



Environmental Bio-Systems, Inc.

Innovative Solutions for a Better Environment

Contractor's License A-Haz 687236

15 October 1999

Karl Royer
East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580-1841

- get boring logs - requested 4/24/99
- compare TPH d conc w/ SFIA Ecrist #s.
- where were SS collected from at each borehole. Any odors at 6-7' bgs.

RE: Soil and Ground Water Sampling Letter Report

Dear Mr. Royer:

Environmental Bio-Systems, Inc. (EBS) presents this letter report as documentation of the recent subsurface exploration conducted at your facility, located at 2651 Grant Avenue in San Lorenzo, California. This letter report was prepared pursuant to a signed contract between East Bay Dischargers Authority (the Client) and EBS (Contract #P99022B-R1).

The scope of soil and ground water sampling described below was mandated by the Alameda County Health Care Services Agency (ACHCSA) in their letter dated 15 June 1999. Their mandate followed the reported release of 555 gallons of diesel fuel at the Site in February 1999. The ACHCSA approved EBS Work Plan #157-531B in their letter dated 20 August 1999 to perform the work documented in this letter report. A Site Location Map and Site Map are included as Figures 1 and 2, respectively in Attachment A.

FIELD WORK

EBS directed the collection of three soil cores at the site by Fast-Tek Engineering Support Services (Fast-Tek) of San Rafael, California on 9 September 1999. Fast-Tek is a California licensed drilling contractor (C-57 #589008). The cores were designated as SB1 through SC3. All core locations are shown on Figure 2 in Attachment A.

Continuous soil cores were collected at each of the three locations using a Geoprobe direct push technology (DPT) rig (Model 5400). The three cores were placed at the locations depicted on Figure 1 in Attachment A. All field activities were carried out under the direct supervision of an EBS California Registered Geologist. First ground water was encountered at approximately 11.5' below ground surface (bgs). Soil cores SC1 and SC2 were completed to a total depth of 16 feet bgs, core SC3 was completed to a total depth of 20 feet bgs.

Continuous soil cores were collected at each sampling location using a 2-inch barrel sampler driven by the Geoprobe. Core samples were collected in 4-foot intervals inside clear acetate sleeves held within the barrel sampler.

Each sleeve was marked immediately upon removal from the sampler to designate the depth interval from which it was collected. Intervals to be submitted for laboratory analysis were separated from the core samples, and immediately covered with Teflon™ sheets, and sealed with plastic end caps.

Soil sample SC1-11' was collected from 11 feet bgs from core SC1. Soil sample SC2-11.5' was collected from 11.5 feet bgs within core SC2. Sample SC3-11.5' was collected from 11.5 feet bgs within core SC3.

New, factory slotted and threaded (0.020 inch slot size) one-inch nominal diameter schedule 40 polyvinyl chloride (PVC) pipe was placed within each of the completed cores. The depth to water was then measured from the top of each core using an electronic water level indicator. A clean Teflon™ bailer was subsequently lowered through the slotted casing and used to collect samples of water contained within the temporary wells. Water collected from the wells in this manner was decanted into factory pre-cleaned amber 1 liter bottles and 40 milliliter (mil) volatile organic analysis (VOA) vials containing hydrochloric acid as a preservative.

Unique labels were immediately affixed to each sample tube and bottle identifying the Site and sample designation. All samples selected for laboratory analysis were then placed into a cooler on top of crushed ice and transported to Analytical Sciences of Petaluma, California. Chain of custody documentation was initiated in the field and accompanied all samples to the laboratory.

LABORATORY ANALYSES AND RESULTS

All submitted soil and ground water samples were analyzed for total petroleum hydrocarbons calculated as diesel (TPHd) using the Environmental Protection Agency (EPA) Methods 3550 and 8015 (modified) for benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl t-butyl ether (MTBE) using the EPA Methods 5030 and 8020. MTBE was confirmed using the EPA Method 8260.

None of the three submitted soil samples were found to contain reportable concentrations of TPHd, BTEX or MTBE.

Ground water sample SC1-H₂O was found to contain 100 micrograms per Liter (µg/L) TPHd, 1.9 µg/L total xylenes, and 28 µg/L MTBE. This sample was not found to contain reportable concentrations of the other analytes.

Ground water sample SC2-H₂O was found to contain 0.73 µg/L toluene and 5.1 µg/L MTBE. This sample was not found to contain reportable concentrations of the other analytes.

Ground water sample SC3-H₂O was found to contain 3,300 µg/L TPHd, 2.9 µg/L toluene, and 2.8 µg/L total xylenes. This sample was not found to contain reportable concentrations of the other analytes.

A copy of the laboratory report is included as Attachment B.

LIMITATIONS

This report was developed in accordance with generally accepted standards of current environmental practice in California. This report is time-dependent and should not be considered valid after a 1-year period from the issue of this report. After 1 year from the issue of this report, site conditions and recommendations contained within this report should be reviewed.

This study was performed solely for the purpose of evaluating environmental conditions of the site subsurface relative to hydrocarbon impact at the subject Site. No engineering or geotechnical references are implied or should be inferred.

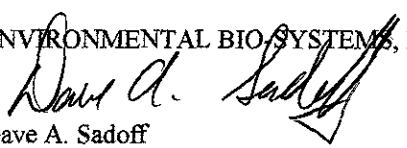
Evaluation of the condition of the Site, for the purpose of this study, was made from a limited number of observation points. Subsurface conditions may deviate away from these points. Additional work, including further study of the subsurface, can reduce the inherent uncertainties associated with this type of work.

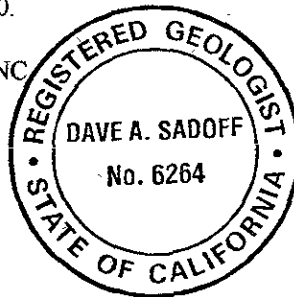
The project was performed, and the report was prepared for the sole use of our client, East Bay Dischargers Authority. The report and the findings contained herein shall not be disclosed to nor used by any other party, other than East Bay Dischargers Authority without the prior written consent of Environmental Bio-Systems, Inc. It is also the responsibility of the Client to convey all data, conclusions and recommendations to regulatory agencies and other parties, as appropriate.

The recommendations herein are professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding our recommendations. It is the responsibility of the client to convey any and all recommendations to governmental agencies and other parties, as appropriate.

EBS appreciates this opportunity to provide you with our services. Should you have any questions, please contact the undersigned at (408) 979-8600.

ENVIRONMENTAL BIO-SYSTEMS, INC


Dave A. Sadoff
Project Geologist, R.G., C.P.G., R.E.A.



/DAS

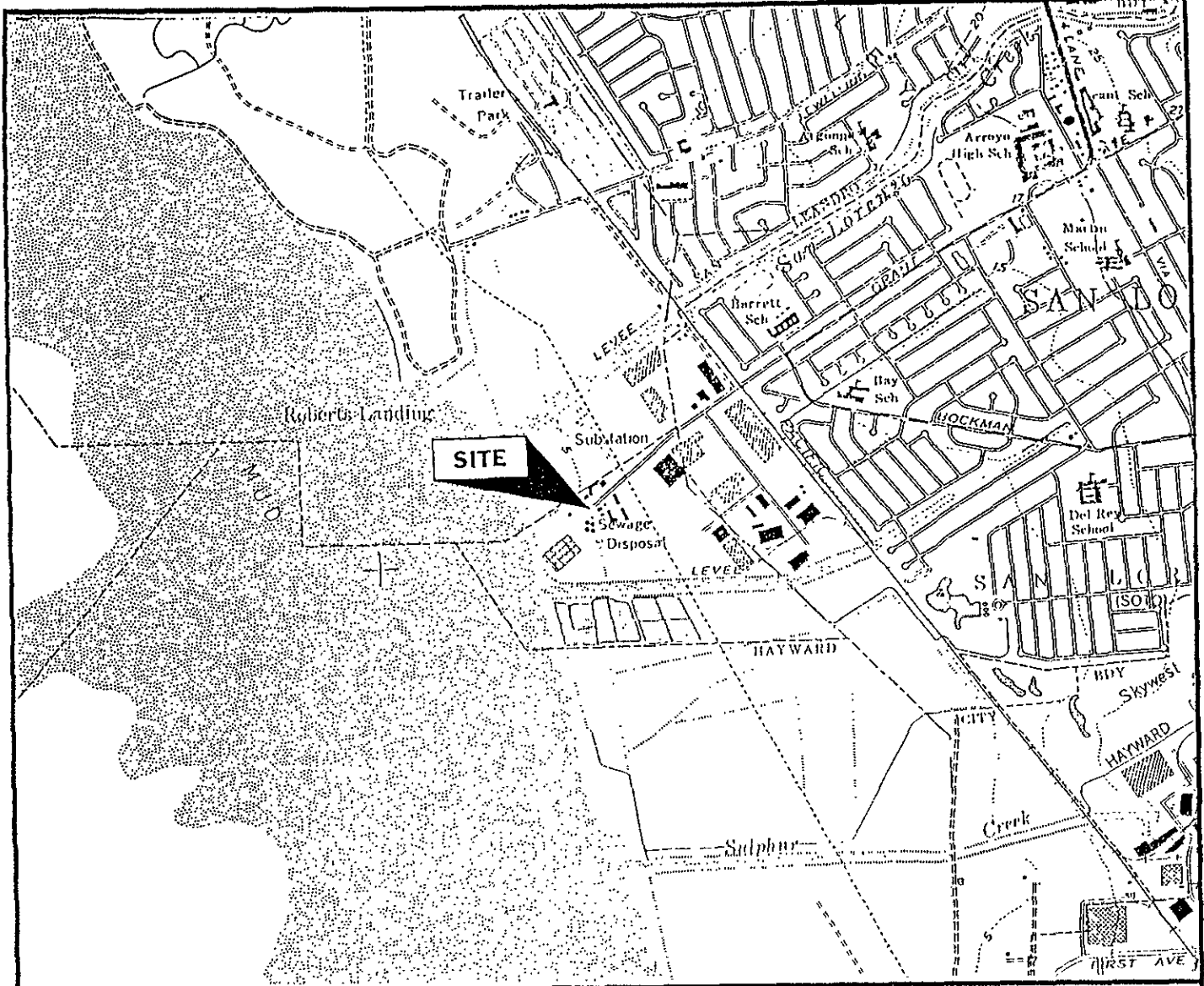
15 October 1999

Subsurface Exploration Letter Report
Client: East Bay Dischargers Authority
Site: 2651 Grant Avenue, San Lorenzo, California

Appendix A

ATTACHMENT A

SITE MAP



SCALE 1:24,000



CONTOUR INTERVAL 20 FEET

DOTTED LINES REPRESENT 5-FOOT CONTOURS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
 SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
 THE MEAN RANGE OF TIDE IS APPROXIMATELY 5 FEET

Source: USGS San Leandro, California 7.5-Minute Quadrangle Map



ENVIRONMENTAL
 BIO-SYSTEMS, INC.

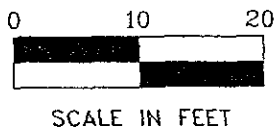
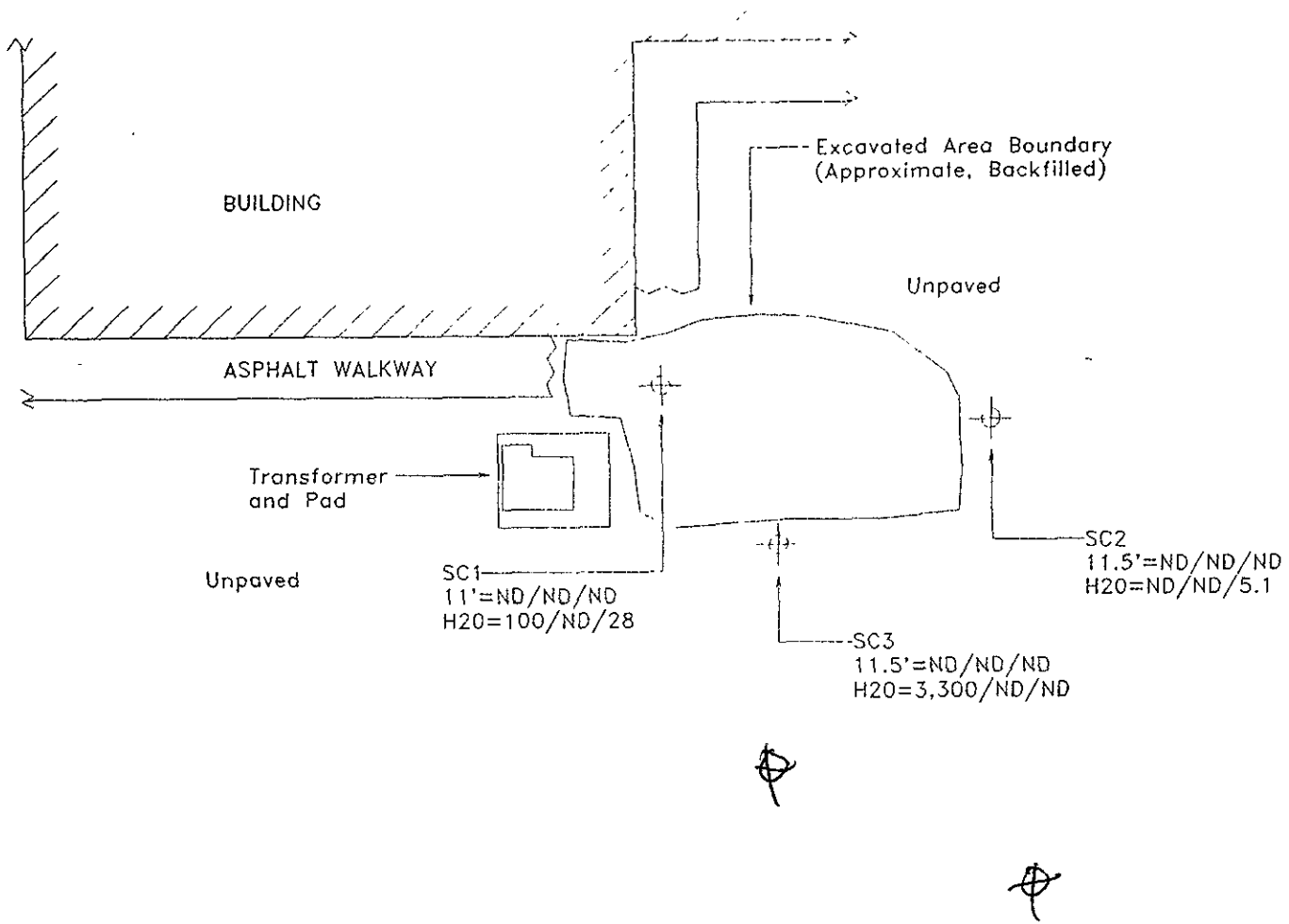
DATE:
 8/9/99

DRAWN BY
 DAS

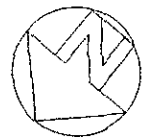
SCALE:
 1" = 2,000'

FIGURE 1:
 SITE LOCATION MAP

E. BAY DISCHARGERS UTIL.
 2651 GRANT AVENUE
 SAN LORENZO, CALIFORNIA



NOTES	
<p>SC3 11.5' = ND/ND/ND H2O = 3,300/ND/ND</p>	<p>BOREHOLE LOCATION AND DESIGNATION SOIL SAMPLE DEPTH TPHd/BENZENE/MTBE WATER SAMPLE TPHd/BENZENE/MTBE ALL RESULTS IN $\mu\text{G/L}$ (WATER) OR $\mu\text{G/KG}$ (SOIL)</p>



DATE: 10/15/99
PROJECT: 157-531B
SCALE: AS SHOWN

FIGURE 2: SITE MAP
AND ANALYTICAL RESULTS

E. BAY DISCHARGERS AUTH.
2651 GRANT AVENUE
SAN LORENZO, CALIFORNIA

15 October 1999

Subsurface Exploration Letter Report
Client: East Bay Dischargers Authority
Site: 2651 Grant Avenue, San Lorenzo, California

Appendix B

ATTACHMENT B

**LABORATORY ANALYTICAL REPORTS
AND
CHAIN OF CUSTODY DOCUMENTATION**



Report Date: September 28, 1999


Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
ATTN: Dave Sadoff

LABORATORY REPORT

Project Name: East Bay Dischargers Auth. 157-531B

Lab Project Number: 9091001

This 8 page report of analytical data has been reviewed and approved for release.



Mark A. Valentini, Ph.D.
Laboratory Director



MTBE and BTEX in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4465	SC1-11'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99	Date Analyzed: 09/20/99	QC Batch #: 898
Date Received: 09/10/99	Method: EPA 5030/8015M/8020	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4466	SC2-11.5'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99	Date Analyzed: 09/20/99	QC Batch #: 898
Date Received: 09/10/99	Method: EPA 5030/8015M/8020	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4467	SC3-11.5'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99	Date Analyzed: 09/20/99	QC Batch #: 898
Date Received: 09/10/99	Method: EPA 5030/8015M/8020	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		



MTBE and BTEX in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4468	SC1-H ₂ O	MTBE	28 ①	2.5
		Benzene	ND	0.5
		Toluene	ND	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	1.9	1.5

Date Sampled: <u>09/09/99</u>	Date Analyzed: <u>09/15/99</u>	QC Batch #: <u>899</u>
Date Received: <u>09/10/99</u>	Method: <u>EPA 5030/8015M/8020</u>	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4469	SC2-H ₂ O	MTBE	5.1	2.5
		Benzene	ND	0.5
		Toluene	0.73	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	ND	1.5

Date Sampled: <u>09/09/99</u>	Date Analyzed: <u>09/15/99</u>	QC Batch #: <u>899</u>
Date Received: <u>09/10/99</u>	Method: <u>EPA 5030/8015M/8020</u>	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4470	SC3-H ₂ O	MTBE	ND	2.5
		Benzene	ND	0.5
		Toluene	2.9	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	2.8	1.5

Date Sampled: <u>09/09/99</u>	Date Analyzed: <u>09/15/99</u>	QC Batch #: <u>899</u>
Date Received: <u>09/10/99</u>	Method: <u>EPA 5030/8015M/8020</u>	
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

① Confirmed by GC/MS (EPA 8260)



TPH Diesel in Soil

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (mg/kg)</u>	<u>RDL (mg/kg)</u>
4465	SC1-11'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (mg/kg)</u>	<u>RDL (mg/kg)</u>
4466	SC2-11.5'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (mg/kg)</u>	<u>RDL (mg/kg)</u>
4467	SC3-11.5'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		



TPH Diesel in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4468	SC1-H ₂ O	TPH/Diesel	100	50

Date Sampled: 09/09/99	Date Extracted: 09/13/99	QC Batch #: 897w
Date Received: 09/10/99	Date Analyzed: 09/13/99	Method: EPA 3510/8015M
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4469	SC2-H ₂ O	TPH/Diesel	ND	50

Date Sampled: 09/09/99	Date Extracted: 09/13/99	QC Batch #: 897w
Date Received: 09/10/99	Date Analyzed: 09/13/99	Method: EPA 3510/8015M
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4470	SC3-H ₂ O	TPH/Diesel	3,300	50

Date Sampled: 09/09/99	Date Extracted: 09/13/99	QC Batch #: 897w
Date Received: 09/10/99	Date Analyzed: 09/13/99	Method: EPA 3510/8015M
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		



LABORATORY QUALITY ASSURANCE REPORT

QC Batch #: 898

Lab Project #: 9091001

<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

<u>Sample #</u>	<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>	<u>Spike Level</u>	<u>% Recv.</u>
4396	CMS	TPH/Gas		NS	
	CMS	Benzene	0.0198	0.0231	85.7
	CMS	Toluene	0.0218	0.0231	94.4
	CMS	Ethyl Benzene	0.0209	0.0231	90.5
	CMS	Xylenes	0.0656	0.0694	94.5

<u>Sample #</u>	<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>	<u>Spike Level</u>	<u>% Recv.</u>	<u>RPD</u>
4396	CMSD	TPH/Gas		NS		
	CMSD	Benzene	0.0211	0.0231	91.3	6.4
	CMSD	Toluene	0.0227	0.0231	98.3	4.0
	CMSD	Ethyl Benzene	0.0220	0.0231	95.2	5.1
	CMSD	Xylenes	0.0687	0.0694	99.0	4.6

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range



QC Batch #: 899

Lab Project #: 9091001

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
4468	CMS	TPH/Gas		NS	
	CMS	Benzene	7.27	8.00	90.9
	CMS	Toluene	8.04	8.00	101
	CMS	Ethyl Benzene	7.99	8.00	99.9
	CMS	Xylenes	23.7	24.0	98.7

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
4468	CMSD	TPH/Gas		NS		
	CMSD	Benzene	7.33	8.00	91.6	0.82
	CMSD	Toluene	8.13	8.00	102	0.99
	CMSD	Ethyl Benzene	8.08	8.00	101	1.1
	CMSD	Xylenes	23.9	24.0	99.8	1.1

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked; OR = Over Calibration Range



QC Batch #: 897

Lab Project #: 9091001

Sample ID	Compound	Result (mg/kg)
MB	TPH/Diesel	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
4467	CMS	TPH/Diesel	214	258	82.9

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
4467	CMSD	TPH/Diesel	223	258	86.3	4.1

MB = Method Blank; LCS = Laboratory Control Sample, CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked; OR = Over Calibration Range

QC Batch #: 897w

Lab Project #: 9091001

Sample ID	Compound	Result (ug/L)
MB	TPH/Diesel	ND

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
LCS	TPH/Diesel	2,210	2,930	75.4

MB = Method Blank, LCS = Laboratory Control Sample, CMS = Client Matrix Spike, CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked, OR = Over Calibration Range



September 28, 1999

Dave Sadoff
Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171

Dear Dave,

Enclosed you will find Analytical Sciences' final report 9091001 for your East Bay Dischargers Auth. (157-531B) project site. An invoice for this work is enclosed.

Should you or your client have any questions regarding this report please contact me at your convenience. We appreciate you selecting Analytical Sciences for this work and look forward to serving your analytical chemistry needs on projects in the future.

Sincerely,

Analytical Sciences

Mark A. Valentini



Report Date: September 28, 1999


Environmental Bio-Systems, Inc.
P.O. Box 7171
San Jose, CA 95150-7171
ATTN: Dave Sadoff

LABORATORY REPORT

Project Name: East Bay Dischargers Auth. 157-531B

Lab Project Number: 9091001

This 8 page report of analytical data has been reviewed and approved for release.



Mark A. Valentini, Ph.D.
Laboratory Director



MTBE and BTEX in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4465	SC1-11'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99 Date Analyzed: 09/20/99 QC Batch #: 898
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4466	SC2-11.5'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99 Date Analyzed: 09/20/99 QC Batch #: 898
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4467	SC3-11.5'	MTBE	ND	0.025
		Benzene	ND	0.005
		Toluene	ND	0.005
		Ethyl Benzene	ND	0.005
		Xylenes	ND	0.015

Date Sampled: 09/09/99 Date Analyzed: 09/20/99 QC Batch #: 898
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No



MTBE and BTEX in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4468	SC1-H ₂ O	MTBE	28	2.5
		Benzene	ND	0.5
		Toluene	ND	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	1.9	1.5

Date Sampled: 09/09/99 Date Analyzed: 09/15/99 QC Batch #: 899
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4469	SC2-H ₂ O	MTBE	5.1	2.5
		Benzene	ND	0.5
		Toluene	0.73	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	ND	1.5

Date Sampled: 09/09/99 Date Analyzed: 09/15/99 QC Batch #: 899
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
4470	SC3-H ₂ O	MTBE	ND	2.5
		Benzene	ND	0.5
		Toluene	2.9	0.5
		Ethyl Benzene	ND	0.5
		Xylenes	2.8	1.5

Date Sampled: 09/09/99 Date Analyzed: 09/15/99 QC Batch #: 899
Date Received: 09/10/99 Method: EPA 5030/8015M/8020
Holding Time Met: Yes No



TPH Diesel in Soil

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4465	SC1-11'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4466	SC2-11.5'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Lab #	Sample ID	Analysis	Result (mg/kg)	RDL (mg/kg)
4467	SC3-11.5'	Diesel	ND	5.0

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3550/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		



TPH Diesel in Water

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (ug/L)</u>	<u>RDL (ug/L)</u>
4468	SC1-H ₂ O	TPH/Diesel	100	50

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897w</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3510/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (ug/L)</u>	<u>RDL (ug/L)</u>
4469	SC2-H ₂ O	TPH/Diesel	ND	50

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897w</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3510/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

<u>Lab #</u>	<u>Sample ID</u>	<u>Analysis</u>	<u>Result (ug/L)</u>	<u>RDL (ug/L)</u>
4470	SC3-H ₂ O	TPH/Diesel	3,300	50

Date Sampled: <u>09/09/99</u>	Date Extracted: <u>09/13/99</u>	QC Batch #: <u>897w</u>
Date Received: <u>09/10/99</u>	Date Analyzed: <u>09/13/99</u>	Method: <u>EPA 3510/8015M</u>
Holding Time Met: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		



LABORATORY QUALITY ASSURANCE REPORT

QC Batch #: 898

Lab Project #: 9091001

<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

<u>Sample #</u>	<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>	<u>Spike Level</u>	<u>% Recv.</u>
4396	CMS	TPH/Gas		NS	
	CMS	Benzene	0.0198	0.0231	85.7
	CMS	Toluene	0.0218	0.0231	94.4
	CMS	Ethyl Benzene	0.0209	0.0231	90.5
	CMS	Xylenes	0.0656	0.0694	94.5

<u>Sample #</u>	<u>Sample ID</u>	<u>Compound</u>	<u>Result (mg/kg)</u>	<u>Spike Level</u>	<u>% Recv.</u>	<u>RPD</u>
4396	CMSD	TPH/Gas		NS		
	CMSD	Benzene	0.0211	0.0231	91.3	6.4
	CMSD	Toluene	0.0227	0.0231	98.3	4.0
	CMSD	Ethyl Benzene	0.0220	0.0231	95.2	5.1
	CMSD	Xylenes	0.0687	0.0694	99.0	4.6

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range



QC Batch #: 899

Lab Project #: 9091001

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
4468	CMS	TPH/Gas		NS	
	CMS	Benzene	7.27	8.00	90.9
	CMS	Toluene	8.04	8.00	101
	CMS	Ethyl Benzene	7.99	8.00	99.9
	CMS	Xylenes	23.7	24.0	98.7

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
4468	CMSD	TPH/Gas		NS		
	CMSD	Benzene	7.33	8.00	91.6	0.82
	CMSD	Toluene	8.13	8.00	102	0.99
	CMSD	Ethyl Benzene	8.08	8.00	101	1.1
	CMSD	Xylenes	23.9	24.0	99.8	1.1

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked; OR = Over Calibration Range



QC Batch #: 897

Lab Project #: 9091001

Sample ID	Compound	Result (mg/kg)
MB	TPH/Diesel	ND

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.
4467	CMS	TPH/Diesel	214	258	82.9

Sample #	Sample ID	Compound	Result (mg/kg)	Spike Level	% Recv.	RPD
4467	CMSD	TPH/Diesel	223	258	86.3	4.1

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked; OR = Over Calibration Range

QC Batch #: 897w

Lab Project #: 9091001

Sample ID	Compound	Result (ug/L)
MB	TPH/Diesel	ND

Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
LCS	TPH/Diesel	2,210	2,930	75.4

MB = Method Blank, LCS = Laboratory Control Sample, CMS = Client Matrix Spike, CMSD = Client Matrix Spike Duplicate
 NS = Not Spiked, OR = Over Calibration Range



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Innovative Solutions for a Better Environment

P.O. Box 7171
San Jose, CA 95150-7171
(408) 979-8600

CHAIN OF CUSTODY

ADDITIONAL INSTRUCTIONS:

1) ANALYZE HIGHEST TPHd.
(1 SOIL, 1 WATER)
FOR PAH

PROJECT NUMBER 157-531B

CLIENT EAST BAY DISCHARGERS AUTH

SITE 2651 GRANT AVE.
SAN LORENZO, CA

ANALYSES							
COMPOSITE	TPHd	C:TEX + MTBE	PAH				

LAB PROJECT # 9091001

SAMPLE I D	MATRIX	NUMBER OF CONTAINERS	TIME COLLECTED	TURNAROUND	LAB SAMPLE #
SC1-11'	SOIL	1	10:05	STANDARD	4465
SC2-11.5'	↓	1	10:45		4466
SC3-11.5'	↓	1	11:35		4467
SC1-H ₂ O	WATER	4	10:20		4468
SC2-H ₂ O	↓	4	11:05		4469
SC3-H ₂ O	↓	3	11:55	↓	4470

DATE SAMPLING COMPLETED 9/11/99

SAMPLING PERFORMED BY: DAVE A. SADOFF

RELEASED BY: <i>N.A. Saff</i>	DATE	TIME	RECEIVED BY: <i>Chris Hays</i>	DATE: 9/10/99	TIME: 1215
RELEASED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
RELEASED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME

SHIPPED VIA: DATE SENT: TIME SENT: COOLER #: