

6K UST (soil + water)
500 gal waste oil
(117 + 120)

Caltec



1100 Lincoln Ave., Ste. #108 • Napa, California 94558 • 707-257-3564 • FAX 707-226-1319 • 800-273-9992

FAX COVER SHEET

DATE

11-23-94

TOTAL PAGES (INCLUDING COVERSHEET)

TO

JENNIFER EBERLEY

FAX NUMBER

FROM

LINDA BROADFOOT

REGARDING

EBMUD TANK REMOVAL

RESPONSE REQUIRED YES NO

HARD COPY TO FOLLOW YES NO

COMMENTS

IF YOU DO NOT RECEIVE ALL PAGES PLEASE CONTACT US IMMEDIATELY AT
(707) 257-3564, THANK YOU.

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

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec. EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O.:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*
 EPA methods 5030, modified 8015, and 8020 or 802; California RWQCB (SF Bay Region) method GGFID(5030)

Lab ID	Client ID	Matrix	TPH (g) [†]	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
42533	MK 111	S						
42534	MK 112	S						
42535	MK 113	S						
42536	MK 114	S						
42537	MK 115 A	W	5200,a,h	340	420	10	740	101
42539	MK 117	S						
42542	MK 120	S						
Detection Limits 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 sheen is present.

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

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Diesel Range (C10-C25) Extractable Hydrocarbons as Diesel *
EPA methods modified 8015, and 3530 or 3510; California RWOCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	bgs	TPH(d)†	% Recovery Surrogate
42533	MK 111	S	10'	24,d	104
42534	MK 112	S	11.5'	ND,d	95
42535	MK 113	S	11.5'	13,d	98
42536	MK 114	S	11.5'	ND	107
42538	MK 116	W		2400,d,b	106
42539	MK 117	S	7'	ND,d	97
42542	MK 120	S	7'	440,d,g	119#
	W	50 ug/L			
Detection Limit unless otherwise stated; ND means Not Detected	S	10 mg/kg			

6K
PK

*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 (or) or heavy (or) 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 sheen is present.

11-22-1994 11:56AM

FROM McCampbell Analytical Inc TO

CALTEC P.05

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

GEO Flexis, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O.:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Volatile Halocarbons				
EPA method 601 or 8010				
Lab ID	42539	42542		
Client ID	MK 117	MK 120		
Matrix	S	S		
Compound ⁽¹⁾	Concentration*	Concentration*	Concentration*	Concentration*
Bromodichloromethane	ND	ND		
Bromoform ⁽²⁾	ND	ND		
Bromomethane	ND	ND		
Carbon Tetrachloride ⁽³⁾	ND	ND		
Chlorobenzene	ND	ND		
Chloroethane	ND	ND		
2-Chloroethyl Vinyl Ether ⁽⁴⁾	ND	ND		
Chloroform ⁽⁵⁾	ND	ND		
Chloromethane	ND	ND		
Dibromochloromethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,1-Dichloroethane	ND	ND		
1,2-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
cis 1,2-Dichloroethene	ND	ND		
trans 1,2-Dichloroethene	ND	ND		
1,2-Dichloropropane	ND	ND		
cis 1,3-Dichloropropene	ND	ND		
trans 1,3-Dichloropropene	ND	ND		
Methylene Chloride ⁽⁶⁾	ND	ND		
1,1,2,2-Tetrachloroethane	ND	ND		
Tetrachloroethene ⁽⁷⁾	ND	ND		
1,1,1-Trichloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
Trichloroethene	ND	ND		
Trichlorofluoromethane	ND	ND		
Vinyl Chloride ⁽⁸⁾	ND	ND		
% Recovery Surrogate	113	110		

Detection limit unless otherwise stated: water, ND < 0.5ug/L; soil, ND < 10ug/kg.
 * water samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L.
 (1) IUPAC allows "ylene" or "ene", ex ethylene or ethane; (2) tribromomethane; (3) tetrachloromethane; (4) (2-chloroethoxy) ethane; (5) trichloromethane; (6) dichloromethane; (7) perchlorethylene, PCE or perclor; (8) chloroethane; (9) unidentified peak(s) present.

DHS Certification No. 1644

Ed Edward Hamilton, Lab Director

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

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; Caltec, BEMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O.:	Date Extracted: 11/22/94
		Date Analyzed: 11/22/94

LUFT Metals*

EPA analytical methods				289.2,7420 ^b	213.1,7130	213.1,7190	249.1,7520	289.1,7950
Lab ID	Client ID	Matrix	Extraction ^c	Lead ^d	Cadmium ^d	Chromium ^d	Nickel ^d	Zinc ^d
10513	ME150	S	TTLIC	ND	ND	43	68	120
Detection Limit unless otherwise stated; ND means Not Detected		W	TTLIC	0.005mg/L	0.05	0.25	0.10	0.05
		S	TTLIC	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

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L
^b Lead is analysed using EPA method 7420 (AA Flame) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples
^c EPA extraction methods 1311(TCLP), 3010/3020(water, TTLIC), 3040(organic matrices, TTLIC), 3050(solids, TTLIC); STLC from CA Title 22

DHS Certification No. 1644

EH Edward Hamilton, Lab Director

11-22-1994 04:09PM

FROM McCampbell Analytical Inc TO

CALTEC P. 03

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

GEO Plexis, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/22/94
		Date Analyzed: 11/22/94

RCI (Reactivity, Corrosivity & Ignitability)

CA Title 22, Section 66261.21-66261.23

Lab ID	Client ID	Matrix	Reactivity ⁺	Corrosivity (pH)	Ignitability ^o
42542	MK120	S	negative	6.94	negative

+ negative means no obvious reaction with water, no evolution of gas upon contact with water, appears to contain no reactive cyanide or sulfide (< 5 mg/kg by EPA SW-846, chapter 7, modified), and shows no indication of explosivity.

o negative for a soil means the absence of spontaneous combustion and the absence of flammability upon exposure to a naked flame.

DHS Certification No. 1644

EH Edward Hamilton, Lab Director

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

GEO Plexis, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline^a, with BTEX^a
 EPA methods 8015, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID (3030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
42533	MK 111	S	24,b,d	0.30	0.028	0.15	0.50	113 [#]
42534	MK 112	S	13,b,d	0.028	0.015	0.019	0.033	109
42535	MK 113	S	22,b,d	0.29	0.025	0.73	1.0	---
42536	MK 114	S	6.1,a	1.5	0.14	0.17	0.86	115 [#]
42537	MK 115 A	W	6200,a,h	340	420	10	740	101
42539	MK 117	S	12,d,b	0.12	0.019	0.096	0.15	109
42542	MK 120	S	900,d	4.5	1.7	2.8	5.6	106
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	

6K bit

69.5
10
11.5
11.5
11.5
7
7

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L
[#] clustered 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 sheen is present.

11-22-1994 02:55PM FROM McCampbell Analytical Inc TO

CALTEC P.04

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

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec. BEMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *
EPA methods modified 8013, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) ⁺	% Recovery Surrogate
42533	MK 111	S	24,d	104
42534	MK 112	S	ND,d	95
42535	MK 113	S	13,d	98
42536	MK 114	S	ND	107
42538	MK 116	W	2400,d,h	106
42539	MK 117	S	ND,d	97
42542	MK 120	S	440,d,g	119 [#]
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 sheen is present.

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

GEO Flexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, EBMUD	Date Sampled: 11/21/94
	Client Contact: David Glisk	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

Petroleum Oil & Grease (with Silica Gel Clean-up) *
 EPA methods 413.1, 9070 or 9071; Standard Methods 5520 B&F or 503 D&E for solids and 5520 B&F or 503 A&R for liquids

Lab ID	Client ID	Matrix	Oil & Grease
42539	MK 117	S	ND
42542	MK 120	S	220
Detection Limit unless otherwise stated; ND means Not Detected	W	5 mg/L	
	S	50 mg/kg	

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

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
-----------------------------------	--

GEO Plexus, Inc. 1900 Wyatt Drive, # 1 Santa Clara, CA 95054	Client Project ID: # C94047; CalTec, BBMUD	Date Sampled: 11/21/94
	Client Contact: David Glick	Date Received: 11/21/94
	Client P.O:	Date Extracted: 11/21/94
		Date Analyzed: 11/21/94

copy
of p. 4

Volatile Halocarbons

EPA method 601 or 8010				
Lab ID	42539	42542		
Client ID	MK 117	MK 120		
Matrix	S	S		
Compound ⁽¹⁾	Concentration*	Concentration*	Concentration*	Concentration*
Bromodichloromethane	ND	ND		
Bromochloromethane	ND	ND		
Bromomethane	ND	ND		
Carbon Tetrachloride ⁽³⁾	ND	ND		
Chlorobenzene	ND	ND		
Chloroethane	ND	ND		
2-Chloroethyl Vinyl Ether ⁽⁴⁾	ND	ND		
Chloroform ⁽⁵⁾	ND	ND		
Chloromethane	ND	ND		
Dibromochloromethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
1,1-Dichloroethane	ND	ND		
1,2-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
cis 1,2-Dichloroethene	ND	ND		
trans 1,2-Dichloroethene	ND	ND		
1,2-Dichloropropane	ND	ND		
cis 1,3-Dichloropropene	ND	ND		
trans 1,3-Dichloropropene	ND	ND		
Methylene Chloride ⁽⁶⁾	ND	ND		
1,1,2-Tetrachloroethane	ND	ND		
Tetrachloroethene ⁽⁷⁾	ND	ND		
1,1,1-Trichloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
Trichloroethene	ND	ND		
Trichlorofluoromethane	ND	ND		
Vinyl Chloride ⁽⁸⁾	ND	ND		
% Recovery Surrogate	113	110		

Detection limit unless otherwise stated: water, ND < 0.5ug/L; soil, ND < 10ug/kg
 * water samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L
 (1) IUPAC allows "mono" or "di" ex. ethylene or ethene; (2) tribromomethane; (3) tetrachloromethane; (4) (2-chloroethoxy) ethene; (5) trichloromethane; (6) dichloromethane; (7) perchloroethylene, PCE or perchlor; (8) chloroethene; (9) unidentified peak(s) present.

DHS Certification No. 1644

Ed Edward Hamilton, Lab Director