

# COTTLE Industries

## TELECOPY COVER SHEET

Date: 2-28-94

Please deliver the following message to:

Name: Eva Chiu

Company: Alameda County Health Agency

FAX Phone Number: 569-4757

From: Roy Parille

Number of pages (including cover page) 16 (sixteen)

Notes: Mountainhorse + Kelso  
Bureau of Reclamation

contact Brian Shimoto at Bureau  
OR Herb Ng

Please contact Roy at (510) 754 9035 if you have any questions. FAX (510) 754-8428

<b>McCAMPBELL ANALYTICAL INC.</b>	110 2nd Avenue South, #D7, Pacheco, CA 94553 Tel: 510-798-1620 Fax: 510-798-1622
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Cottle Industries P.O. Box 7 Antioch, CA 94509	Client Project ID: Bureau Of Reclamation	Date Sampled: 02/08/94
	Client Contact: Roy Pantle	Date Received: 02/09/94
	Client P.O:	Date Extracted: 02/09/94
		Date Analyzed: 02/09-02/11/94

**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) <sup>†</sup>	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
34155	W0-1	S	ND	ND	ND	ND	ND	109
34156	W0-Comp	S	ND	ND	ND	ND	ND	110
34157	RG-1	S	3.1,g	ND	ND	ND	ND	99
34158	RG-2	S	130,b,d	ND < 0.025	0.16	0.76	1.9	100
34159	RG-Comp	S	94,g	0.006	0.062	0.010	0.98	94
<b>Detection Limit unless otherwise stated; ND means Not Detected</b>		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.

DHS Certification No. 1644  Edward Hamilton, Lab Director

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		Date Analyzed: 02/09/94

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel \***  
EPA methods modified 8015, and 3550 or 3510; California RWQCH (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>	% Recovery Surrogate
34155	WO-1	S	ND	97
34156	WO-Comp	S	ND,g	98
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	
		S	10 mg/kg	

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

# cluttered chromatogram; surrogate and sample peaks co-elute or surrogate peak is on elevated baseline

+ 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) modified diesel?; light(CL) or heavy(CH) diesel compounds are 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 phase is present.





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		Date Received: 02/09/94
	Client Contact: Roy Pantle	Date Extracted: 02/15/94
	Client P.O:	Date Analyzed: 02/15/94

**LLFT Metals\***

EPA analytical methods				239.2,7420 <sup>+</sup>	213.1,7130	213.1,7190	249.1,7520	289.1,7950
Lab ID	Client ID	Matrix	Extraction <sup>o</sup>	Lead <sup>*</sup>	Cadmium <sup>*</sup>	Chromium <sup>*</sup>	Nickel <sup>*</sup>	Zinc <sup>*</sup>
34155	WO-1	S	TTLC	5.1	ND	41	28	36
34156	WO-Comp	S	TTLC	ND	ND	27	14	37
Detection Limit unless otherwise stated; ND means Not Detected	W	TTLC	0.005mg/L	0.05	0.25	0.10	0.05	
	S	TTLC	4.0 mg/kg	1.0	5.0	2.0	1.0	
	---	STLC,TCLP	0.20 mg/L	0.05	0.25	0.10	0.05	

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/l.

<sup>+</sup> Lead is analyzed using EPA method 7420 (AA Flame) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

<sup>o</sup> EPA extraction methods: 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

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## QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/08-02/09/94

Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.000	1.880	2.014	2.03	93	99	6.9
Benzene	0.000	0.194	0.206	0.2	97	103	6.0
Toluene	0.020	0.222	0.230	0.2	101	105	3.5
Ethylbenzene	0.000	0.206	0.216	0.2	103	108	4.7
Xylenes	0.050	0.664	0.684	0.6	102	106	3.0
TPH (diesel)	0	312	309	300	104	103	0.8
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: 02/11-02/12/94

Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.059	2.142	2.03	101	106	4.0
Benzene	0.000	0.222	0.206	0.2	111	103	7.5
Toluene	0.000	0.228	0.212	0.2	114	106	7.3
Ethylbenzene	0.000	0.226	0.210	0.2	113	105	7.3
Xylenes	0.000	0.692	0.644	0.6	115	107	7.2
TPH (diesel)	0	309	302	300	103	101	2.5
TRPH (oil & grease)	0.0	24.5	24.8	20.8	118	119	1.2

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

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