McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1707b94

Report Created for: Geo-Logic

1140 5th Avenue
Crockett, CA 94525

Project Contact: Joel Gregor
Project P.O.:
Project Name: Chevron-Livermore

Project Received: 07/31/2017

Analytical Report reviewed & approved for release on 08/01/2017 by:

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033ORELAP

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Geo-Logic
Project: Chevron-Livermore
WorkOrder: 1707B94

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Glossary of Terms & Qualifier Definitions

Client: Geo-Logic
Project: Chevron-Livermore
WorkOrder: 1707B94

Analytical Qualifiers

e2	Diesel range compounds are significant; no recognizable pattern
e11/e4	Pattern resembles stoddard solvent/mineral spirit; and/or Gasoline range compounds are significant.

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Analytical Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Received:	7/31/17 14:43	**Extraction Method:**	SW5030B
Date Prepared:	7/31/17	**Analytical Method:**	SW8260B
Project:	Chevron-Livermore	**Unit:**	mg/kg

TPH(g)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P3d 10.5	1707B94-001A	Soil	07/31/2017 13:08	GC10	142868

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**0.32**	0.25	1	07/31/2017 22:07

Surrogates	REC (%)	Limits	
Dibromofluoromethane	116	70-130	07/31/2017 22:07
Benzene-D6	84	60-140	07/31/2017 22:07

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP S1 (N-S-E-W)	1707B94-002A	Soil	07/31/2017 13:27	GC10	142868

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**11**	2.5	10	07/31/2017 22:47

Surrogates	REC (%)	Limits	
Dibromofluoromethane	120	70-130	07/31/2017 22:47
Benzene-D6	74	60-140	07/31/2017 22:47

Analyst(s): KF

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Analytical Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Received:	7/31/17 14:43	**Extraction Method:**	SW5030B
Date Prepared:	7/31/17	**Analytical Method:**	SW8260B
Project:	Chevron-Livermore	**Unit:**	mg/Kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P3d 10.5	1707B94-001A	Soil	07/31/2017 13:08	GC10	142868

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	07/31/2017 22:07
t-Butyl alcohol (TBA)	ND	0.050	1	07/31/2017 22:07
1,2-Dibromoethane (EDB)	ND	0.0040	1	07/31/2017 22:07
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	07/31/2017 22:07
Ethanol	ND	0.50	1	07/31/2017 22:07
Ethylbenzene	ND	0.0050	1	07/31/2017 22:07
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/31/2017 22:07
Naphthalene	ND	0.0050	1	07/31/2017 22:07
Toluene	ND	0.0050	1	07/31/2017 22:07
Xylenes, Total	ND	0.0050	1	07/31/2017 22:07

Surrogates	REC (%)	Limits	
Dibromofluoromethane	101	70-130	07/31/2017 22:07
Toluene-d8	110	70-130	07/31/2017 22:07
4-BFB	108	70-130	07/31/2017 22:07
Benzene-d6	83	60-140	07/31/2017 22:07
Ethylbenzene-d10	102	60-140	07/31/2017 22:07
1,2-DCB-d4	81	60-140	07/31/2017 22:07

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Received:	7/31/17 14:43	**Extraction Method:**	SW5030B
Date Prepared:	7/31/17	**Analytical Method:**	SW8260B
Project:	Chevron-Livermore	**Unit:**	mg/Kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP S1 (N-S-E-W)	**1707B94-002A**	**Soil**	**07/31/2017 13:27**	**GC10**	**142868**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.050	10	07/31/2017 22:47
t-Butyl alcohol (TBA)	ND	0.50	10	07/31/2017 22:47
1,2-Dibromoethane (EDB)	ND	0.040	10	07/31/2017 22:47
1,2-Dichloroethane (1,2-DCA)	ND	0.040	10	07/31/2017 22:47
Ethanol	ND	5.0	10	07/31/2017 22:47
Ethylbenzene	ND	0.050	10	07/31/2017 22:47
Methyl-t-butyl ether (MTBE)	ND	0.050	10	07/31/2017 22:47
Naphthalene	**1.0**	0.050	10	07/31/2017 22:47
Toluene	ND	0.050	10	07/31/2017 22:47
Xylenes, Total	ND	0.050	10	07/31/2017 22:47

Surrogates	REC (%)	Limits	
Dibromofluoromethane	104	70-130	07/31/2017 22:47
Toluene-d8	101	70-130	07/31/2017 22:47
4-BFB	103	70-130	07/31/2017 22:47
Benzene-d6	82	60-140	07/31/2017 22:47
Ethylbenzene-d10	77	60-140	07/31/2017 22:47
1,2-DCB-d4	94	60-140	07/31/2017 22:47

Analyst(s): KF

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Analytical Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Received:	7/31/17 14:43	**Extraction Method:**	SW3050B
Date Prepared:	7/31/17	**Analytical Method:**	SW6020
Project:	Chevron-Livermore	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P3d 10.5	1707B94-001A	Soil	07/31/2017 13:08	ICP-MS3	142889

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.2**	0.50	1	08/01/2017 09:55

Surrogates	REC (%)	Limits	
Terbium	101	70-130	08/01/2017 09:55

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP S1 (N-S-E-W)	1707B94-002A	Soil	07/31/2017 13:27	ICP-MS3	142889

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.9**	0.50	1	08/01/2017 10:01

Surrogates	REC (%)	Limits	
Terbium	101	70-130	08/01/2017 10:01

Analyst(s): ND

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Analytical Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Received:	7/31/17 14:43	**Extraction Method:**	SW3550B/3630C
Date Prepared:	7/31/17	**Analytical Method:**	SW8015B
Project:	Chevron-Livermore	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
P3d 10.5	1707B94-001A	Soil	07/31/2017 13:08	GC39A	142900

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.1**	1.0	1	08/01/2017 15:28

Surrogates	REC (%)	Limits	
C26	101	70-130	08/01/2017 15:28

Analyst(s): TK Analytical Comments: e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
COMP S1 (N-S-E-W)	1707B94-002A	Soil	07/31/2017 13:27	GC39A	142900

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**25**	1.0	1	08/01/2017 01:28

Surrogates	REC (%)	Limits	
C26	102	70-130	08/01/2017 01:28

Analyst(s): TK Analytical Comments: e11/e4,e2

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Quality Control Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Prepared:	7/31/17	**BatchID:**	142868
Date Analyzed:	7/31/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS/LCSD-142868

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.25	-	-	-
Surrogate Recovery					
Dibromofluoromethane	0.1434		0.12	115	70-130
Benzene-D6	0.1027		0.10	103	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(g) (C6-C12)	0.875	0.838	1	88	84	67-117	4.39	20
Surrogate Recovery								
Dibromofluoromethane	0.144	0.146	0.12	115	116	70-130	0.875	20
Benzene-D6	0.0970	0.0917	0.10	97	92	60-140	5.66	20

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Quality Control Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Prepared:	7/31/17	**BatchID:**	142868
Date Analyzed:	7/31/17 - 8/1/17	**Extraction Method:**	SW5030B
Instrument:	GC10, GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS-142868

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.971	0.10	1	-	97	72-156
tert-Amyl methyl ether (TAME)	ND	0.0429	0.0050	0.050	-	86	53-116
Benzene	ND	0.0485	0.0050	0.050	-	97	63-137
Bromobenzene	ND	0.0494	0.0050	0.050	-	99	68-126
Bromochloromethane	ND	0.0491	0.0050	0.050	-	98	72-126
Bromodichloromethane	ND	0.0472	0.0050	0.050	-	94	61-127
Bromoform	ND	0.0358	0.0050	0.050	-	72	49-100
Bromomethane	ND	0.0408	0.0050	0.050	-	81	40-161
2-Butanone (MEK)	ND	0.158	0.020	0.20	-	79	43-157
t-Butyl alcohol (TBA)	ND	0.180	0.050	0.20	-	90	41-135
n-Butyl benzene	ND	0.0717	0.0050	0.050	-	143	102-160
sec-Butyl benzene	ND	0.0726	0.0050	0.050	-	145	74-168
tert-Butyl benzene	ND	0.0659	0.0050	0.050	-	132	88-157
Carbon Disulfide	ND	0.0506	0.0050	0.050	-	101	42-151
Carbon Tetrachloride	ND	0.0543	0.0050	0.050	-	109	49-149
Chlorobenzene	ND	0.0499	0.0050	0.050	-	100	77-121
Chloroethane	ND	0.0403	0.0050	0.050	-	81	41-134
Chloroform	ND	0.0471	0.0050	0.050	-	94	69-133
Chloromethane	ND	0.0460	0.0050	0.050	-	92	31-119
2-Chlorotoluene	ND	0.0611	0.0050	0.050	-	122	79-139
4-Chlorotoluene	ND	0.0582	0.0050	0.050	-	116	77-138
Dibromochloromethane	ND	0.0436	0.0050	0.050	-	87	58-121
1,2-Dibromo-3-chloropropane	ND	0.0126	0.0040	0.020	-	63	39-115
1,2-Dibromoethane (EDB)	ND	0.0478	0.0040	0.050	-	96	67-119
Dibromomethane	ND	0.0438	0.0050	0.050	-	88	66-117
1,2-Dichlorobenzene	ND	0.0467	0.0050	0.050	-	93	59-109
1,3-Dichlorobenzene	ND	0.0571	0.0050	0.050	-	114	75-130
1,4-Dichlorobenzene	ND	0.0544	0.0050	0.050	-	109	71-122
Dichlorodifluoromethane	ND	0.0313	0.0050	0.050	-	63	43-68
1,1-Dichloroethane	ND	0.0488	0.0050	0.050	-	98	62-139
1,2-Dichloroethane (1,2-DCA)	ND	0.0483	0.0040	0.050	-	97	58-135
1,1-Dichloroethene	ND	0.0513	0.0050	0.050	-	103	42-145
cis-1,2-Dichloroethene	ND	0.0455	0.0050	0.050	-	91	67-129
trans-1,2-Dichloroethene	ND	0.0602	0.0050	0.050	-	120	54-139
1,2-Dichloropropane	ND	0.0466	0.0050	0.050	-	93	68-125
1,3-Dichloropropane	ND	0.0471	0.0050	0.050	-	94	65-125
2,2-Dichloropropane	ND	0.0548	0.0050	0.050	-	110	45-151

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Quality Control Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Prepared:	7/31/17	**BatchID:**	142868
Date Analyzed:	7/31/17 - 8/1/17	**Extraction Method:**	SW5030B
Instrument:	GC10, GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS-142868

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0548	0.0050	0.050	-	110	64-138
cis-1,3-Dichloropropene	ND	0.0558	0.0050	0.050	-	112	62-134
trans-1,3-Dichloropropene	ND	0.0468	0.0050	0.050	-	94	59-128
Diisopropyl ether (DIPE)	ND	0.0466	0.0050	0.050	-	93	52-129
Ethanol	ND	2.02	0.50	2.5	-	81	40-113
Ethylbenzene	ND	0.0530	0.0050	0.050	-	106	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0454	0.0050	0.050	-	91	53-125
Freon 113	ND	0.0446	0.0050	0.050	-	89	51-126
Hexachlorobutadiene	ND	0.0728	0.0050	0.050	-	146	70-158
Hexachloroethane	ND	0.0624	0.0050	0.050	-	125	80-160
2-Hexanone	ND	0.0355	0.0050	0.050	-	71	41-116
Isopropylbenzene	ND	0.0555	0.0050	0.050	-	111	77-146
4-Isopropyl toluene	ND	0.0720	0.0050	0.050	-	144	96-159
Methyl-t-butyl ether (MTBE)	ND	0.0444	0.0050	0.050	-	89	58-122
Methylene chloride	ND	0.0488	0.0050	0.050	-	98	58-135
4-Methyl-2-pentanone (MIBK)	ND	0.0361	0.0050	0.050	-	72	40-112
Naphthalene	ND	0.0255	0.0050	0.050	-	51	23-73
n-Propyl benzene	ND	0.0697	0.0050	0.050	-	139	82-160
Styrene	ND	0.0516	0.0050	0.050	-	103	68-124
1,1,1,2-Tetrachloroethane	ND	0.0495	0.0050	0.050	-	99	70-128
1,1,2,2-Tetrachloroethane	ND	0.0372	0.0050	0.050	-	74	57-111
Tetrachloroethene	ND	0.0641	0.0050	0.050	-	128	73-145
Toluene	ND	0.0551	0.0050	0.050	-	110	76-130
1,2,3-Trichlorobenzene	ND	0.0336	0.0050	0.050	-	67	43-72
1,2,4-Trichlorobenzene	ND	0.0430	0.0050	0.050	-	86	47-95
1,1,1-Trichloroethane	ND	0.0528	0.0050	0.050	-	106	60-141
1,1,2-Trichloroethane	ND	0.0483	0.0050	0.050	-	97	62-118
Trichloroethene	ND	0.0592	0.0050	0.050	-	118	72-132
Trichlorofluoromethane	ND	0.0466	0.0050	0.050	-	93	43-135
1,2,3-Trichloropropane	ND	0.0434	0.0050	0.050	-	87	57-122
1,2,4-Trimethylbenzene	ND	0.0650	0.0050	0.050	-	130	81-152
1,3,5-Trimethylbenzene	ND	0.0657	0.0050	0.050	-	131	78-160
Vinyl Chloride	ND	0.0414	0.0050	0.050	-	83	42-131
Xylenes, Total	ND	0.161	0.0050	0.15	-	107	70-130

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Quality Control Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Prepared:	7/31/17	**BatchID:**	142868
Date Analyzed:	7/31/17 - 8/1/17	**Extraction Method:**	SW5030B
Instrument:	GC10, GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS-142868

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1187	0.130		0.12	95	104	70-130
Toluene-d8	0.1453	0.145		0.12	116	116	70-130
4-BFB	0.01277	0.0132		0.012	102	106	70-130
Benzene-d6	0.08543	0.0847		0.10	85	85	60-140
Ethylbenzene-d10	0.1114	0.0985		0.10	111	98	60-140
1,2-DCB-d4	0.08271	0.0910		0.10	83	91	60-140

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Date Prepared:	7/31/17	**BatchID:**	142889
Date Analyzed:	7/31/17 - 8/1/17	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1, ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS-142889 1707C12-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	51.3	0.50	50	-	103	75-125
Surrogate Recovery							
Terbium	515.6	525		500	103	105	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	50.8	53.1	50	2.413	97	101	75-125	4.33	20
Surrogate Recovery									
Terbium	505	518	500		101	104	70-130	2.60	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	ND<2.5	2.413	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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Quality Control Report

Client:	Geo-Logic	**WorkOrder:**	1707B94
Date Prepared:	7/31/17	**BatchID:**	142900
Date Analyzed:	7/31/17	**Extraction Method:**	SW3550B/3630C
Instrument:	GC39A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Chevron-Livermore	**Sample ID:**	MB/LCS-142900 1707B94-001AMS/MSD

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.3	1.0	40	-	108	79-133
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C26	24.96	24.8		25	100	99	81-103

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	41.4	41.7	40	1.098	101	102	59-150	0.719	30
Surrogate Recovery									
C26	25.2	25.2	25		101	101	70-130	0	30

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1707B94 **ClientCode: GLC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Joel Gregor
Geo-Logic
1140 5th Avenue
Crockett, CA 94525
(510) 787-6867 FAX: (510) 787-1457

Email: joelgreger2@gmail.com
cc/3rd Party: rick@armer-norman.com;
PO:
ProjectNo: Chevron-Livermore

Bill to:
Joel Greger
Geo-Logic
1140 5th Avenue
Crockett, CA 94525

Requested TAT: **1 day;**

Date Received: **07/31/2017**
Date Logged: **07/31/2017**

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
1707B94-001	P3d 10.5	Soil	7/31/2017 13:08	☐	A	A	A	A								
1707B94-002	COMP S1 (N-S-E-W)	Soil	7/31/2017 13:27	☐	A	A	A	A								

Test Legend:

1	8260GAS_S	2	8260VOC_S	3	PBMS_TTLC_S	4	TPH(D)WSG_S
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

The following SampIDs: 001A, 002A contain testgroup Gas8260VOC_S.

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.

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WORK ORDER SUMMARY

Client Name: GEO-LOGIC
Client Contact: Joel Gregor
Contact's Email: joelgreger2@gmail.com

Project: Chevron-Livermore
Comments:

Work Order: 1707B94
QC Level: LEVEL 2
Date Logged: 7/31/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1707B94-001A	P3d 10.5	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Stainless Steel tube 2"x6"	☐	7/31/2017 13:08	1 day		☐	
			SW6020 (Lead)			☐		1 day		☐	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS			☐		1 day		☐	
1707B94-002A	COMP S1 (N-S-E-W)	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	4 / (4:1)	Stainless Steel tube 2"x6"	☐	7/31/2017 13:27	1 day		☐	
			SW6020 (Lead)			☐		1 day		☐	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS			☐		1 day		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

RUSH

also send to rick@armer-norman.com

MAI Work Order # 1707B94

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush	X	2 Day Rush		3 Day Rush		STD		Quote #	7559
J-Flag / MDL		ESL		Cleanup Approved				Bottle Order #	
Delivery Format: PDF	X	GeoTracker EDF		EDD		Write On (DW)		EQuIS	

Report To: Joel Greger	Bill To: Armer-Norman (formerly Paradiso Mech.)
Company: Geo-Logic	
Email: joelgreger2@gmail.com	
Alt Email:	Tele: 510 5935382
Project Name: Chevron-Livermore	Project #:
Project Location: 4707 First St	PO #
Sampler Signature: Joel G	

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	# Containers	Matrix	Preservative	BTEX & TPH as Gas (8021 / 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + ~~Motor~~ Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (~~VOCs~~) TPH gas, BTEX, MTBE, TBA, naphthalene, EDB, EDC, ethanol	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	Total Lead			
B-3 d 10.5	7-31-17	1051PM	1	Soil	1			X						X							X			
Comp S1 (N-S-E-W)	↓	1217PM	4	↓	↓			X						X							X			

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
Joel G	7-31-17	243 Pm	[signature]	7/31/17	1443

Comments / Instructions

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp ____ °C Initials ____

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Sample Receipt Checklist

Client Name:	**Geo-Logic**	Date and Time Received	**7/31/2017 14:43**
Project Name:	**Chevron-Livermore**	Date Logged:	**7/31/2017**
		Received by:	Kena Ponce
WorkOrder №:	**1707B94** Matrix: Soil	Logged by:	Kena Ponce
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature		Temp:			NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☐	No	☑	

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments: