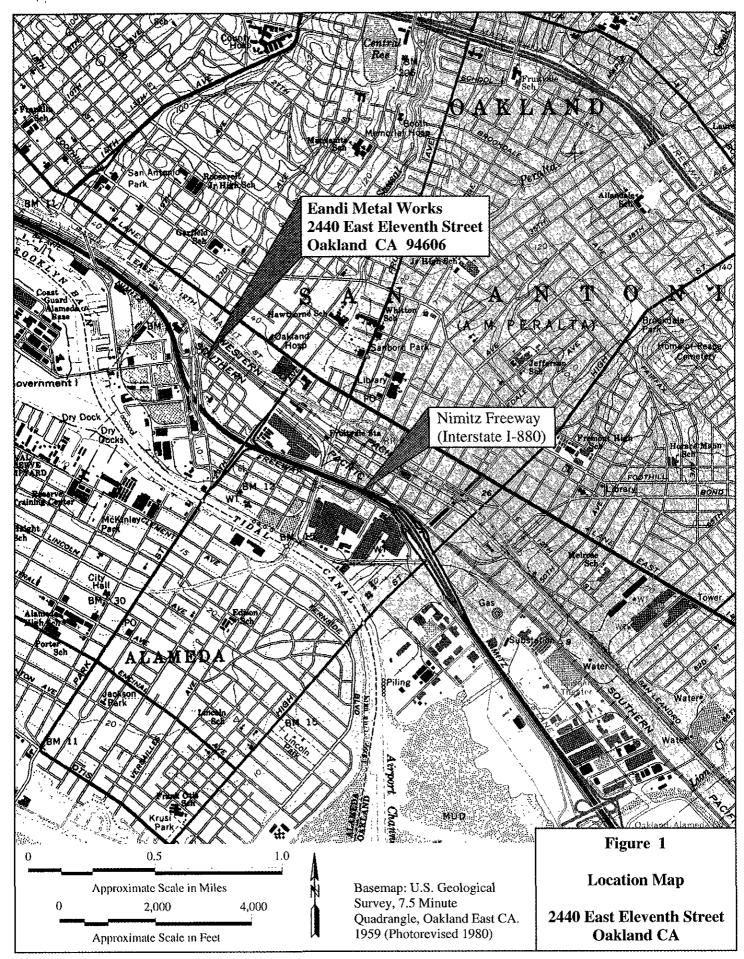
Location	Sample Date	Sample Type	Sample Depth (feet)	TPH- Diesel (mg/kg)	TPH- Kerosene (mg/kg)	TPH- Stoddard Solvent (mg/kg)	TPH- Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Fuel Oxygenates (EPA Method 8260) (mg/kg)	Total Lead (mg/kg)
E-1	10 July	Grab	6	NM	NM	NM	<0.5	<0.005	<0.005	<0.005	<0.005	MtBE = <0.005 (1)	15.9
	1995	(liner)	12.5	NM	NM	NM	1.4	0.058	0.15	0.059	0.30	MtBE = $0.017^{(1)}$	10.5
E-2	10 July 1995	Grab (liner)	12.5	NM	NM	NM	<0.5	<0:005	<0.005	<0.005	<0:005	MtBE = $< 0.005^{(1)}$	12.8
Base	9 June 2004	Grab (liner)	7.5-8		[\$ ⁶ ,<1`···	", ° ≲1	``,	*<0.005	<0.005	<0.005	<0.005	<0.005 to <0.01	43
Sidewall NW	9 June 2004	Grab (liner)	5-5.5	SI.	<1	<1		<0.005	<0.005	<0.005	<0.005	<0.005 to <0.01	5.5
Sidewall NE	9 June 2004	Grab (liner)	5-5.5	:- <l< td=""><td>41</td><td></td><td></td><td>₹0.005</td><td><0.005 € vindansa</td><td><0.005</td><td><0.005</td><td><0.005 to <0.01</td><td>22</td></l<>	4 1			₹0.005	<0.005 € vindansa	<0.005	<0.005	<0.005 to <0.01	22
Sidewall SW	9 June 2004	Grab (liner)	5-5.5	ļ	£		Jo 🗷	<0.005	<0.005	<0.005	<0.005	<0.005 to <0.01	7.9
Sidewall SE	9 June 2004	Grab (liner)	5-5.5	√I			V.	<0.005	<0.005	<0.005	<0.005	<0.005 to <0.01	42

General Notes

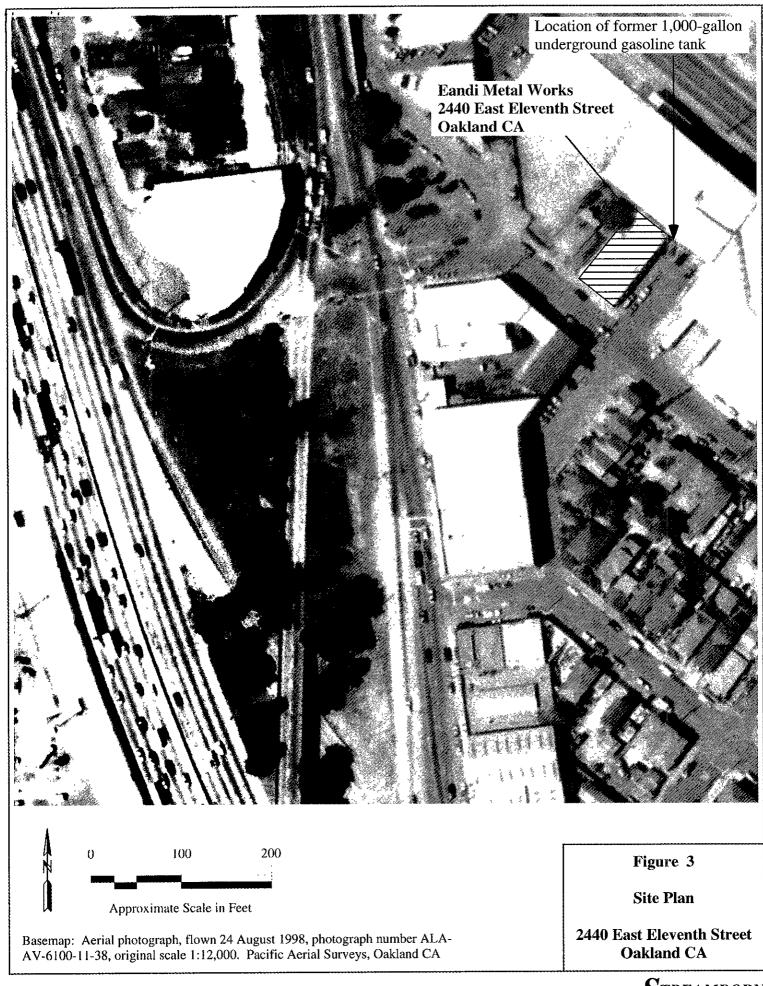
- (a) TPH = total petroleum hydrocarbons. MtBE = methyl tert-butyl ether.
- (b) 10 July 1995 samples collected by AGI Technologies (Bellevue WA); remaining samples collected by Streamborn (Berkeley CA).
- (c) 10 July 1995 samples analyzed by Anametrix Laboratories (San Jose CA); remaining samples analyzed by STL San Francisco (Pleasanton CA)
- (d) Depth measured from adjacent ground or pavement surface.

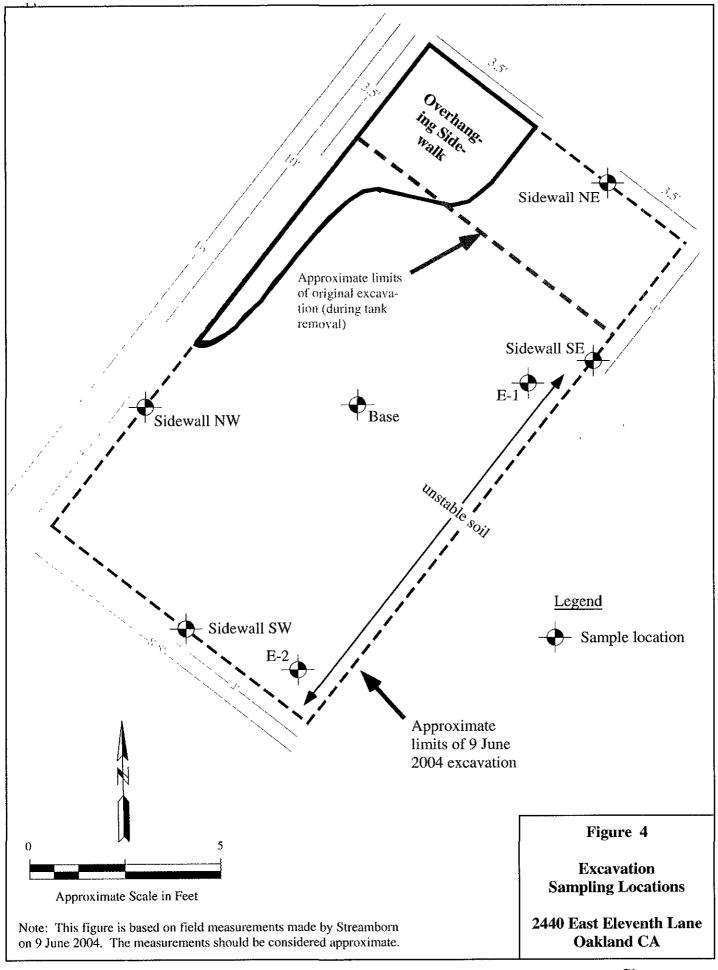
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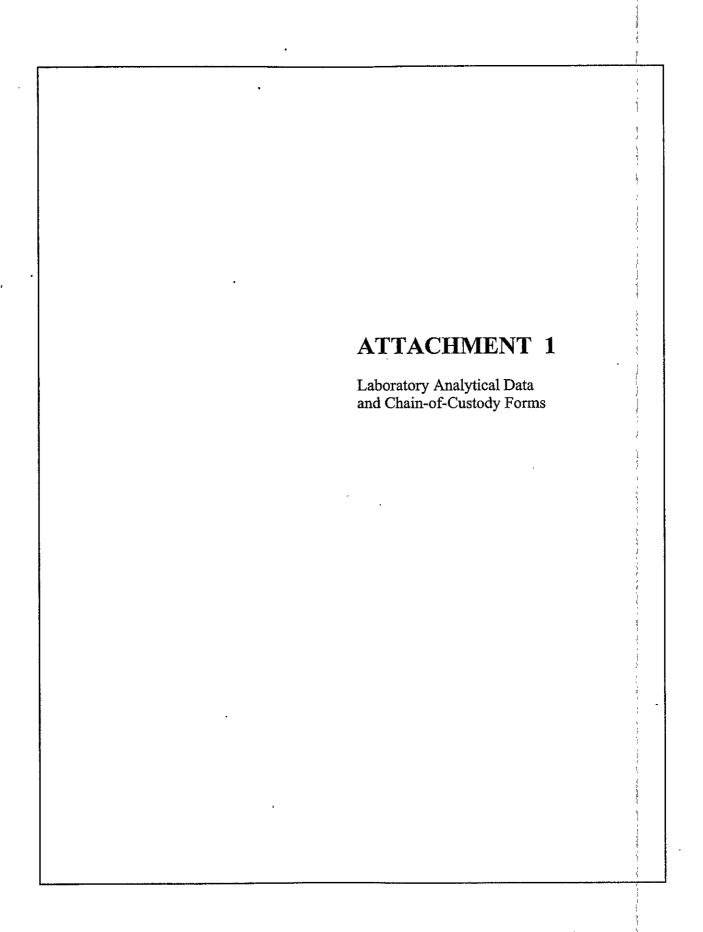
(1) For the 10 July 1995 samples, MtBE was analyzed by EPA Method 8020 and other fuel oxygenates were not analyzed for













Submission#: 2004-06-0378

Streamborn Consulting Services

June 24, 2004

900 Sante Fe Avenue Albany, CA 94706

Attn.: Matthew Hall

Project#: P279

Project: 2440 East Eleventh Street

Site: 2440 East Eleventh Street, Oakland, CA

Attached is our report for your samples received on 06/10/2004 16:15

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 07/25/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com Sincerely,

Dimple Sharma Project Manager

haema



Streamborn Consulting Services

Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

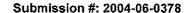
2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
Sidewall NW (5-5.5)	06/09/2004 13:40	Soil	1
Sidewall NE (5-5.5)	06/09/2004 13:10	Soil	2
Sidewall SW (5-5.5)	06/09/2004 12:40	Soil	3
Sidewall SE (5-5.5)	06/09/2004 13:00	Soil	4
Base (7.5-8)	06/09/2004 12:25	Soil	5





Streamborn Consulting Services

Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3050B

Test(s):

6010B

Sample ID: Sidewall NW (5-5.5)

Lab ID:

2004-06-0378 - 1

Sampled: 06/09/2004 13:40

Extracted:

6/11/2004 14:18

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	5.5	1.0	mg/Kg	1.00	06/12/2004 00:06	





Streamborn Consulting Services

Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3050B

Sample ID: Sidewall NE (5-5.5)

Sampled: 06/09/2004 13:10

Matrix: Soil Test(s): Lab ID:

6010B

2004-06-0378 - 2

Extracted:

6/11/2004 14:18 QC Batch#: 2004/06/11-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	22	1.0	mg/Kg	1.00	06/12/2004 00:09	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3050B

Sample ID: Sidewall SW (5-5.5)

dewall SW (5-5.5)

Sampled: 06/09/2004 12:40

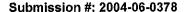
Matrix: Soil

Test(s): 6010B

Lab ID: 2004-06-0378 - 3

Extracted: 6/11/2004 14:18

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	7.9	1.0	mg/Kg	1.00	06/12/2004 00:13	





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Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

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Project: P279

Matrix:

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3050B

Sample ID: Sidewall SE (5-5.5)

Sampled:

06/09/2004 13:00

Soil

Test(s): 6010B

Lab ID:

2004-06-0378 - 4

Extracted:

6/11/2004 14:18

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	42	1.0	mg/Kg	1.00	06/12/2004 00:16	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3050B

Sample ID: Base (7.5-8)

Matrix:

Sampled:

06/09/2004 12:25

Soil

Test(s): 6010B

Lab ID:

2004-06-0378 - 5

Extracted:

6/11/2004 14:18

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	43	1.0	mg/Kg	1.00	06/12/2004 00:20	





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Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 3050B Method Blank

MB: 2004/06/11-04.15-125

Soil

Test(s): 6010B

k

QC Batch # 2004/06/11-04.15
Date Extracted: 06/11/2004 14:18

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	06/11/2004 22:19	





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2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 3050B Test(s): 6010B

Laboratory Control Spike

Soil

QC Batch # 2004/06/11-04.15

LCS

2004/06/11-04.15-126

Extracted: 06/11/2004

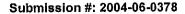
Analyzed: 06/11/2004 22:24

LCSD 2004/06/11-04.15-127

Extracted: 06/11/2004

Analyzed: 06/11/2004 22:28

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	its %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	98.5	97.8	100.0	98.5	97.8	0.7	80-120	20		





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Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

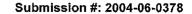
2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
Sidewall NW (5-5.5)	06/09/2004 13:40	Soil	1
Sidewall NE (5-5.5)	06/09/2004 13:10	Soil	2
Sidewall SW (5-5.5)	06/09/2004 12:40	Soil	3
Sidewall SE (5-5.5)	06/09/2004 13:00	Soil	4
Base (7.5-8)	06/09/2004 12:25	Soil	5





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Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 5030B

Test(s):

8260B

Sample ID: Sidewall NW (5-5.5)

Lab ID:

2004-06-0378 - 1

Sampled: 06/09/2004 13:40

Extracted:

6/16/2004 16:09

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	06/16/2004 16:09	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	06/16/2004 16:09	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	06/16/2004 16:09	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Benzene	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Toluene	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Ethyl benzene	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Total xylenes	ND	5.0	ug/Kg	1.00	06/16/2004 16:09	
Surrogate(s)	f					
1,2-Dichloroethane-d4	110.5	72-124	%	1.00	06/16/2004 16:09	
Toluene-d8	111.8	75-116	%	1.00	06/16/2004 16:09	





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Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Extracted: 6/16/2004 11:53

Prep(s): 5030B

Sample ID: Sidewall NE (5-5.5)

Sampled: 06/09/2004 13:10

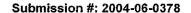
Matrix: Soil

8260B Test(s):

Lab ID:

2004-06-0378 - 2

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	06/16/2004 11:53	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	06/16/2004 11:53	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	06/16/2004 11:53	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Benzene	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Toluene	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Ethyl benzene	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Total xylenes	ND	5.0	ug/Kg	1.00	06/16/2004 11:53	
Surrogate(s)						
1,2-Dichloroethane-d4	101.4	72-124	%	1.00	06/16/2004 11:53	
Toluene-d8	103.6	75-116	%	1.00	06/16/2004 11:53	





Streamborn Consulting Services

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Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

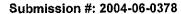
Prep(s): 5030B Test(s): 8260B

Sample ID: Sidewall SW (5-5.5) Lab ID: 2004-06-0378 - 3

Sampled: 06/09/2004 12:40 Extracted: 6/16/2004 00:02

Matrix: Soil QC Batch#: 2004/06/15-02.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	06/16/2004 00:02	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	06/16/2004 00:02	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	06/16/2004 00:02	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
Benzene	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
Toluene	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
Ethyl benzene	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	
Total xylenes	ND	5.0	ug/Kg	1.00	06/16/2004 00:02	İ
Surrogate(s)			i			1
1,2-Dichloroethane-d4	118.1	72-124	%	1.00	06/16/2004 00:02	
Toluene-d8	100.4	75-116	%	1.00	06/16/2004 00:02	





Streamborn Consulting Services

Attn.: Matthew Hall

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 5030B

Test(s):

8260B

Sample ID: Sidewall SE (5-5.5)

Lab ID:

2004-06-0378 - 4

Sampled: 06/09/2004 13:00

Extracted:

6/16/2004 00:58

Matrix: Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	06/16/2004 00:58	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	06/16/2004 00:58	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	06/16/2004 00:58	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Benzene	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Toluene	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Ethyl benzene	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Total xylenes	ND	5.0	ug/Kg	1.00	06/16/2004 00:58	
Surrogate(s)		ļ				
1,2-Dichloroethane-d4	119.5	72-124	%	1.00	06/16/2004 00:58	
Toluene-d8	113.9	75-116	%	1.00	06/16/2004 00:58	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

8260B

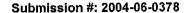
Prep(s): 5030B Test(s):

Sample ID: Base (7.5-8) Lab ID: 2004-06-0378 - 5

Sampled: 06/09/2004 12:25 Extracted: 6/16/2004 01:16

Matrix: Soil QC Batch#: 2004/06/15-02.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	06/16/2004 01:16	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	06/16/2004 01:16	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	06/16/2004 01:16	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Benzene	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Toluene	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Ethyl benzene	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Total xylenes	ND	5.0	ug/Kg	1.00	06/16/2004 01:16	
Surrogate(s)						
1,2-Dichloroethane-d4	115.9	72-124	%	1.00	06/16/2004 01:16	
Toluene-d8	108.7	75-116	%	1.00	06/16/2004 01:16	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 5030B Method Blank

MB: 2004/06/15-02.69-010

Test(s): 8260B Soil QC Batch # 2004/06/15-02.69

Date Extracted: 06/15/2004 20:10

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	06/15/2004 20:10	
tert-Butyl alcohol (TBA)	ND	10.0	ug/Kg	06/15/2004 20:10	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	06/15/2004 20:10	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	06/15/2004 20:10	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	06/15/2004 20:10	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	06/15/2004 20:10	
Benzene	ND	5.0	ug/Kg	06/15/2004 20:10	
Toluene	ND	5.0	ug/Kg	06/15/2004 20:10	
Ethyl benzene	ND	5.0	ug/Kg	06/15/2004 20:10	
Total xylenes	ND	5.0	ug/Kg	06/15/2004 20:10	
Surrogates(s)					
1,2-Dichloroethane-d4	115.6	72-124	%	06/15/2004 20:10	1
Toluene-d8	111.4	75-116	%	06/15/2004 20:10	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 5030B Method Blank

MB: 2004/06/16-01.69-021

Soil

Test(s): 8260B QC Batch # 2004/06/16-01.69

Date Extracted: 06/16/2004 07:21

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	06/16/2004 07:21	
tert-Butyl alcohol (TBA)	ND	10.0	ug/Kg	06/16/2004 07:21	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	06/16/2004 07:21	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	06/16/2004 07:21	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	06/16/2004 07:21	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	06/16/2004 07:21	
Benzene	ND	5.0	ug/Kg	06/16/2004 07:21	
Toluene	ND	5.0	ug/Kg	06/16/2004 07:21	
Ethyl benzene	ND	5.0	ug/Kg	06/16/2004 07:21	
Total xylenes	ND	5.0	ug/Kg	06/16/2004 07:21	
Surrogates(s)					
1,2-Dichloroethane-d4	118.2	72-124	%	06/16/2004 07:21	
Toluene-d8	107.5	75-116	%	06/16/2004 07:21	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 5030B

LCS

Test(s): 8260B

Laboratory Control Spike

2004/06/15-02.69-034

Soil
Extracted: 06/15/2004

QC Batch # 2004/06/15-02.69

LCSD 2004/06/15-02.69-052

=-1---1-00/4E/000

Analyzed: 06/15/2004 19:34

Extracted: 06/15/2004

Analyzed: 06/15/2004:19:52

Compound	Conc. ug/Kg		Exp.Conc.	Reco	Recovery %		Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE) Benzene Toluene	48.8 60.0 58.2	47.8 52.8 56.2	50.0 50.0 50.0	97.6 120.0 116.4	95.6 105.6 112.4	2.1 12.8 3.5	65-165 69-129 70-130	20 20 20		
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	536 551	534 559	500 500	107.2 110.2	106,8 111,8		72-124 75-116			





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Laboratory Control Spike

Soil

QC Batch # 2004/06/16-01.69

LCS 2004/06/16-01.69-044.

Extracted: 06/16/2004

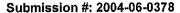
Analyzed: 06/16/2004 06:44

LCSD 2004/06/16-01.69-022

Extracted: 06/16/2004

Analyzed: 06/16/2004 10:21

Compound	Conc.	ug/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	gs
Compound	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LÇS	LCSD
Methyl tert-butyl ether (MTBE) Benzene Toluene	58.0 59.2 60.7	51.5 54.4 56.1	50.0 50.0 50.0	116.0 118.4 121.4	103.0 108.8 112.2	11.9 8.5 7.9	65-165 69-129 70-130	20 20 20		
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	551 560	521 545	500 500	110.2 112.0	104.2 109.0		72-124 75-116			





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS/MSD)

Soil

QC Batch # 2004/06/15-02.69

Sidewall SW (5-5.5) >> MS

Lab ID:

2004-06-0378 - 003

MS: 2004/06/15-02.69-021

Extracted: 06/16/2004

Analyzed:

06/16/2004 00:21

Dilution:

1.00

MSD: 2004/06/15-02.69-039

Extracted: 06/16/2004

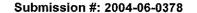
Analyzed:

06/16/2004 00:39

Dilution:

1.00

Compound	Conc.	į.	ıg/Kg	Spk.Level	R	ecovery	%	Limite	s %	FI	ags
	MS	MSD	Sample	ug/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	60.4	58.3	ND	45.0	134.2	130.7	2.6	65-165	20		
Benzene	54.3	50.2	ND	45.0	120.7	112.6	6.9	69-129	20		
Toluene	53.3	60.0	ND	45.0	118.4	134.5	12.7	70-130	20		rpd
Surrogate(s)											
1,2-Dichloroethane-d4	679	665	1	500	135.8	133.0		72-124		sh	sh
Toluene-d8	588	660		500	117.6	132.0		75-116		sh	sh





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
Sidewall NW (5-5.5)	06/09/2004 13:40	Soil	1
Sidewall NE (5-5.5)	06/09/2004 13:10	Soil	2
Sidewall SW (5-5.5)	06/09/2004 12:40	Soil	3
Sidewall SE (5-5.5)	06/09/2004 13:00	Soil	4
Base (7.5-8)	06/09/2004 12:25	Soil	5





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

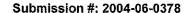
Prep(s): 3550/8015M Test(s): 8015M

 Sample ID:
 Sidewall NW (5-5.5)
 Lab ID:
 2004-06-0378 - 1

 Sampled:
 06/09/2004 13:40
 Extracted:
 6/18/2004 07:49

 Matrix:
 Soil
 QC Batch#:
 2004/06/18-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	06/19/2004 01:42	
Kerosene	ND	1.0	mg/Kg	1.00	06/19/2004 01:42	
Stoddard solvent	ND	1.0	mg/Kg	1.00	06/19/2004 01:42	
Surrogate(s)						
o-Terphenyl	85.0	60-130	%	1.00	06/19/2004 01:42	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3550/8015M

0/00 (SIVI

Test(s): Lab ID: 8015M

Sample ID: **Sidewall NE (5-5.5)**Sampled: 06/09/2004 13:10

Lab ID: 2004-06-0378 - 2

Extracted:

6/18/2004 07:49

Matrix: Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	06/19/2004 01:14	
Kerosene	ND	1.0	mg/Kg	1.00	06/19/2004 01:14	
Stoddard solvent	ND	1.0	mg/Kg	1.00	06/19/2004 01:14	
Surrogate(s)						
o-Terphenyl	84.7	60-130	%	1.00	06/19/2004 01:14	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

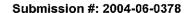
Prep(s): 3550/8015M Test(s): 8015M

 Sample ID:
 Sidewall SW (5-5.5)
 Lab ID:
 2004-06-0378 - 3

 Sampled:
 06/09/2004 12:40
 Extracted:
 6/18/2004 07:49

 Matrix:
 Soil
 QC Batch#:
 2004/06/18-03.10

Conc. RL Unit Dilution Flag Compound Analyzed 1.00 06/19/2004 00:47 Diesel ND 1.0 mg/Kg Kerosene ND 1.0 mg/Kg 1.00 06/19/2004 00:47 1.00 | 06/19/2004 00:47 Stoddard solvent ND 1.0 mg/Kg Surrogate(s) % 1.00 06/19/2004 00:47 83.0 60-130 o-Terphenyl





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3550/8015M

Sample ID: Sidewall SE (5-5.5)

Sampled: 06/09/2004 13:00

Matrix: Soil

Test(s): 8015M

Lab ID: 2004-06-0378 - 4

Extracted: 6/18/2004 07:49

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	06/19/2004 00:19	
Kerosene	ND	1.0	mg/Kg	1.00	06/19/2004 00:19	
Stoddard solvent	ND	1.0	mg/Kg	1.00	06/19/2004 00:19	
Surrogate(s)						
o-Terphenyl	92.9	60-130	%	1.00	06/19/2004 00:19	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Prep(s): 3550/8015M Test(s): 8015M

 Sample ID:
 Base (7.5-8)
 Lab ID:
 2004-06-0378 - 5

 Sampled:
 06/09/2004 12:25
 Extracted:
 6/18/2004 07:49

 Matrix:
 Soil
 QC Batch#:
 2004/06/18-03.10

Unit Dilution Compound Conc. RL Analyzed Flag 1.0 1.00 06/18/2004 23:51 Diesel ND mg/Kg 1.00 06/18/2004 23:51 Kerosene ND 1.0 mg/Kg 1.00 06/18/2004 23:51 1.0 mg/Kg Stoddard solvent ND Surrogate(s) % 1.00 06/18/2004 23:51 o-Terphenyl 83.5 60-130





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Project: P279

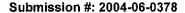
2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

	Batch QC Report	
Prep(s): 3550/8015M Method Blank	Soil	Test(s): 8015M QC Batch # 2004/06/18-03.10
MB: 2004/06/18-03.10-001		Date Extracted: 06/18/2004 07:49

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel Kerosene Stoddard solvent	ND ND ND	1 1 1	mg/Kg mg/Kg mg/Kg	06/18/2004 14:08 06/18/2004 14:08 06/18/2004 14:08	
Surrogates(s) o-Terphenyl	93.9	60-130	%	06/18/2004 14:08	





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Project: P279

2440 East Eleventh Street

Received: 06/10/2004 16:15

Site: 2440 East Eleventh Street, Oakland, CA

Batch QC Report

Prep(s): 3550/8015M

Test(s): 8015M

Laboratory Control Spike

Soil

QC Batch # 2004/06/18-03.10

LCS

2004/06/18-03.10-002

Extracted: 06/18/2004

Analyzed: 06/18/2004 14:36

LCSD 2004/06/18-03.10-003

Extracted: 06/18/2004

Analyzed: 06/18/2004 15:04

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	34.6	36.5	41.5	83.4	88.0	5.4	60-130	25	·	
Surrogates(s) o-Terphenyl	18.4	18.2	20.0	92.0	91.0		60-130	0		



STL San Francisco

Sample Receipt Checklist

Submission #:2004- <u>0 6</u> - <u>0 ≥ 78</u>	
Checklist completed by: (initials) Date: 06 / // /04	
Courier name: DSTL San Francisco 🗆 Client	
Custody seals intact on shipping container/samples	Yes No Present
Chain of custody present?	Yes No
Chain of custody signed when relinquished and received?	Yes No
Chain of custody agrees with sample labels?	YesNo
Samples in proper container/bottle?	YesNo
Sample containers intact?	YesNo
Sufficient sample volume for indicated test?	Yes
All samples received within holding time?	Yes_ •_No
Container/Temp Blank temperature in compliance (4 $^{ m O}$ C \pm 2)?	Temp: 6 Yes No No
	Ice Present Yes/_No
Water - VOA vials have zero headspace?	No VOA vials submitted Yes No
(if bubble is present, refer to approximate bubble size and itemize in comment \$\sigma_0(\)\$ Water - pH acceptable upon receipt? □ Yes □ No □ pH adjusted Preservative used: □ HNO₃ □ HCl □ H₂SO₄ □ NaOH □	
For any item check-listed "No", provided detail of discrepancy in comm	ent section below:
Comments:	the state of the s
- -	
Project Management [Routing for instruction of indica	ted discrepancy(ies)]
Project Manager: (initials) Date://04	
Client contacted: ☐ Yes ☐ No	
Summary of discussion:	
Corrective Action (per PM/Client):	

STREAMBORN Chain-of-Custody Form

86780

Project Name: 2440 East Eleventh Street	Project Location: 2440 East Eleventh Street, Oakland CA	Project Number: P279
Sampler: Matthew B. Hall	Laboratory: STL San Francisco	Laboratory Number:

W 45 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1			N	Matri	x	Ту	pe	С	ontainers			Tu	naro	und			Analyses					
Sample Designation	Date	V.4	Soil C	Water	Vapor	Grab	Composite	Quantity	Туре	Preservative	Field Filtration	48-Hour	5- Working Days	10-Working Days		TPH-diesel/kerosene/ stoddard solvent	TPH-gasoline/ BTEX/ fuel oxygenates (by EPA Method 8260)	Total Lead			Sampler Comments	Laboratory Comments
Sidewall NW (5-5.5)	9-Jun-04	£401	х			х		1	liner	ice				х		х	х	х				
	9-Jun-04	1:10	x			х		1	liner	ice				х		x	х	x				
Sidewall NE (57.5 Sidewall SW (5-5.5	9-Jun-04	12:40	×			х		1	liner	ice			1	_ x		X	X	X	<u> </u>			
Sidewall SE (5-5.5)	9-Jun-04	1:00	х			х		1	liner	ice				х		х	х	х				
Base (7.5-8)	9-Jun-04	12:25	х			х		1	liner	ice				х		х	x	х	<u> </u>			
					L					<u>. </u>						<u> </u>						
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Note: Sampler and laboratory to observe preservative, conditi	ion, integrity, etc. of samples and record (under "Comments") any exception	ns from standard protocols.	
		ediated/	120
Relinquished By:	Received By:	Date: (/// O/ O	Time .
Relinquished By	Received By: Neurie Harrista	STL-SF Date: (3/10/04	Time:
7.37	1 0	1,00	

STREAMBORN Mail: PO Box 8330, Berkeley CA 94707-8330 Office: 900 Santa Fe Ave, Albany CA 94706 510-528-4234 Fax: 528-2613

Report results to info@streamborn.com

6.0°C