

COTTLE Engineering

ALCO
HAZMAT

94 OCT 19 PM 4:55

P.O. Box 163
Antioch, CA 94509
(510) 754-9935

CA Lic. No. 481444

TELECOPY COVER SHEET

Date: 10-7-94

Please deliver the following
message to:

Name: Brian Shinnott

Company: U.S.B.R.

FAX Phone Number: 209-836-6269

From: Roy Pantle

Number of pages (including cover page) 8

Notes: Analytical Reports

Please contact Roy at (510) 754-9935

McCAMPBELL ANALYTICAL INC.	110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622
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Cottle Industries P.O. Box 7 Antioch, CA 94509	Client Project ID: U.S.B.R.; Tracy Pumping Plant	Date Sampled: 08/24/94
	Client Contact: Roy Pantle	Date Received: 08/26/94
	Client P.O:	Date Extracted: 08/26-08/27/94
		Date Analyzed: 08/27-08/29/94

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 GC/FID(5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
40566	W-101	W	12,000,b,c	110	3.5	690	470	99
40567	S-201	S	92,g,d	ND	0.050	ND	0,043	85
40568	S-202	S	4200,b	3.3	9.9	36	73	124 [#]
Detection Limit unless otherwise stated; ND means Not Detected		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 samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes 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 are significant, no recognizable pattern; 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 phase is present.

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: 08/27-08/28/94

Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	1.960	2.018	2.03	97	99	2.9
Benzene	0.000	0.176	0.184	0.2	88	92	4.4
Toluene	0.000	0.180	0.184	0.2	90	92	2.2
Ethylbenzene	0.000	0.178	0.186	0.2	89	93	4.4
Xylenes	0.000	0.554	0.574	0.6	92	96	3.5
TPH (diesel)	0	300	300	300	100	100	0.1
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 08/27-08/29/94

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	111.2	102.5	100	111.2	102.5	8.2
Benzene	0	10.2	9.2	10	102.0	92.0	10.3
Toluene	0	10.2	9.5	10	102.0	95.0	7.1
Ethyl Benzene	0	10.2	10	10	102.0	100.0	2.0
Xylenes	0	31.8	30.7	30	106.0	102.3	3.5
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	14700	34200	33400	23700	82	79	2.4

$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$

$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$

2816A cot LG

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7

PACHECO, CA 94553

FAX (510) 798-1822

(510) 798-1820

CHAIN OF CUSTODY RECORD

TURN AROUND TIME:

RUSH
 24 HOUR
 48 HOUR
 5 DAY

REPORT TO: COTTLE-ENG BILL TO: COTTLE

COMPANY: COTTLE ENGINEERING

P.O. Box 163

ANTIOCH, CA 94509

TELE: 90-798-9335

FAX: 510-798-8128

PROJECT NUMBER:

PROJECT NAME: U.S.B.R. TRACY PLANT

PROJECT LOCATION: U.S.B.R.

SAMPLER SIGNATURE: [Signature]

TRACY PUMPING PLANT TRACY CA

ANALYSIS REQUEST

OTHER

RIEX & TPH as Gasoline (602/8020 & 8012)	
TPH as Diesel (8008)	
Total Petroleum Oil & Grease (8520 EM/5520 SM)	
Total Petroleum Hydrocarbons (1181)	
EPA 601/8010	
EPA 602/8020	
EPA 608/8080	
EPA 609/8090 - PCBs Only	
EPA 624/8240/8260	
EPA 625/8270	
CM - 17 Metals	
EPA - Priority Pollutant Metals	
LEAD (7210/7421/2392/6010)	
ORGANIC LEAD	
PCB	

COMMENTS

SAMPLE ID	LOCATION	SAMPLING		# CONTAINERS	TYPE CONTAINERS	MATRIX					METHOD PRESERVED						
		DATE	TIME			WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HEX	OTHER				
W-201	11' center of excav.	8-24-94	1:30P	2	VOA	X											
S-201	12' North of excav.	8-24-94	1:40P	1	SLV		X										
S-202	13' West of excav	8-24-94	1:50P	1	SLV		X										

40588
40587
40588

REPT ✓
 GOOD CONDITION ✓
 HEAD SPACE ABSENT ✓
 PRESERVATIVE ✓
 APPROPRIATE ✓
 CONTAINERS ✓

RELINQUISHED BY: <u>[Signature]</u>	DATE: <u>9/26/94</u>	TIME: <u>11:25 AM</u>	RECEIVED BY: <u>[Signature]</u>
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:

REMARKS: 5-201
5-202
W-201

McCAMPBELL ANALYTICAL INC.	110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622
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Cottle Industries P.O. Box 7 Antioch, CA 94509	Client Project ID: U.S.B.R. Tracy Pumping Plant	Date Sampled: 09/16/94
	Client Contact: Roy Pantle	Date Received: 09/16/94
	Client P.O.:	Date Extracted: 09/16/94
		Date Analyzed: 09/16/94

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
41043	BR51 Comp	S	2.2,b	ND	0.006	0.005	0.061	93
Detection Limit unless otherwise stated; ND means Not Detected	W	50 ug/L	0.5	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.005	0.005	0.005	0.005	0.005	

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

cluttered chromatogram; sample peak co-elutes 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 are significant; no recognizable pattern; 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 phase is present.

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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: 09/15-09/16/94

Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.000	1.729	1.974	2.03	85	97	13.2
Benzene	0.000	0.172	0.168	0.2	86	84	2.4
Toluene	0.000	0.178	0.184	0.2	89	92	3.3
Ethylbenzene	0.000	0.174	0.182	0.2	87	91	4.5
Xylenes	0.000	0.540	0.560	0.6	90	93	3.6
TPH (diesel)	0	354	357	300	118	119	1.0
TRPH (oil & grease)	0.0	22.4	22.3	20.8	108	107	0.4

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7

(510) 798-1820

PACHECO, CA 94533

FAX (510) 798-1822

CHAIN OF CUSTODY RECORD

TURN AROUND TIME:

RUSH
 24 HOUR
 48 HOUR
 5 DAY

REPORT TO: COTTLE

BILL TO: COTTLE

COMPANY: COTTLE ENGINEERING

P.O. Box 163

ANTIOCH CA 94509

TELE: 510-754-9135

FAX: 510-754-8428

PROJECT NUMBER:

PROJECT NAME: U.S.B.R.

PROJECT LOCATION: USER

SAMPLER SIGNATURE:

TRACY PUMPING PLANT BAYON, CA

Ray Runtz

ANALYSIS REQUEST

OTHER

STEX & TPH as Discard (502/503 & 6015)	
THP as Discard (6015)	
Total Petroleum Oil & Grease (505 EM/505 IM)	
Total Petroleum Hydrocarbons (418.1)	
EPA 502/001E	
EPA 505/003	
EPA 505/004	
EPA 505/006 - PCBs Only	
EPA 504/0040/0042	
EPA 505/007E	
CAM - 17 Metals	
EPA - Priority Pollutant Metals	
LEAD (7248/748/7252/7257)	
ORGANIC LEAD	
PC	

COMMENTS

SAMPLE ID	LOCATION	SAMPLING		# CONTAINERS	TYPE CONTAINERS	MATRIX					METHOD PRESERVED					
		DATE	TIME			WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	OTHER			
ES51 COMP	TREATMENT POND	9/16/94	12:00P	4	SLV		X									

COMPOSITE
41043

NCFE
 GOOD CONTAINERS
 HEAD SPACE ASSENT
 PRESERVATIVE
 APPROPRIATE
 CONTAINERS

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
<i>Ray Runtz</i>	9/16/94	2:10	<i>Luigi Pica</i>
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:

REMARKS:

[X X X X X] NORTHERD
 [X X X X X] SOUTHERD



U.S. Department of the Interior
Bureau of Reclamation
2800 Cottage Way, MP-470
Sacramento, California 95825-1898
Attn: QA Section

Sample Date: 12/28/94
Report Date: 01/05/95
Page 1 of 1

Sample I.D. No: Tracy UST
TMW004
APPL Sample No: R19160-17454W A-D

Date Received: 12/30/94
Date Extracted: 01/03/95

Test Results:**

<u>Compound</u>	<u>Concentration $\mu\text{g/L}$</u>	<u>Detection limit $\mu\text{g/L}$</u>
Benzene	ND*	0.5
Ethylbenzene	ND	0.5
Toluene	ND	0.5
Total Xylenes	ND	0.5
TPH-Gasoline	ND	20

BRIAN,

THESE ARE THE LATEST RESULTS FOR SAMPLES
collected at the monitoring well for the UST
in the Canal Authority maintenance yard. NEXT
SAMPLE TO BE COLLECTED IN MARCH, 1995.

Thanks,
Russ

* ND = None Detected

** B.T.E. & X. analyzed by EPA Method 8020 & 5030.
TPH (Total Purgeable Hydrocarbons) analyzed by EPA Method
5030 and GC/FID.

Tested By Jon Beunee
Checked By Mark O'S