

Via E-mail and Mail

July 20, 2009
Job No. 3126.003

RECEIVED

8:40 am, Jul 29, 2009

Alameda County
Environmental Health

BGC
BERLOGAR
GEOTECHNICAL
CONSULTANTS



Mr. Jerry Wickham
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577


Subject: Supplemental Limited Environmental Site Investigation
Transportation Corridor
West of First Street, Between Spring Street and Ray Street
Pleasanton, California

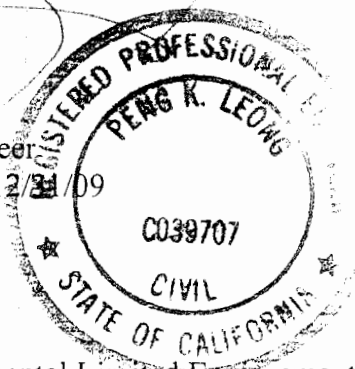
Dear Mr. Wickham:

We declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of our knowledge.

Respectfully submitted,

BERLOGAR GEOTECHNICAL CONSULTANTS


Peng Leong
Principal Engineer
C39707, Exp. 12/31/09




Frank Berlogar

PSL:jmb

Attachment:
Supplemental Limited Environmental Site Investigation Report

Copies: Addressee (2)
MacKay and Soms (2)
Attention: Mr. Chris Guenther
City of Pleasanton (2)
Attention: Mr. Jim Gotcher

3126.003/22271.doc

SUPPLEMENTARY LIMITED ENVIRONMENTAL
SITE INVESTIGATION
TRANSPORTATION CORRIDOR
WEST OF FIRST STREET,
BETWEEN SPRING STREET AND RAY STREET
PLEASANTON, CALIFORNIA

FOR
MACKAY AND SOMPS CIVIL ENGINEERS, INC.
July 10, 2009

Job No. 3126.003

Via E-mail and Mail

July 10, 2009
Job No. 3126.003

BGC
BERLOGAR
GEOTECHNICAL
CONSULTANTS



Mr. Chris Guenther
MacKay and Soms Civil Engineers, Inc.
5142 Franklin Drive, Suite B
Pleasanton, California 94588

Subject: Supplementary Limited Environmental Site Investigation
Transportation Corridor
West of First Street, Between Spring Street and Ray Street
Pleasanton, California

Dear Mr. Guenther:

Enclosed is the Supplementary Limited Environmental Site Investigation Report documenting the supplementary soil sampling activities that were conducted by Berlogar Geotechnical Consultants along the portion of the Transportation Corridor located on the west side of First Street, between Spring Street and Ray Street in Pleasanton, California.

If you have any questions or comments concerning this report, please feel free to contact us at (925) 484-0220.

Respectfully submitted,

BERLOGAR GEOTECHNICAL CONSULTANTS

Peng K. Leon
Principal Engineer
C39707, Exp. 12/31/09

PKL/PSL:jmb



Paul Sai-Wing Lai
Paul Sai-Wing Lai
Principal Engineer

Copies: Addressee
City of Pleasanton (1)
Attention: Mr. Jim Gotcher
Alameda County Health Care Services Agency (2)
Attention: Mr. Jerry Wickham

3126.003/22253.doc

TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF TABLES.....	ii
LIST OF FIGURES.....	iii
1.0 INTRODUCTION.....	1
2.0 SITE DESCRIPTION.....	1
3.0 BACKGROUND.....	1
4.0 SUPPLEMENTARY LIMITED ENVIRONMENTAL SITE INVESTIGATION.....	2
5.0 SOIL CONDITIONS.....	2
6.0 LABORATORY ANALYSIS.....	2
7.0 INVESTIGATION RESULTS.....	3
8.0 DISCUSSION.....	3
9.0 EXCLUSIONS.....	3

TABLES

FIGURES

APPENDIX: LABORATORY CERTIFICATES

LIST OF TABLES

NUMBER	TITLE
1	Soil Sample Results – Petroleum Hydrocarbons
2	Soil Sample Results – Metals

LIST OF FIGURES

NUMBER

TITLE

1

Site Plan

**SUPPLEMENTARY LIMITED ENVIRONMENTAL SITE INVESTIGATION
TRANSPORTATION CORRIDOR
WEST OF FIRST STREET, BETWEEN SPRING STREET AND RAY STREET
PLEASANTON, CALIFORNIA**

1.0 INTRODUCTION

This report presents the findings of the Supplementary Limited Environmental Site Investigation that was conducted by Berlogar Geotechnical Consultants (BGC) along the portion of the Transportation Corridor located west of First Street, between Spring Street and Ray Street in Pleasanton, California. The site is shown on the Site Plan, Figure 1.

The purpose of the investigation was to assess the potential presence of petroleum hydrocarbons and metals within the surficial soil at the site associated with the former railway line located at the site.

The investigation was limited to collecting soil samples and analyzing the samples for total petroleum hydrocarbons (TPH) as diesel (TPHd), TPH as motor oil (TPHmo), and metals.

2.0 SITE DESCRIPTION

The site is located west of First Street, between Spring Street and Ray Street in Pleasanton, California. The site consists of a rectangular parcel covering an area of approximately 1 acre. The site is currently vacant and unpaved.

3.0 BACKGROUND

A rail line corridor occupied the site from 1888 through the early 1990s. The site has been vacant since the removal of the rail line by 1993.

A limited environmental site investigation was performed by BGC at the parcel located south of the site in March 2009. Twenty-four soil samples were collected from twelve test pits and selectively analyzed for TPHg, TPHd, TPHmo, benzene-toluene-ethylbenzene-xylenes, methyl-tertiary butyl ether, volatile organic compounds (VOCs), semi-VOCs, organochlorine pesticides, polychlorinated biphenyls, and metals. Based on the findings of the investigation, it appeared that the surficial soil within the parcel contained antimony, arsenic, lead, mercury, and vanadium concentrations above their respective background levels and the San Francisco Regional Water Quality Control Board's Environmental Screening Levels (ESLs, where groundwater is a current or potential source of drinking water) for residential landuse, and in some cases their commercial/industrial ESLs and STLCs.

4.0 SUPPLEMENTARY LIMITED ENVIRONMENTAL SITE INVESTIGATION

BGC collected soil samples on June 23, 2009. A total of fourteen soil samples were collected from seven test pit locations (TP-13 through TP-19). The approximate test pit locations are shown on the Site Plan, Figure 1.

The test pits were excavated using a backhoe. Soil samples were collected from the test pits by driving a 2-inch diameter modified California sampler (containing a clean brass tube) into the soil at the prescribed depths. Soil samples designated with suffixes "A" and "B" were collected at depths of approximately 1 and 3 feet below the existing ground surface (bgs), respectively.

After being sealed and labeled, the filled brass tubes were immediately placed in a chilled cooler containing crushed ice for transportation to the laboratory. Proper documentation and field chain-of-custody procedures were followed.

All equipment used during this investigation which might have come into contact with contaminated materials was thoroughly decontaminated before and after each use. This was accomplished by washing with Alconox (a laboratory-grade detergent) and rinsing with distilled water.

5.0 SOIL CONDITIONS

Soil underlying the site generally consisted of fill over native alluvial soils of sandy clay, clayey silt, sandy silt, silty sand, and sandy gravel. The fill consisted of gravelly clay, gravelly sand, sandy gravel, and gravel. The soil was neither stained nor discolored. Additionally, no hydrocarbon odor was detected. No groundwater was encountered in the test pits.

6.0 LABORATORY ANALYSIS

The soil samples were sent to McCampbell Analytical, Inc. of Pittsburg, California, a state-certified laboratory, and analyzed for:

- TPHd, and TPHmo using EPA Method 8015B; and
- California Assessment Manual (CAM) 17 Metals using EPA Method 6020A.

The samples were analyzed on a normal turnaround basis.

7.0 INVESTIGATION RESULTS

The laboratory analytical results are summarized in Tables 1 and 2. Laboratory certificates are included in the Appendix. Analytical results were compared to commercial/industrial ESLs.

Laboratory analytical results of the soil samples indicated that TPHd and TPHmo concentrations were below their respective commercial/industrial ESLs.

Metal concentrations detected in the soil samples were within typical background levels and generally below their respective commercial/industrial ESLs, with the exception of antimony and arsenic. The antimony concentration of 51 mg/kg contained in Sample T-17A was above the commercial/industrial ESL of 40 mg/kg. The corresponding deeper Sample T-17B was below the antimony commercial/industrial ESL. Arsenic concentrations detected in all fourteen samples were above the commercial/industrial ESL of 1.6 mg/kg.

8.0 DISCUSSION

Based on the findings of this investigation, it appears that surficial soil within the site extending beyond three feet bgs primarily contains arsenic concentrations that exceed their respective commercial/industrial ESLs.

9.0 EXCLUSIONS

BGC assumes no responsibility or liability for the reliance hereon or use hereof of information contained in this report by anyone other than the party to whom it is addressed and City of Pleasanton.

The evaluations and recommendations presented in this report are based on the limited site investigation results available at this time and could be revised if new information necessitating further review of the site becomes available.

Job No. 3126.003

Transportation Corridor

West of First Street Between Spring Street and
Ray Street

Pleasanton, California

TABLE 1
SOIL SAMPLE RESULTS - PETROLEUM HYDROCARBONS

Sample ID	Depth (feet)	TPHd (mg/kg)	TPHmo (mg/kg)
T-13A	1.0	<1.0	<5.0
T-13B	3.0	<1.0	<5.0
T-14A	1.0	<1.0	<5.0
T-14B	3.0	<1.0	<5.0
T-15A	1.0	2.0	11
T-15B	3.0	<1.0	<5.0
T-16A	1.0	2.6	12
T-16B	3.0	1.4	5.2
T-17A	1.0	<1.0	<5.0
T-17B	3.0	<1.0	<5.0
T-18A	1.0	<1.0	<5.0
T-18B	3.0	<1.0	<5.0
T-19A	1.0	3.4	27
T-19B	3.0	<1.0	<5.0
Commercial/Industrial ESL (1)		83	2,500

Note:

1. Shallow soils (<3m bgs), where groundwater is a current or potential source of drinking water.

Job No. 3126.003
 Transportation Corridor
 West of First Street
 Between Spring Street and
 Ray Street
 Pleasanton, California

TABLE 2
 SOIL SAMPLE RESULTS - METALS

Sample ID	Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
T-13A	1.0	0.71	5.0	170	<0.5	<0.25	51	8.9	22	33	0.25	1.7	53	<0.5	<0.5	<0.5	40	57
T-13B	3.0	0.64	22.0	130	<0.5	<0.25	36	9.0	13	5.4	0.06	0.60	38	<0.5	<0.5	<0.5	35	31
T-14A	1.0	1.8	3.8	170	<0.5	<0.25	39	7.6	16	7.2	<0.05	1.7	39	<0.5	<0.5	<0.5	35	46
T-14B	3.0	<0.5	3.2	140	<0.5	<0.25	32	6.3	14	5.5	<0.05	1.5	35	<0.5	<0.5	<0.5	32	39
T-15A	1.0	0.60	4.4	150	<0.5	<0.25	44	8.4	21	38	0.08	3.0	44	<0.5	<0.5	<0.5	37	69
T-15B	3.0	1.1	26	120	<0.5	<0.25	55	7.7	19	10	<0.05	1.5	48	<0.5	<0.5	<0.5	45	62
T-16A	1.0	0.65	5.4	170	<0.5	<0.25	53	9.0	25	34	0.076	1.5	56	<0.5	<0.5	<0.5	43	74
T-16B	3.0	3.2	59	180	<0.5	<0.25	64	17	42	38	0.082	0.69	62	<0.5	<0.5	<0.5	38	59
T-17A	1.0	51	8.6	380	<0.5	0.88	69	11	32	260	0.10	0.57	54	<0.5	<0.5	<0.5	44	260
T-17B	3.0	1.9	3.6	190	<0.5	<0.25	43	10	16	7.2	<0.05	<0.5	44	<0.5	<0.5	<0.5	42	40
T-18A	1.0	3.8	150	110	<0.5	<0.25	45	12	76	45	0.071	0.78	41	<0.5	<0.5	<0.5	90	136
T-18B	3.0	0.50	6.3	150	<0.5	<0.25	67	6.0	17	8.1	<0.05	<0.5	46	<0.5	<0.5	<0.5	53	45
T-19A	1.0	5.1	80	130	<0.5	0.39	40	10	100	85	0.13	0.63	45	<0.5	<0.5	<0.5	63	110
T-19B	3.0	0.85	12	160	<0.5	<0.25	71	6.6	24	11	<0.05	2.2	51	<0.5	<0.5	<0.5	52	50
Commercial/Industrial ESL [1]		40	1.6	1,500	8.0	7.4	750	80	230	750	10	40	150	10	40	16	200	600

Note:

1. Shallow soils (<3m bgs), where groundwater is a current or potential source of drinking water.

CHECKED BY:

DRAWN BY: CC

DATE: 6-29-09

JOB NUMBER: 3126.003

RAY STREET

FIRST STREET

SPRING STREET

T-13

T-14

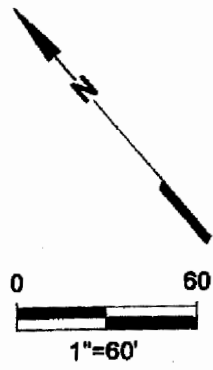
T-15

T-16

T-17

T-18

T-19



EXPLANATION



PROJECT BOUNDARY



APPROXIMATE TEST PIT LOCATION

SITE PLAN

TRANSPORTATION CORRIDOR

WEST OF FIRST STREET, BETWEEN
SPRING STREET AND RAY STREET
PLEASANTON, CALIFORNIA

FOR

MACKAY AND SOMPS CIVIL ENGINEERS, INC.

Berlogar Geotechnical Consultants

SOIL ENGINEERS * ENGINEERING GEOLOGISTS

BASE: "PRELIMINARY PARKING LOT LAYOUT". PROVIDED BY MACKAY AND SOMPS. DATED 2/08

FIGURE 1

APPENDIX

Laboratory Certificates



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com F-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ICES P.O. Box 99288 Emeryville, CA 94662	Client Project ID: #BGC 3126.003; Transportation Corridor	Date Sampled: 06/23/09
	Client Contact: Peng Leong	Date Received 06/23/09
	Client P.O.:	Date Extracted 06/23/09
		Date Analyzed 06/24/09-06/26/09

CAM / CCR 17 Metals*

Lab ID	0906694-001A	0906694-002A	0906694-003A	0906694-004A	Reporting Limit for DF 1. ND means not detected above the reporting limit	
Client ID	T-13A	T-13B	T-14A	T-14B		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/kg	mg/l

ICP-MS Metals, Concentration*

Analytical Method: 6020A	Extraction Method: SW1050B				Work Order: 0906694	
Dilution Factor	1	1	1	1	1	1
Antimony	0.71	0.64	1.8	ND	0.5	NA
Arsenic	5.0	22	3.8	3.2	0.5	NA
Barium	170	130	170	140	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	ND	0.25	NA
Chromium	51	36	39	37	0.5	NA
Cobalt	8.9	9.0	7.6	6.9	0.5	NA
Copper	22	13	16	14	0.5	NA
Lead	33	5.4	7.2	5.5	0.5	NA
Mercury	0.25	0.060	ND	ND	0.05	NA
Molybdenum	1.7	0.60	1.7	1.5	0.5	NA
Nickel	53	38	39	35	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	40	35	35	32	0.5	NA
Zinc	57	31	46	39	5.0	NA
%SS:	113	103	118	112		

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ICES P.O. Box 99288 Emeryville, CA 94662	Client Project ID: #BGC 3126.003;	Date Sampled: 06/23/09
	Transportation Corridor	Date Received: 06/23/09
	Client Contact: Peng Leong	Date Extracted: 06/23/09
	Client P.O.:	Date Analyzed: 06/24/09-06/26/09

CAM / CCR 17 Metals*

Lab ID	0906694-005A	0906694-006A	0906694-007A	0906694-008A	Reporting Limit for DF = 1. ND means not detected above the reporting limit	
Client ID	T-15A	T-15B	T-16A	T-16B		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg-Kg	mg/L

ICP-MS Metals, Concentration*

Analytical Method: 6020A	Extraction Method: SW1050B				Work Order: 0906694	
Dilution Factor	1	1	1	1	1	1
Antimony	0.60	1.1	0.66	3.2	0.5	NA
Arsenic	4.4	26	5.4	39	0.5	NA
Barium	150	120	170	180	5.0	NA
Beryllium	ND	ND	ND	ND	0.5	NA
Cadmium	ND	ND	ND	ND	0.25	NA
Chromium	44	55	53	64	0.5	NA
Cobalt	8.4	7.7	9.0	17	0.5	NA
Copper	21	19	25	42	0.5	NA
Lead	38	10	34	38	0.5	NA
Mercury	0.080	ND	0.076	0.082	0.05	NA
Molybdenum	3.4	1.5	1.5	0.69	0.5	NA
Nickel	44	48	56	62	0.5	NA
Selenium	ND	ND	ND	ND	0.5	NA
Silver	ND	ND	ND	ND	0.5	NA
Thallium	ND	ND	ND	ND	0.5	NA
Vanadium	37	45	43	58	0.5	NA
Zinc	69	47	74	59	5.0	NA
%SS:	107	117	129	130		

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9260

ICES P.O. Box 99288 Emeryville, CA 94662	Client Project ID: #BGC 3126.003:	Date Sampled: 06/23/09
	Transportation Corridor	Date Received: 06/23/09
	Client Contact: Peng Leong	Date Extracted: 06/23/09
	Client P.O.:	Date Analyzed: 06/24/09-06/26/09

CAM / CCR 17 Metals*

Lab ID	0906694-009A	0906694-010A	0906694-011A	0906694-012A	Reporting Limit for DI = 1. ND means not detected above the reporting limit	
Client ID	T-17A	T-17B	T-18A	T-18B		
Matrix	S	S	S	S	S	W
Extraction Type	TOTAL	TOTAL	TOTAL	TOTAL	mg/kg	mg/l

ICP-MS Metals, Concentration*

Analytical Method: 6020A		Extraction Method: SW3050B				Work Order: 0906694	
Dilution Factor	1	1	1	1	1	1	
Antimony	51	1.9	3.8	0.50	0.5	NA	
Arsenic	8.6	3.6	150	6.3	0.5	NA	
Barium	380	190	110	150	5.0	NA	
Beryllium	ND	ND	ND	ND	0.5	NA	
Cadmium	0.88	ND	ND	ND	0.25	NA	
Chromium	69	43	45	67	0.5	NA	
Cobalt	11	10	12	6.0	0.5	NA	
Copper	32	16	76	17	0.5	NA	
Lead	260	7.2	45	8.1	0.5	NA	
Mercury	0.10	ND	0.071	ND	0.05	NA	
Molybdenum	0.57	ND	0.78	ND	0.5	NA	
Nickel	54	44	41	46	0.5	NA	
Selenium	ND	ND	ND	ND	0.5	NA	
Silver	ND	ND	ND	ND	0.5	NA	
Thallium	ND	ND	ND	ND	0.5	NA	
Vanadium	44	42	90	53	0.5	NA	
Zinc	260	40	130	45	5.0	NA	
%SS:	122	120	125	125			

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 (STIC).

DI WET = Waste Extraction Test using de-ionized water.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

ICES P.O. Box 99288 Emeryville, CA 94662	Client Project ID: #BGC 3126.003: Transportation Corridor	Date Sampled: 06/23/09
	Client Contact: Peng Leong	Date Received 06/23/09
	Client P.O.:	Date Extracted 06/23/09
		Date Analyzed 06/24/09-06/26/09

CAM / CCR 17 Metals*

Lab ID	0906694-013A	0906694-014A			Reporting Limit for DI = 1. ND means not detected above the reporting limit	
Client ID	T-19A	T-19B			S	W
Matrix	S	S			mg/kg	mg/L
Extraction Type	TOTAL	TOTAL				

ICP-MS Metals, Concentration*

Analytical Method: 6020A	Extraction Method: SW3050B				Work Order: 0906694	
Dilution Factor	1	1			1	1
Antimony	5.1	0.85			0.5	NA
Arsenic	80	12			0.5	NA
Barium	130	160			5.0	NA
Beryllium	ND	ND			0.5	NA
Cadmium	0.39	ND			0.25	NA
Chromium	40	71			0.5	NA
Cobalt	10	6.6			0.5	NA
Copper	100	24			0.5	NA
Lead	85	11			0.5	NA
Mercury	0.13	ND			0.05	NA
Molybdenum	0.63	2.2			0.5	NA
Nickel	45	51			0.5	NA
Selenium	ND	ND			0.5	NA
Silver	ND	ND			0.5	NA
Thallium	ND	ND			0.5	NA
Vanadium	63	52			0.5	NA
Zinc	110	50			5.0	NA
%SS	114	124				

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



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: mca@mccampbell.com
Telephone: 925-252-9262 Fax: 925-252-9269

ICES P.O. Box 99288 Emeryville, CA 94662	Client Project ID: #BGC 3126.003; Transportation Corridor	Date Sampled: 06/23/09
	Client Contact: Peng Leong	Date Received: 06/23/09
	Client P.O.:	Date Analyzed: 06/24/09-06/26/09
		Date Extracted: 06/23/09

Total Extractable Petroleum Hydrocarbons*

Extraction method: SW3550C

Analytical methods: SW8015B

Work Order: 0906694

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C25)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
0906694-001A	T-13A	S	ND	ND	1	102	
0906694-002A	T-13B	S	ND	ND	1	110	
0906694-003A	T-14A	S	ND	ND	1	109	
0906694-004A	T-14B	S	ND	ND	1	109	
0906694-005A	T-15A	S	2.0	11	1	99	e7,e2
0906694-006A	T-15B	S	ND	ND	1	98	
0906694-007A	T-16A	S	2.6	12	1	103	e7,e2
0906694-008A	T-16B	S	1.4	5.2	1	102	e7,e2
0906694-009A	T-17A	S	ND	ND	1	102	
0906694-010A	T-17B	S	ND	ND	1	109	
0906694-011A	T-18A	S	ND	ND	1	98	
0906694-012A	T-18B	S	ND	ND	1	109	
0906694-013A	T-19A	S	3.4	27	2	96	e7,e2
0906694-014A	T-19B	S	ND	ND	1	103	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in ug/L, wipe samples in ug/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/l., and all DISTLC / STLC / SPLP / TCLP extracts are reported in ug/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 McC Campbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

e7) oil range compounds are significant



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: mams@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0906694

Analyte	EPA Method: 6020A					Extraction: SW3050B			BatchID: 44007			Spiked Sample ID: 0906637-002A			
	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	1.1	50	102	103	1.32	10	94.5	94.1	0.509	75 - 125	20	75 - 125	20		
Arsenic	14	50	100	99.6	0.501	10	95.6	95.7	0.105	75 - 125	20	75 - 125	20		
Barium	160	500	94.1	96	1.45	100	86.4	85.8	0.743	75 - 125	20	75 - 125	20		
Beryllium	ND	50	94.8	94.5	0.272	10	93.5	93.4	0.161	75 - 125	20	75 - 125	20		
Cadmium	ND	50	100	101	0.554	10	96.6	96.8	0.207	75 - 125	20	75 - 125	20		
Chromium	41	50	93.9	92.8	0.624	10	93.9	93.1	0.888	75 - 125	20	75 - 125	20		
Cobalt	11	50	95.3	95.3	0	10	96.9	96.3	0.673	75 - 125	20	75 - 125	20		
Copper	30	50	93.4	93.5	0.0653	10	93.4	92.1	1.37	75 - 125	20	75 - 125	20		
Lead	25	50	102	102	0	10	97.4	96.5	0.886	75 - 125	20	75 - 125	20		
Mercury	0.70	1.25	118	120	1.28	0.25	117	118	1.23	75 - 125	20	75 - 125	20		
Molybdenum	0.68	50	100	103	2.47	10	95.7	95.8	0.0835	75 - 125	20	75 - 125	20		
Nickel	43	50	94.3	96.2	1.04	10	92.3	92.2	0.173	75 - 125	20	75 - 125	20		
Selenium	ND	50	99.8	100	0.440	10	91.4	88.5	3.18	75 - 125	20	75 - 125	20		
Silver	ND	50	122	124	1.59	10	116	120	3.65	75 - 125	20	75 - 125	20		
Thallium	ND	50	99.6	100	0.581	10	88.1	88.7	0.701	75 - 125	20	75 - 125	20		
Vanadium	66	50	NR	NR	NR	10	96.3	94.8	1.55	75 - 125	20	75 - 125	20		
Zinc	56	500	95.7	95.1	0.525	100	94.4	93.3	1.13	75 - 125	20	75 - 125	20		
%SS	93	250	95	96	1.42	250	92	91	1.66	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 44007 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906694-001A	06/23/09	06/23/09	06/24/09 11:43 PM	0906694-002A	06/23/09	06/23/09	06/25/09 3:10 PM
0906694-003A	06/23/09	06/23/09	06/25/09 12:23 AM	0906694-004A	06/23/09	06/23/09	06/25/09 12:31 AM
0906694-005A	06/23/09	06/23/09	06/25/09 12:38 AM	0906694-006A	06/23/09	06/23/09	06/25/09 12:46 AM
0906694-007A	06/23/09	06/23/09	06/25/09 12:53 AM	0906694-008A	06/23/09	06/23/09	06/26/09 12:45 PM
0906694-009A	06/23/09	06/23/09	06/25/09 3:31 PM	0906694-009A	06/23/09	06/23/09	06/26/09 1:02 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.



QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0906694

EPA Method: 6020A		Extraction: SW3050B				BatchID: 44059				Spiked Sample ID: 0906694-014A			
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	0.85	50	107	106	0.424	10	98.9	97	1.95	75 - 125	20	75 - 125	20
Arsenic	12	50	95.2	94.9	0.321	10	104	103	1.93	75 - 125	20	75 - 125	20
Barium	160	500	89.8	88.8	0.818	100	90.1	88.1	2.21	75 - 125	20	75 - 125	20
Beryllium	ND	50	96.7	95.4	1.34	10	111	109	1.72	75 - 125	20	75 - 125	20
Cadmium	ND	50	102	102	0	10	104	102	2.52	75 - 125	20	75 - 125	20
Chromium	71	50	NR	NR	NR	10	114	111	3.11	75 - 125	20	75 - 125	20
Cobalt	6.6	50	94.3	93.7	0.541	10	110	108	1.56	75 - 125	20	75 - 125	20
Copper	24	50	89.2	88.8	0.290	10	109	106	2.48	75 - 125	20	75 - 125	20
Lead	11	50	94.6	94.9	0.240	10	100	98.6	1.70	75 - 125	20	75 - 125	20
Mercury	ND	1.25	85.6	84.8	0.912	0.25	104	100	3.14	75 - 125	20	75 - 125	20
Molybdenum	2.2	50	95.9	96.2	0.279	10	101	99.3	1.46	75 - 125	20	75 - 125	20
Nickel	51	50	78.9	78.1	0.441	10	107	104	2.56	75 - 125	20	75 - 125	20
Selenium	ND	50	102	103	0.697	10	109	107	1.39	75 - 125	20	75 - 125	20
Silver	ND	50	115	114	0.227	10	99.6	98	1.58	75 - 125	20	75 - 125	20
Thallium	ND	50	91.9	92.4	0.563	10	99.4	97.9	1.48	75 - 125	20	75 - 125	20
Vanadium	52	50	72.6, F1	73.5, F1	0.472	10	115	112	2.55	75 - 125	20	75 - 125	20
Zinc	50	500	98.4	98.4	0	100	108	106	2.34	75 - 125	20	75 - 125	20
%SS	124	250	99	98	1.05	250	96	94	3.03	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

F1 = MS / MSD outside of acceptance criteria. LCS - LCSD validate prep batch.

BATCH 44059 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906694-010A	06/23/09	06/23/09	06/25/09 3:39 PM	0906694-011A	06/23/09	06/23/09	06/25/09 4:12 PM
0906694-011A	06/23/09	06/23/09	06/26/09 1:07 PM	0906694-012A	06/23/09	06/23/09	06/25/09 4:19 PM
0906694-013A	06/23/09	06/23/09	06/25/09 4:27 PM	0906694-014A	06/23/09	06/23/09	06/24/09 11:08 PM

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

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

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 925-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015B

W.O Sample Matrix: Soil

QC Matrix: Soil

BatchID: 44009

WorkOrder: 0906694

EPA Method SW8015B		Extraction SW3550C							Spiked Sample ID: 0906644-010A			
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	108	108	0	102	101	1.80	70 - 130	30	70 - 130	30
%SS:	105	50	106	106	0	105	103	2.08	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 44009 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906694-001A	06/23/09	06/23/09	06/24/09 8:28 PM	0906694-002A	06/23/09	06/23/09	06/24/09 10:27 PM
0906694-003A	06/23/09	06/23/09	06/25/09 5:27 AM	0906694-004A	06/23/09	06/23/09	06/25/09 2:02 AM
0906694-005A	06/23/09	06/23/09	06/26/09 8:16 PM	0906694-006A	06/23/09	06/23/09	06/24/09 6:06 PM
0906694-007A	06/23/09	06/23/09	06/26/09 4:38 PM	0906694-008A	06/23/09	06/23/09	06/26/09 3:25 PM
0906694-009A	06/23/09	06/23/09	06/24/09 7:17 PM				

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

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

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

QA/QC Officer



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 44058

WorkOrder: 0906694

EPA Method SW8015B	Extraction SW3550C								Spiked Sample ID: 0906694-014A			
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec	% Rec	% RPD	MS / MSD	RPD	LCS/LCSD
TPH-Diesel (C10-C23)	ND	20	109	101	7.05	104	106	0.982	70 - 130	30	70 - 130	30
%SS:	103	50	104	112	7.42	104	106	1.52	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 44058 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0906694-010A	06/23/09	06/23/09	06/25/09 3:10 AM	0906694-011A	06/23/09	06/23/09	06/24/09 7:17 PM
0906694-012A	06/23/09	06/23/09	06/25/09 4:19 AM	0906694-013A	06/23/09	06/23/09	06/25/09 1:27 PM
0906694-014A	06/23/09	06/23/09	06/24/09 10:48 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.

29066-544

McCAMPBELL ANALYTICAL, INC.
 1534 WILLOW PASS ROAD
 PITTSBURG, CA 94565-1701
 Website: www.mccampbell.com Email: mala@mccampbell.com
 Telephone: (877) 252-9262 Fax: (925) 252-9260

CHAIN OF CUSTODY RECORD
 TURN AROUND TIME
 RUSH 24HR 48HR 72HR 5DAY
 GeoTracker EDF PDF Excel Write On (DW)

Report To: Peng Leong Bill To: Same
 Company: ICFS
 P.O. Box 99288
 Emeryville, CA 94662
 E-Mail: derek_ices@yahoo.com
 Tele: (510) 652-3222 Fax: (510) 652-3555
 Project #: BGC 3126.003 Project Name:
 Project Location: Transportation Corridor, Pleasanton, CA
 Sampler Signature: *[Signature]*

Analysis Request Other Comments

MTBE: BYEN & TPH as Gas (02-0021-0014)
 MTBE: BYEN ONLY (EPA 802-0021)
 TPH as Total Aroclor (01-0115)
 Total Petroleum Oil & Grease (1004-0021 E.H.A.P)
 Total Petroleum Hydrocarbons (111-1)
 EPA 802.2-01-010-0010 (HVOX)
 EPA 809/808-0001 (EPCBs/Cl)
 EPA 808/802 IV (V-ONLY: Aroclors: Congeners)
 EPA 807-01 (NP Petroleums)
 EPA 815-01 (Volatile Chlorides)
 EPA 821-020-020 (VOC)
 EPA 821-025-020 (SVOC)
 EPA 820-01 (COP: PAHs: PNAs)
 CATIONIC Metals (July 2003-010-0020)
 ANIONIC Metals (July 2003-010-0020)
 Lead (July 2003-010-0020)

Filter Samples for Metals analysis: Yes/No

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
T-13A	T-13	7/23/07		1										
T-13B	T-13			1										
T-14A	T-14			1										
T-14B	T-14			1										
T-15A	T-15			1										
T-15B	T-15			1										
T-16A	T-16			1										
T-16B	T-16			1										
T-17A	T-17			1										
T-17B	T-17			1										
T-18A	T-18			1										
T-18B	T-18			1										
T-19A	T-19			1										
T-19B	T-19			1										

Relinquished By: *[Signature]* Date: 7/23/07 Received By: *[Signature]*
 Relinquished By: *[Signature]* Date: 7/23/07 Time: 1:00 PM Received By: *[Signature]*
 Relinquished By: *[Signature]* Date: Time: Received By:

ICE: 4.4 COMMENTS:
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 APPROPRIATE CONTAINERS
 PRESERVED IN LAB
 VDA5 O&G METALS OTHER
 PRESERVATION pH-2

McCampbell Analytical, Inc.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0906694

ClientCode: ICES

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:

Peng Leong
ICES
P.O. Box 99288
Emeryville, CA 94662
(510) 652-3222 FAX (510) 652-3555

Email: derek_ices@yahoo.com
cc:
PO:
ProjectNo: #BGC 3126.003; Transportation
Corridor

Bill to:

Accounts Payable
ICES
P.O. Box 99288
Emeryville, CA 94662

Requested TAT: 5 days

Date Received: 06/23/2009

Date Printed: 06/23/2009

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	
0906694-001	T-13A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-002	T-13B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-003	T-14A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-004	T-14B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-005	T-15A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-006	T-15B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-007	T-16A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-008	T-16B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-009	T-17A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-010	T-17B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-011	T-18A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-012	T-18B	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-013	T-19A	Soil	6/23/2009	<input type="checkbox"/>	A	A											
0906694-014	T-19B	Soil	6/23/2009	<input type="checkbox"/>	A	A											

Test Legend:

1 CAM17MS_S
6
11

2 TPH(DMO)_S
7
12

3
8

4
9

5
10

Prepared by: Maria Venegas

Comments:

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.