Environmental
Science &
Engineering, Inc.
A CILCORP Company

July 11, 1995

Mr. Rod Freitag
Environmental Program Manager
Alameda County General Services Agency
Engineering & Environmental Management
1401 Lakeside Drive
Oakland, CA 94612

SUBJECT: REPORT OF STOCKPILED SOIL SAMPLING
UST 18 & 19 SITE
SANTA RITA CORRECTIONAL FACILITY
DUBLIN, CALIFORNIA
ESE PROJECT NO. 65-95-068

Dear Mr. Freitag:

Environmental Science & Engineering, Inc. (ESE) presents the following results for the sampling of stockpiled soil at the UST 18 & 19 Site, Santa Rita Correctional Facility, Dublin, California (Figure 1 - Vicinity Map). ESE was contracted by the Alameda County General Services Agency (GSA) to perform this sampling. The objective of this work was to characterize the soil by assessing the concentrations of petroleum hydrocarbons in samples collected.

BACKGROUND

5/18/92 ?

ESE supervised the excavation and removal of two underground storage tanks (USTs) at the subject site on May 13 and 14, 1992 (ESE, 1992a). These USTs were utilized for the storage of Bunker C fuel oil only. Approximately 160 cubic yards of excavated soil were stockpiled on the north and southeast sides of the excavation (Figure 2 - Site Plan).

Located approximately 100 feet northeast of the UST 18 & 19 excavation is another soil stockpile of approximately 200 cubic yards (Figure 2). This stockpile is from the cleanup of the Old Graystone Fueling Area (Old Graystone) at the Santa Rita Correctional Facility (ESE, 1992b). Gasoline and diesel were the contaminants of concern at Old Graystone.

SITE ACTIVITIES

ESE collected soil samples from the three stockpiles at the UST 18 & 19 Site at a frequency of one discrete soil sample per approximately 50 cubic yards of stockpiled soil, for a total of 7 samples. All sampling was performed on May 26, 1995.

→ 7 samples from 3 piles

4090 Nelson Avenue, Suite J Concord, CA 94520 Phone (415) 685-4053 Fax (415) 685-5323

Prior to starting the fieldwork, all onsite personnel attended a brief health and safety tailgate meeting. The purpose of that meeting was to summarize the health and safety plan and describe the potential hazards. All work was performed in Level D personal protective equipment.

Seven soil samples (SP-1 through SP-7) were collected at the locations indicated in Figure 2. Each sample was collected at a location deep within the stockpiled soil utilizing a backhoe. This strategy was applied in an attempt to collect samples of soil which had not been directly exposed to the ambient atmosphere. Each sample was collected by manually advancing a new, six-inch, thin-wall brass sleeve into the newly exposed soil. Upon retrieval, the sample was immediately capped with teflon-lined plastic caps, sealed with tape, labeled, and documented on a chain of custody form. All samples were placed under ice in a cooler and transported to McCampbell Analytical (a State-Certified laboratory) of Pacheco, California.

Soil samples collected from the stockpiles generated from activities at the UST 18 & 19 Site (samples SP-1, SP-2, and SP-3) were analyzed for total petroleum hydrocarbons as diesel (TPH-D) using EPA Method 8015 (modified per CA LUFT), oil and grease (O&G) using Standard Method 5520 D/E&F, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8020. All samples were analyzed on a five-day turnaround time basis.

Soil samples collected from the stockpile generated from activities at the Old Graystone Fueling Area (samples SP-4, SP-5, SP-6, and SP-7) were analyzed for total petroleum hydrocarbons as diesel (TPH-D) and gasoline (TPH-G) using EPA Method 8015 (modified per CA LUFT) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8020. All samples were analyzed on a five-day turnaround time basis.

RESULTS

Analytical results for soil samples collected from the UST 18 & 19 Site stockpiles are presented on Table 1 - UST 18 & 19 Site Stockpile Analytical Results. Detectable concentrations of TPH-D ranging from 57 to 140 milligrams per kilogram (mg/Kg) and O&G ranging from 190 to 360 mg/Kg were reported to occur in all samples collected. No detectable concentrations of BTEX constituents were reported to occur in any of the samples.

Analytical results for soil samples collected from the Old Graystone stockpile are presented on Table 2 - Old Graystone Stockpile Analytical Results. Detectable concentrations of TPH-D ranging from 2.4 to 79 mg/Kg were reported to occur in three of the samples (SP-4, SP-5, SP-6, and SP-7). No detectable concentrations of BTEX constituents were reported to occur in any of the samples.

Analytical reports with chain of custody documentation are provided as Attachment 1.

REFERENCES

Environmental Science & Engineering, Inc. (ESE), 1992a. Underground Storage Tank Closure Report, UST 18 & 19 Site, Santa Rita Correctional Facility, Dublin, California; July 20, 1992.

Environmental Science & Engineering, Inc. (ESE), 1992b. Underground Storage Tank Closure Report, Old Graystone Fueling Area, Santa Rita Correctional Facility, Dublin, California; July 20, 1992.

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Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists and engineers practicing in this field. No other warranty, express or implied, is made as to the professional advice in this report. Please feel free to contact Bart Miller at (510) 685-4053 with any questions pertaining to this report.

Sincerely,
ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Bart S. Miller
Project Geologist

George Reid, R.G.
Manager, Geosciences

REGISTERED GEOLOGIST
GEORGE REID
No. 3608
STATE OF CALIFORNIA

Attachments: Tables
Figures
Analytical Reports

TABLES

TABLE 1. UST 18 & 19 SITE STOCKPILE ANALYTICAL RESULTS

Sample No.	TPH-D (mg/Kg)	O&G (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
SP-1	140	360	ND	ND	ND	ND
SP-2	57	190	ND	ND	ND	ND
SP-3	130	270	ND	ND	ND	ND

Notes

- mg/Kg refers to milligrams per kilogram
- ND refers to Not Detected at method detection limit
- TPH-D refers to total petroleum hydrocarbons as diesel (EPA 8015 modified)
- O&G refers to petroleum oil and grease (SM 5520 D\E&F)
- Benzene, toluene, ethylbenzene, and xylenes (EPA 8020)
- All samples collected by ESE on May 26, 1995

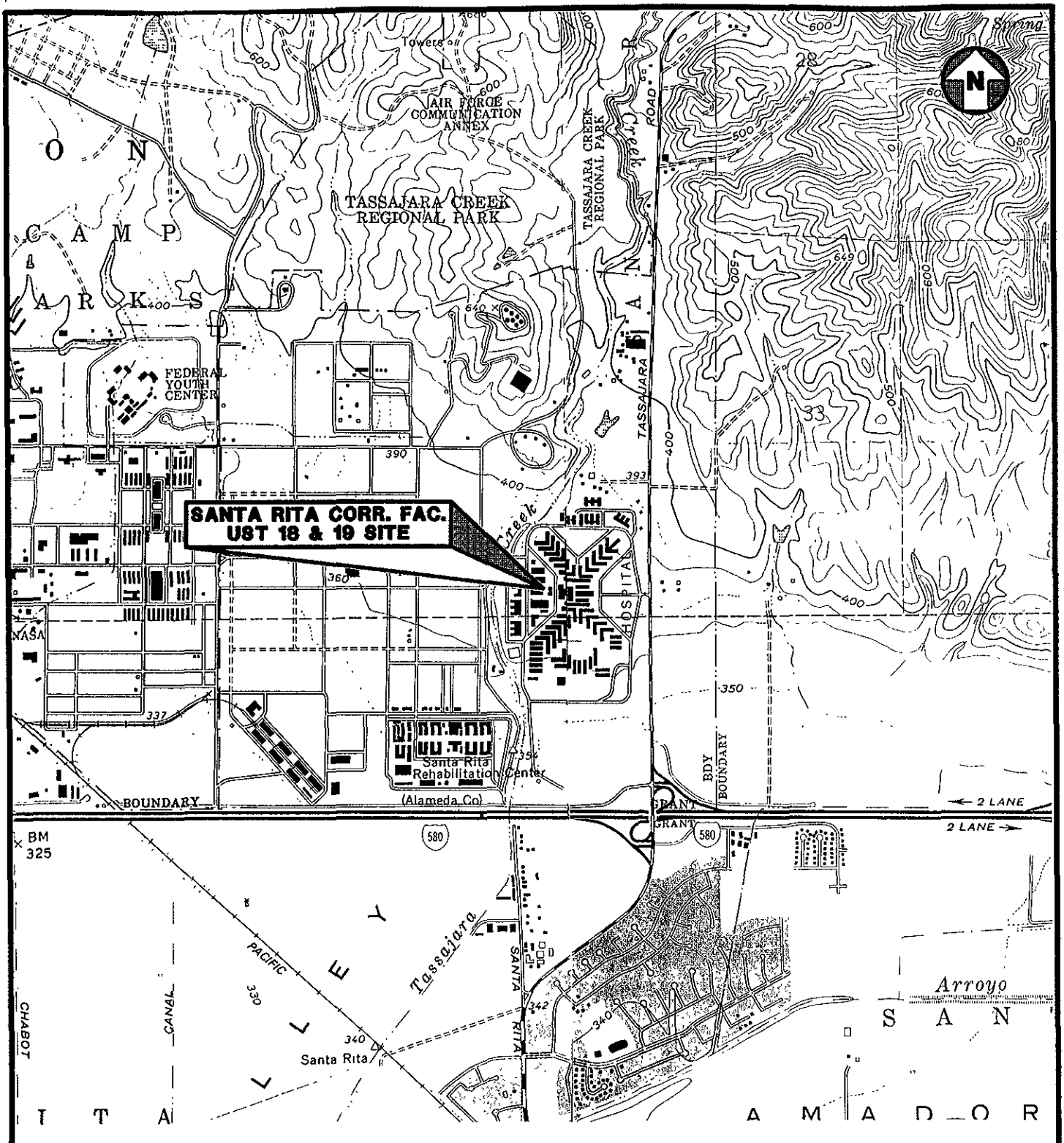
TABLE 2. OLD GRAYSTONE STOCKPILE ANALYTICAL RESULTS

Sample No.	TPH-G (mg/Kg)	TPH-D (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
SP-4	ND	2.4	ND	ND	ND	ND
SP-5	ND	15	ND	ND	ND	ND
SP-6	ND	79	ND	ND	ND	ND
SP-7	ND	ND	ND	ND	ND	ND

Notes

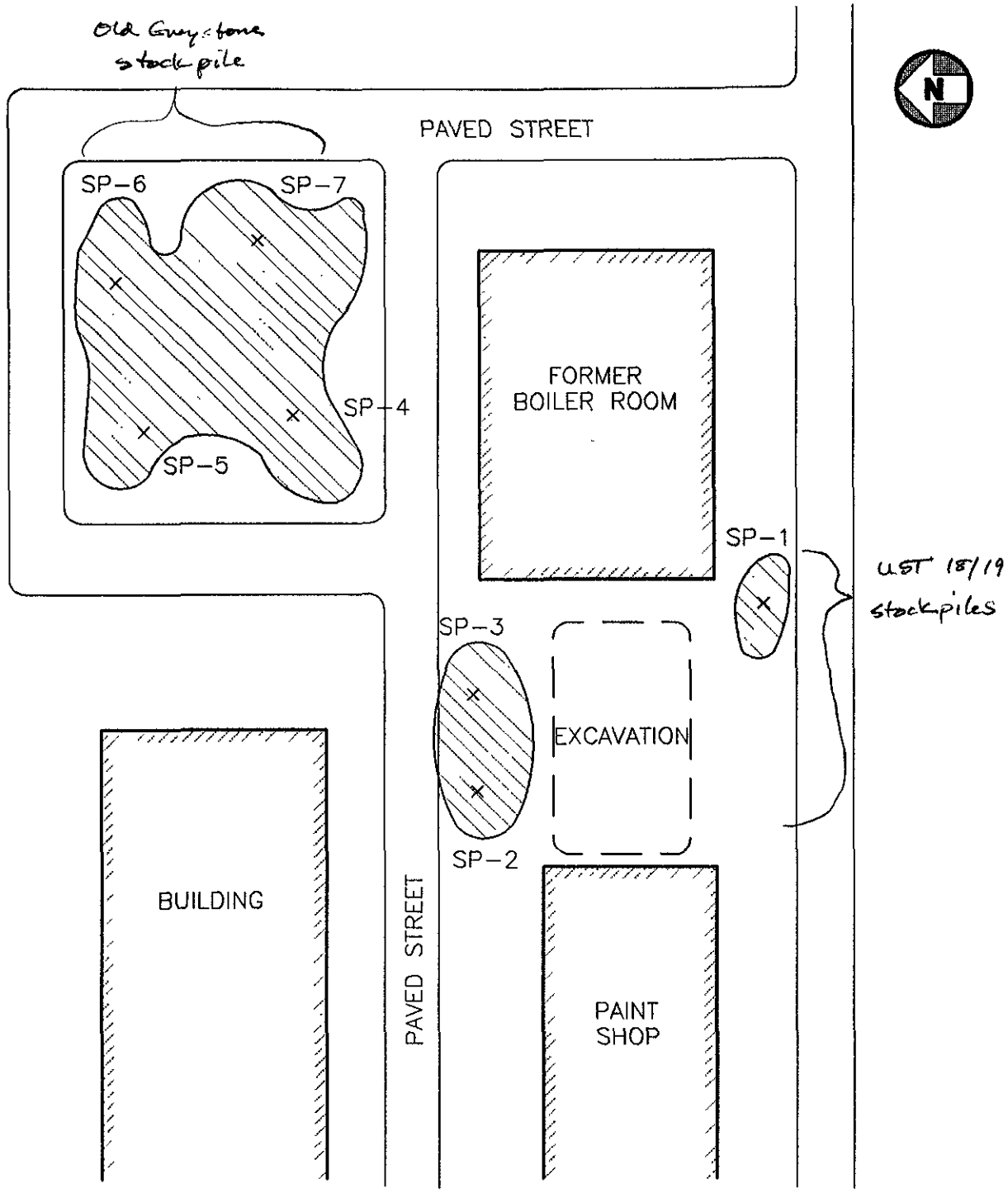
- mg/Kg refers to milligrams per kilogram
- ND refers to not detected at method detection limit
- TPH-D refers to total petroleum hydrocarbons as diesel (EPA 8015 modified)
- TPH-G refers to total petroleum hydrocarbons as gasoline (EPA 8015 modified)
- Benzene, toluene, ethylbenzene, and xylenes (EPA 8020)
- All samples collected by ESE on May 26, 1995

FIGURES



ADAPTED FROM U.S.G.S. DUBLIN AND LIVERMORE, CALIFORNIA, 7.5 MINUTE TOPOGRAPHIC QUADRANGLE MAPS, 1980

ESE Environmental Science & Engineering, Inc.	DATE 6/21/95	VICINITY MAP	FIGURE NO. 1
4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	REVISED	ALAMEDA COUNTY GSA – UST 18 & 19 SITE SANTA RITA CORRECTIONAL FACILITY DUBLIN, CALIFORNIA	PROJ. NO. 65-95-068
	CAD FILE 65506801		



LEGEND

STOCKPILED SOIL

SP-1 SAMPLE LOCATION

SCALE 0 40 FEET

Environmental Science & Engineering, Inc. 4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	DATE 7/11/95 REVISED CAD FILE 65506802	SITE PLAN ALAMEDA COUNTY GSA – UST 18 & 19 SITE SANTA RITA CORRECTIONAL FACILITY DUBLIN, CALIFORNIA	FIGURE NO. 2 PROJ. NO. 65-95-068

ATTACHMENT 1

ANALYTICAL REPORTS

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

06/09/95

Dear Bart:

Enclosed are:

1). the results of **3** samples from your **# 65-95-068; Alameda County GSA, UST # 18,19** Site project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Environmental Science & Eng. 4090 Nelson Ave., Suite J Concord, CA 94520	Client Project ID: # 65-95-068; Alameda County GSA, UST # 18,19 Site	Date Sampled: 05/26/95
		Date Received: 05/26/95
	Client Contact: Bart Miller	Date Extracted: 05/26/95
	Client P.O: # SMSA-C-021	Date Analyzed: 05/26/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
52882	SP-1	S	---	ND	ND	ND	ND	107
52883	SP-2	S	---	ND	ND	ND	ND	103
52884	SP-3	S	---	ND	ND	ND	ND	107
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Environmental Science & Eng. 4090 Nelson Ave., Suite J Concord, CA 94520	Client Project ID: # 65-95-068; Alameda County GSA, UST # 18,19 Site	Date Sampled: 05/26/95
		Date Received: 05/26/95
	Client Contact: Bart Miller	Date Extracted: 05/26/95
	Client P.O: # SMSA-C-021	Date Analyzed: 05/26-05/29/95

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
52882	SP-1	S	140,g	102
52883	SP-2	S	57,g	103
52884	SP-3	S	130,g	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	10 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

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Environmental Science & Eng. 4090 Nelson Ave., Suite J Concord, CA 94520	Client Project ID: # 65-95-068; Alameda County GSA, UST # 18,19 Site	Date Sampled: 05/26/95
		Date Received: 05/26/95
	Client Contact: Bart Miller	Date Extracted: 05/30/95
	Client P.O: # SMSA-C-021	Date Analyzed: 05/30/95

Petroleum Oil & Grease (with Silica Gel Clean-up) *

EPA methods 413.1, 9070 or 9071; Standard Methods 5520 D/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	Oil & Grease*
52882	SP-1	S	360
52883	SP-2	S	190
52884	SP-3	S	270
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	5 mg/L
		S	50 mg/kg

* water samples are reported in mg/L and soils in mg/kg

h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/26-05/27/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.003	1.984	2.03	99	98	1.0
Benzene	0.000	0.178	0.182	0.2	89	91	2.2
Toluene	0.000	0.174	0.184	0.2	87	92	5.6
Ethylbenzene	0.000	0.174	0.180	0.2	87	90	3.4
Xylenes	0.000	0.550	0.558	0.6	92	93	1.4
TPH (diesel)	0	318	313	300	106	104	1.5
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/28-05/30/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.117	2.125	2.03	104	105	0.4
Benzene	0.000	0.172	0.166	0.2	86	83	3.6
Toluene	0.000	0.178	0.172	0.2	89	86	3.4
Ethylbenzene	0.000	0.178	0.172	0.2	89	86	3.4
Xylenes	0.000	0.552	0.532	0.6	92	89	3.7
TPH (diesel)	0	308	306	300	103	102	0.4
TRPH (oil & grease)	0.0	20.0	19.0	20	100	95	5.1

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

4219AESEX155

DATE MAY 26, 1995 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

PROJECT NAME ALAMEDA CO. GSA

ADDRESS UST #18, 19 SITE
~~SANTA RITA CORRECTIONAL FACILITY PLEASANTON, CALIFORNIA~~

PROJECT NO. 65-95-068

SAMPLED BY E. W. Garcia

LAB NAME M. CAMPBELL ANALYTICAL

ESE Environmental Science & Engineering, Inc.
A CH CORP Company
4080 Nelson Avenue
Suite J
Concord, CA 94520
Phone (510) 685-4053
Fax (510) 685-5323

SAMPLE #	DATE	TIME	LOCATION	O:G (SM#W 5520)	TPH-D (8015m)	BTEX (8020)	MATRIX	NUMBER OF CONTAINERS	REMARKS (CONTAINER, SIZE, ETC.)
SP-1	5-26-95	0848	ADJACENT TO EXCAVATION	✓	✓	✓	SOIL	1	2" brass Sleeve 52882
SP-2	↓	0857	"	✓	✓	✓	"	1	" 52883
SP-3	↓	0857	"	✓	✓	✓	"	1	" 52884

ANALYSES TO BE PERFORMED

MATRIX

RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	date	time
1.			
2.		5/26/95	12:40
3.			
4.	VOAS D&G METALS CONTAINER		
5.			

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE APPROPRIATE CONTAINERS ✓

3 TOTAL NUMBER OF CONTAINERS

REPORT RESULTS TO: BART MILLER ESE

SPECIAL SHIPMENT REQUIREMENTS: COLD TRANSPORT

INSTRUCTIONS TO LABORATORY (handling, analyses, storage, etc.):

NORMAL T.A.T. PLEASE INVOICE ~~ESE~~ ALAMEDA COUNTY GSA

SAMPLE RECEIPT

CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDTN/COLD	MC
CONFORMS TO RECORD	MC

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

06/09/95

Dear Bart:

Enclosed are:

1). the results of 4 samples from your # **65-95-068; Alameda County GSA, UST # 18,19 Site** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Environmental Science & Eng. 4090 Nelson Ave., Suite J Concord, CA 94520	Client Project ID: # 65-95-068; Alameda County GSA, UST # 18,19 Site	Date Sampled: 05/26/95
		Date Received: 05/26/95
	Client Contact: Bart Miller	Date Extracted: 05/26/95
	Client P.O: # SMSA-C-021	Date Analyzed: 05/26/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
52885	SP-4	S	ND	ND	ND	ND	ND	106
52886	SP-5	S	ND	ND	ND	ND	ND	107
52887	SP-6	S	ND	ND	ND	ND	ND	101
52888	SP-7	S	ND	ND	ND	ND	ND	103
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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110 2nd Avenue South, #D7, Pacheco, CA 94553
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Environmental Science & Eng. 4090 Nelson Ave., Suite J Concord, CA 94520	Client Project ID: # 65-95-068; Alameda County GSA, UST # 18,19 Site	Date Sampled: 05/26/95
		Date Received: 05/26/95
	Client Contact: Bart Miller	Date Extracted: 05/26/95
	Client P.O: # SMSA-C-021	Date Analyzed: 05/26-05/30/95

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
52885	SP-4	S	2.4,g	102
52886	SP-5	S	15,g	96
52887	SP-6	S	79,a	92
52888	SP-7	S	ND	97
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	10 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/26-05/27/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount	% Recovery		RPD
	Sample	MS	MSD	Spiked	MS	MSD	
TPH (gas)	0.000	2.003	1.984	2.03	99	98	1.0
Benzene	0.000	0.178	0.182	0.2	89	91	2.2
Toluene	0.000	0.174	0.184	0.2	87	92	5.6
Ethylbenzene	0.000	0.174	0.180	0.2	87	90	3.4
Xylenes	0.000	0.550	0.558	0.6	92	93	1.4
TPH (diesel)	0	318	313	300	106	104	1.5
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/28-05/30/95 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.117	2.125	2.03	104	105	0.4
Benzene	0.000	0.172	0.166	0.2	86	83	3.6
Toluene	0.000	0.178	0.172	0.2	89	86	3.4
Ethylbenzene	0.000	0.178	0.172	0.2	89	86	3.4
Xylenes	0.000	0.552	0.532	0.6	92	89	3.7
TPH (diesel)	0	308	306	300	103	102	0.4
TRPH (oil & grease)	0.0	20.0	19.0	20	100	95	5.1

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

4220 AESEX 156

DATE MAY 26, 1995 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

PROJECT NAME ALAMEDA CO. GSA

ADDRESS UST #18 19 SITE
SANTA RITA CORRECTIONAL FACILITY
DUBLIN, CALIFORNIA

PROJECT NO. 65-95-068

SAMPLED BY E.W. Garcia

LAB NAME McCAMPBELL ANALYTICAL

ESE Environmental Science & Engineering, Inc.
A CH COMP Company
4080 Nelson Avenue Suite I Concord, CA 94520
Phone (510) 685-4053
Fax (510) 685-5323

SAMPLE #	DATE	TIME	LOCATION	TPH-G (8015m)	TPH-D (8015m)	BTEX (8020)	MATRIX	NUMBER OF CONTAINERS	REMARKS (CONTAINER, SIZE, ETC.)	
SP-4	5-26-95	0908	200 FEET NE OF EXCAVATION	✓	✓	✓	SOIL	1	2" Brass Sleeve	52885
SP-5	↓	0916	"	✓	✓	✓	"	1	"	52886
SP-6		0918	"	✓	✓	✓	"	1	"	52887
SP-7		0922	"	✓	✓	✓	"	1	"	52888

	RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	date	time
1.			5/26/95	12:40
2.				
3.				
4.	ICE? ✓	VOAs O&G METALS OTHER		
5.	GOOD CONDITION ✓ HEAD SPACE ABSENT ✓	PRESERVATIVE APPROPRIATE CONTAINERS ✓		

4 TOTAL NUMBER OF CONTAINERS

REPORT RESULTS TO: BART MILLER ESE

SPECIAL SHIPMENT REQUIREMENTS: COLD TRANSPORT

INSTRUCTIONS TO LABORATORY (handling, analyses, storage, etc.):
NORMAL T.A.T. PLEASE INVOICE ALAMEDA COUNTY GSA

SAMPLE RECEIPT

CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDTN/COLD	✓
CONFORMS TO RECORD	✓