

CO - 909

Diversified Technology
Consultants
Parks Reserve Forces
Training Area

To: Eva Chu **Fax:** 510-337-9335

From: Daniel Walsh **Date:** 10/24/01

Re: PRFTA 13 Remediation **Pages:** 7

CC: *Dobbin*

Urgent For Review Please Comment Please Reply Please Recycle

Notes: Eva,

Here are the analyticals for the diesel contamination DSRSD has discovered here at Parks RFTA. Please call me if you have any questions. We will allow the contractor to continue to trench with the proper safeguards in place. I have ordered the roll-off bins for disposal of the soil. If there is more documentation that you need please let me know. We will submit a formal report to you soon and we will determine a method of payment for your oversight. Thank you.

Daniel Walsh
Diversified Technology Consultants
Parks RFTA Environmental Office
(925) 875-4683 Fax: (925) 875-4639

*Approve continued trenching -
Have site safety officer to oversee
handling of contaminated soil
and/or groundwater.
Take field readings as necessary*



ROTHWELL CONSULTING, INC.
1500 PARK AVENUE, SUITE 309
EMERYVILLE, CALIFORNIA 94608
PHONE 510.985.1045
FAX 510.985.1046
EMAIL rothwell@rothwell.net

October 23, 2001

Mr. Manual Cunha
RGW Construction, Inc.
550 Greenville Road
Livermore, California 94550

Subject: Soil Sampling and Analysis in Sewer Trenches; Camp Parks, Dublin, CA

Mr. Cunha:

On October 19, 2001, Rothwell Consulting, Inc. performed soil sampling and analysis at the aforementioned project location following the discovery of suspected contaminated soil during excavation of sewer trenches. A total of five soil samples were collected at depths ranging from 2.5 feet to 12 feet below ground surface. The soil samples were then hand-delivered to a California DHS-certified laboratory where they were analyzed for petroleum hydrocarbons as diesel (TPH-d) and total petroleum hydrocarbons as oil and grease (TPH-o.g), and volatile organic compounds (VOCs). The sample locations, depths, and results are summarized below.

Sample Number	Sample Location	Results		
		TPH-diesel	TPH-oil, grease	VOCs
1011019-A	North/South trench ~100' north of south intersection: 12 feet below ground surface.	470	84	ND
1011019-B	North/South trench ~100' north of south intersection: 8 feet below ground surface.	140	22	Not tested
1011019-C	North/South trench ~200' north of south intersection: 3 feet below ground surface.	35	ND	Not tested
1011019-D	East/West trench ~100' west of north intersection: 2.5 feet below ground surface.	7.4	1.8	Not tested
1011019-E	East/West trench ~200' east of north intersection: 1.5 feet below ground surface.	2.2	4.3	Not tested

The soil test results indicate that the soil has been impacted by petroleum hydrocarbons in the diesel and oil and grease range compounds. The contaminant concentrations in the north/south trench appears to be higher at the lower depths in the silty sand strata. The east/west trenches were found to contain relatively low concentrations of petroleum hydrocarbons that appeared to be limited to the gravel road base.

This report is not a comprehensive site characterization and should not be construed as such. Additional site soil and groundwater testing will likely be necessary to adequately characterize the environmental impacts at the site. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, this report should be deemed conclusive with respect to only the information obtained.

Rothwell Consulting makes no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Rothwell Consulting has strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

Should you have any questions or require additional assistance, please feel free to call me.

Sincerely,

Rothwell Consulting, Inc.



Eric Rothwell, CIH
Senior Consultant

 McCAMPBELL ANALYTICAL, INC.	110 2nd Street, #D7, Pacheco, CA 94553-5560 Telephone : 925-798-1620 Fax 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com
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Rothwell Consulting, Inc. 1500 Park Avenue, #308 Emeryville, CA 94608	Client Project ID: RGW-Camp Parks	Date Sampled: 10/19/01
		Date Received: 10/19/01
	Client Contact: Eric Rothwell	Date Extracted: 10/22/01
	Client P.O.:	Date Analyzed: 10/22/01

Diesel Range (C10-C13) Extractable Hydrocarbons as Diesel*
 EPA methods modified 8115, and 3550 or 3510; California RWOCB (SF Bay Region) method GC/FID (3550) or GC/FID (3510)

Lab ID	Client ID	Matrix	TPH(d)*	%Recovery Surrogate
75226	1011019-A	S	470	100
75227	1011019-B	S	140	101
75228	1011019-C	S	35	102
75229	1011019-D	S	7.4	101
75230	1011019-E	S	2.2	102
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 mg/L, wipe samples in ug/wipe, soil and sludge samples in ug/kg, and all TCLP/SCLC/SPLP extracts in mg/L.
 * clustered chromatograms resulting in excluded surrogate and sample peaks, or surrogate peak is on elevated baseline, or: surrogate has been diminished by dilution or original extract.
 * The following descriptions of the TPH chromatogram are carryover 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 peaks; 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 miscible shown in present; i) liquid non-hc that contains greater than ~5 vol. % diesel.

DHS Certification No. 1644

 Edward Hamilton, Lab Director

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	Client P.O.:	Date Extracted: 10/22/01
		Date Analyzed: 10/22/01

Petroleum Oil & Grease (with Silica Gel Clean-up) *
 EPA methods 418.1, 8070 or 8071; Standard Methods 5520 D/H&F or 503 D&E for solids and 5520 B&F or 503 A&B for liquids

Lab ID	Client ID	Matrix	Oil & Grease *
75226	1011019-A	S	34
75227	1011019-B	S	23
75228	1011019-C	S	ND
75229	1011019-D	S	1.8
75230	1011019-E	S	4.3
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, wipe samples in mg/wipe, soil and sludge samples in mg/kg, and all TCLP/STLC/SPLP extracts in mg/L.
 b) lighter than water immiscible shown is present; c) liquid sample that contains greater than ~5 vol % sediment.

DHS Certification No. 1644

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		Date Analyzed: 10/22/01

Volatile Organics By GC/MS			
EPA method 8260		75226	
Lab ID		1011019-A	
Client ID		Soil	
Matrix			
Compound	Concentration*	Compound	Concentration
Acetone	ND<30	1,1-Dichloroethene	ND<30
Benzene	ND<30	cis-1,2-Dichloroethene	ND<30
Bromobenzene	ND<30	trans-1,2-Dichloroethene	ND<30
Bromochloromethane	ND<30	Ethylbenzene	ND<30
Bromodichloromethane	ND<30	Hexachlorobutadiene	ND<30
Bromoform	ND<30	2-Hexanone	ND<30
Bromomethane	ND<30	Iodomethane (methyl iodide)	ND<30
2-Butanone (MEK)	ND<30	Isopropylbenzene	ND<30
n-Butylbenzene	ND<30	4-Isopropyltoluene	ND<30
sec-Butylbenzene	ND<30	Methylene chloride	ND<30
tert-Butylbenzene	ND<30	4-Methyl-2-pentanone (MIBK)	ND<30
Carbon disulfide	ND<30	Naphthalene	ND<30
Carbon tetrachloride	ND<30	n-Propylacetate	ND<30
Chlorobenzene	ND<30	Styrene	ND<30
Chloroethane	ND<30	1,1,1,2-Tetrachloroethane	ND<30
2-Chloroethylvinyl ether	ND<30	1,1,2,2-Tetrachloroethane	ND<30
Chloroform	ND<30	Tetrachloroethene	ND<30
Chloromethane	ND<30	Toluene	ND<30
2-Chlorotoluene	ND<30	1,2,3-Trichlorobenzene	ND<30
4-Chlorotoluene	ND<30	1,2,4-Trichlorobenzene	ND<30
Dibromochloromethane	ND<30	1,1,1-Trichloroethane	ND<30
1,2-Dibromo-3-chloropropane (DBCP)	ND<30	1,1,2-Trichloroethane	ND<30
1,2-Dibromoethane (EDB)	ND<30	Trichloroethene	ND<30
Dibromomethane	ND<30	Trichlorofluoromethane	ND<30
1,2-Dichlorobenzene	ND<30	1,2,3-Trichloropropane	ND<30
1,3-Dichlorobenzene	ND<30	1,2,4-Trimethylbenzene	ND<30
1,4-Dichlorobenzene	ND<30	1,3,5-Trimethylbenzene	ND<30
1,4-Dichloro-2-butene, total	ND<30	Vinyl acetate	ND<30
Dichlorodifluoroethane	ND<30	Vinyl chloride	ND<30
1,1-Dichloroethane	ND<30	m-Xylene	ND<30
1,2-Dichloroethane	ND<30	o-Xylene	ND<30
1,1-Dichloroethene	ND<30	p-Xylene	ND<30
cis-1,2-Dichloroethene	ND<30	Xylene (total)	ND<30
trans-1,2-Dichloroethene	ND<30	Camphene	
1,2-Dichloroethene (total)	ND<30	Surrogate Recoveries (%)	
1,2-Dichloropropane	ND<30	4-Bromophenylphenyl ether	99
1,3-Dichloropropane	ND<30	4-Chloro-3-methylphenol	96
2,2-Dichloropropane	ND<30	3,3'-Dichlorobenzidine	98

* soil and sludge samples are reported in ug/kg, wipes in ug/wipe, and water samples and all TCLP / STLC / STLP extracts in ug/l.
 * EPA extraction methods 1311 (TCLP), 3010/3020 (water, TTLC), 3090 (organic solvents, TTLC), 3050 (solids, TTLC), STLC - CA Title 22
 * surrogate diluted out of range
 * reporting limit raised due to interference
 † liquid samples that contain greater than ~2 vol. % oil/water; this oil/water is corrected with the liquid, in accordance with EPA methodologies and can significantly effect reported metals concentrations.

 Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.

110 2ND AVENUE, SUITE 101
PACIFIC, CA 94651-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH
 24 HOUR
 48 HOUR
 5 DAY

Report To: _____ Bill To: _____
 Company: **ROTHWELL CONSULTING, INC.**
1500 PARK AVE, #508
EMERYVILLE, CA 94608
 Tele: **510 985-1045** Fax: ()
 Project #: _____ Project Name: **BEAL-CAMP PARKS**
 Project Location: _____
 Sampler Signature: *[Signature]*

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments															
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				BTX & TPH as Gas (M2000 - M15V-MTBE)	TPH as Diesel (M13)	Total Petroleum Oil & Grease (5520 GAF/BAF)	Total Petroleum Hydrocarbons (413.1)	EPA 601 / 8010	BTX ONLY (EPA 602 - 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB'S ONLY	EPA 824 / 8240	EPA 825 / 8270	PAHs - 6010, 5520 VPS by 3, VMA 1, LHM	CAN-17 Metals	LUFT 5 Metals	Lead (7240/7420/2300/2690)	RCI
1011019-A	TEST PT 1	10/19	PM	1	" "	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	75226
1011019-B	TEST PT 1	10/19	PM	1	" "	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	75227
1011019-C	TEST PT 2	10/19	PM	1	" "	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	75228
1011019-D	TEST PT 3	10/19	PM	1	" "	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	75228
1011019-E	TEST PT 4	10/19	PM	1	" "	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	75230

Relinquished By: *[Signature]* Date: 10/19/01 Time: 15:40
 Received By: *[Signature]*
 Relinquished By: _____ Date: _____ Time: _____
 Received By: _____
 Relinquished By: _____ Date: _____ Time: _____
 Received By: _____

Remarks: _____
 ICEP GOOD CONDITION HEAD SPACE ABSENT
 PRESERVATION APPROPRIATE CONTAINERS