

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

RECEIVED

WorkOrder: 1610A33

By Alameda County Environmental Health 3:26 pm, Mar 24, 2017

Report Created for: Geosolve, Inc.

1807 Santa Rita Road, Suite D-165

Pleasanton, CA 94566

Project Contact: Rob Campbell

Project P.O.: 2016-04

Project Name: 2016-04; 19th & Harrison

Project Received: 10/21/2016

Analytical Report reviewed & approved for release on 10/26/2016 by:

Angela Rydelius,

Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



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

CA ELAP 1644 ♦ NELAP 4033ORELAP

"When Quality Counts"

Glossary of Terms & Qualifier Definitions

Client: Geosolve, Inc.

Project: 2016-04; 19th & Harrison

WorkOrder: 1610A33

Glossary Abbreviation

Serial Dilution Percent Difference %D

95% Confident Interval 95% Interval

DF **Dilution Factor**

(DISTLC) Waste Extraction Test using DI water DI WET

DISS Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)

Dilution Test (Serial Dilution) DLT

DUP **Duplicate**

Estimated Detection Limit EDL

ITEF International Toxicity Equivalence Factor

LCS Laboratory Control Sample

Method Blank MB

MB % Rec % Recovery of Surrogate in Method Blank, if applicable

Method Detection Limit MDL

Minimum Level of Quantitation ML

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.)

Relative Percent Deviation **RPD 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)

Analytical Qualifiers

Η samples were analyzed out of holding time



Analytical Report

Client: Geosolve, Inc. WorkOrder: 1610A33

 Date Received:
 10/21/16 19:15
 Extraction Method:
 ASTM D 1946-90

 Date Prepared:
 10/24/16
 Analytical Method:
 ASTM D 1946-90

Project: 2016-04; 19th & Harrison Unit: $\mu L/L$

Atmospheric gas Oxygen and Nitrogen											
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID						
OG-1	1610A33-001A	Air	10/21/2016	GC26	128694						
<u>Analytes</u>	Result	Qualifiers	<u>RL</u> <u>DF</u>		Date Analyzed						
Oxygen	130,000	Н	10,000 5		10/24/2016 12:41						

Analyst(s): AK

Client ID	Lab ID	Matrix	Batch ID		
OG-2	1610A33-002A	Air	10/21/2016	GC26	128694
<u>Analytes</u>	Result	Qualifiers	<u>RL</u> <u>DF</u>		Date Analyzed
Oxygen	140,000	Н	10,000 5		10/24/2016 13:02

Analyst(s): AK

Client ID	Lab ID	Lab ID Matrix Date Collected Instrument						
OG-3	1610A33-003A	Air	10/21/2016	GC26	128694			
Analytes	Result	<u>Qualifiers</u>	<u>RL</u> <u>DF</u>		Date Analyzed			
Oxygen	140,000	Н	10,000 5		10/24/2016 13:23			

Analyst(s): AK

Client ID	Lab ID	Matrix	Da	te Collecte	Batch ID	
OG-4	1610A33-004A	Air	10/	21/2016	GC26	128694
<u>Analytes</u>	Result	Qualifiers	<u>RL</u>	<u>DF</u>		Date Analyzed
Oxygen	140,000	Н	10,0	000 5		10/24/2016 13:44

Analyst(s): AK

Angela Rydelius, Lab Manager

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

Analytical Report

Client: Geosolve, Inc. WorkOrder: 1610A33

Date Received:10/21/16 19:15Extraction Method:ASTM D 1946-90Date Prepared:10/24/16Analytical Method:ASTM D 1946-90

Project: 2016-04; 19th & Harrison Unit: $\mu L/L$

Atmospheric gas Oxygen and Nitrogen

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OG-5	1610A33-005 <i>A</i>	A Air	10/21/2016	GC26	128694
Analytes	Result	<u>Qualifiers</u>	<u>RL</u> <u>DF</u>		Date Analyzed
Oxygen	140,000	Н	10,000 5		10/24/2016 14:05

Analyst(s): AK

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Quality Control Report

 Client:
 Geosolve, Inc.
 WorkOrder:
 1610A33

 Date Prepared:
 10/24/16
 BatchID:
 128694

Date Analyzed:10/24/16Extraction Method:ASTM D 1946-90Instrument:GC26Analytical Method:ASTM D 1946-90

Matrix: Air Unit: $\mu L/L$

Project: 2016-04; 19th & Harrison **Sample ID:** MB/LCS-128694

QC Summary Report for ASTM D1946-90 MB LCS RL **SPK** LCS Analyte MB SS **LCS** Result %REC %REC Result Val Limits Oxygen ND 6770 2000 7000 70-130

McCampbell Analytical, Inc.

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

☐ J-flag

☐ ThirdParty

WorkOrder: 1610A33 ClientCode: GSP

□ WaterTrax □ WriteOn □ EDF □ Excel □ EQuIS □ Email □ HardCopy

Report to: Bill to: Requested TAT: 3 days;

Rob Campbell Email: rcampbell@geosolve-inc.com Lisa Campbell Geosolve, Inc. cc/3rd Party: Geosolve, Inc.

 1807 Santa Rita Road, Suite D-165
 PO: 2016-04
 1807 Santa Rita Road, Suite D-165
 Date Received: 10/21/2016

 Pleasanton, CA 94566
 ProjectNo: 2016-04; 19th & Harrison
 Pleasanton, CA 94566
 Date Logged: 10/21/2016

(925) 963-1198 FAX: lcampbell@geosolve-inc.com

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1610A33-001	OG-1	Air	10/21/2016 00:00		Α											
1610A33-002	OG-2	Air	10/21/2016 00:00		Α											
1610A33-003	OG-3	Air	10/21/2016 00:00		Α											
1610A33-004	OG-4	Air	10/21/2016 00:00		Α											
1610A33-005	OG-5	Air	10/21/2016 00:00		Α				İ							

Test Legend:

1 ATMOSPHERICGAS_AIR	2	3	4
5	6	7	8
9	10	11	12

Prepared by: Jena Alfaro

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:	GEOSOLVE, INC.	Project:	2016-04; 19th & Harrison	Work Order: 1610A33
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Client Contact: Rob Campbell QC Level: LEVEL 2

Contact's Email: rcampbell@geosolve-inc.com

Comments:

Date Logged: 10/21/2016

		☐ WaterTrax	☐WriteOn ☐EDF	Excel	Fax Fmail	HardC	opyThirdPar	ty 🔲 J	I-flag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1610A33-001A	OG-1	Air	ASTM D1946-90 (Light Gases, Atmospheric) <oxygen></oxygen>	1	Tedlar		10/21/2016	3 days	
1610A33-002A	OG-2	Air	ASTM D1946-90 (Light Gases, Atmospheric) <oxygen></oxygen>	1	Tedlar		10/21/2016	3 days	
1610A33-003A	OG-3	Air	ASTM D1946-90 (Light Gases, Atmospheric) <oxygen></oxygen>	1	Tedlar		10/21/2016	3 days	
1610A33-004A	OG-4	Air	ASTM D1946-90 (Light Gases, Atmospheric) <oxygen></oxygen>	1	Tedlar		10/21/2016	3 days	
1610A33-005A	OG-5	Air	ASTM D1946-90 (Light Gases, Atmospheric) <oxygen></oxygen>	1	Tedlar		10/21/2016	3 days	

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.

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Report To: 165 Can see Bill To: Ceo50 1, M										44	•	6	Analysis Request						_	_	_													
Company: Ger		10/2	26:	HD.	165	-	ola	24	Sa	+	^	~	1																					
Tele: (975) 96		98	y Ca	-						. 0	Pe	3	20	50/	ve	'BE	no	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	10 pc											als				
Project #: Zo	16-0	7,	-/-	11	Pr	oject	Nar	ne:	0 10	7≝	,7	H	ar	ris	0	8015)MTBE		64/	Total Petroleum Hydrocarbons (418.1)	(S)	only		515/8151 (Acidic Cl Herbicides)			(AAS)			-	Lab to Filter sample for Dissolved metals analysis		1		1
Project Location:		Me!	2545	7	' Fy	rcha	se O	rde	·# ~	20	16.	- 6	27	-		8015		se (16) suc	icide	clors	es)	lerbi	(s;	Cs)	s / Pr)***	***		olve		0		
Sampler Signatur	e: 7/	9/1/	·	1				IAT	RIX			পা	MI	ЕТНО	OD	021/		Grea	carbo	Pest	Aro	sticid	СІВ	VOC	SVO	PAH	9050	6020		Diss		Ĭ	\vdash	_
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SAMPLE ID	Location/			ers	5		ıter					7-1		1		TPH as Gas (8021/	1 (80	лш О	ım H	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors only	EPA 507 / 8141 (NP Pesticides)	51 (A	524.2 / 624 / 8260 (VOCs)	525.2 / 625 / 8270 (SVOCs)	8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)**	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	samp		7		
SAMPLEID	Field Point Name	Date	Time	Containers	Ground Water	Waste Water	Drinking Water	re.				0	-				Diese	trole	trole	/ 608	808/	/ 81	18 /	2/6	2/6	70 SI	Met	Meta	8.002	ilter		10		
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**MAI clients MUST disck	se any dana	erous che	micals kno	wn to	be pr	esent	in the	r subr	nitted	samn	les in	conc	centro	ations	that	may c	ause	imme	diate	harm	or seri	ous fi	iture I	ealth	enda	ngern	nent c	as a re	sult o	f brief	glov	ed, on	en air	sample
handling by MAI staff. No	on-disclosure	incurs an	Immediate	\$250	surch	arge o	and th	e clie	nt is su	bject	to full	lega	al liab	ility fo	or har	m suff	ered.	Thank	k you	for yo	ur und	ersta	nding	and f	or allo	wing	us to	work s	afely				3.5	
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Sample Receipt Checklist

Client Name:	Geosolve, Inc.				Date and Time Received	10/21/2016 19:15
Project Name:	2016-04; 19th & Ha	rrison			Date Logged:	10/21/2016
Mark Order No.	4640422	Motrice Air			Received by:	Jena Alfaro
WorkOrder №: Carrier:	1610A33 Benjamin Yslas (MA	Matrix: <u>Air</u> J. Courier)			Logged by:	Jena Alfaro
Came	<u> </u>	<u>- </u>				
		Chain of C	ustody	(COC) Info	rmation	
Chain of custody	present?		Yes	✓	No 🗆	
Chain of custody	signed when relinqui	shed and received?	Yes	✓	No 🗆	
Chain of custody	agrees with sample I	abels?	Yes	✓	No 🗆	
Sample IDs noted	d by Client on COC?		Yes	✓	No 🗆	
Date and Time of	f collection noted by 0	Client on COC?	Yes	✓	No 🗆	
Sampler's name	noted on COC?		Yes	✓	No 🗆	
		Sample	e Rece	ipt Informat	<u>ion</u>	
Custody seals int	tact on shipping conta	ainer/cooler?	Yes		No 🗌	NA 🗸
Shipping containe	er/cooler in good con	dition?	Yes	•	No 🗆	
Samples in prope	er containers/bottles?		Yes	•	No 🗆	
Sample containe	rs intact?		Yes	✓	No 🗆	
Sufficient sample	volume for indicated	test?	Yes	✓	No 🗆	
		Sample Preservation	n and	Hold Time (HT) Information	
All samples recei	ived within holding tim	ne?	Yes		No 🗸	
Sample/Temp Bla	ank temperature			Temp:		NA 🗹
Water - VOA vial	s have zero headspa	ce / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	ecked for correct pre	servation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2	; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?		Yes		No 🗸	
UCMR3 Samples	<u>s:</u>					
Total Chlorine t	tested and acceptable	e upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine to 300.1, 537, 539		upon receipt for EPA 218.7,	Yes		No 🗆	NA 🗹

Comments: Method ASTM D1946-90 (Light Gases, Atmospheric) was received passed its 0.025-day holding time.