Summary Report: Non-destructive Hazardous Materials Survey SHRA, Twin Rivers (59 Buildings), Sacramento, CA 95811 SCA Project No.: F12279

#### **Attachment 4**

### **Lead and PCB Laboratory Reports**



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701A79 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1205-1207 Isabel St; MBS Twin Rivers Svy

**Project Received:** 01/25/2017

Analytical Report reviewed & approved for release on 01/31/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1205-1207 Isabel St; MBS Twin Rivers Svy

WorkOrder: 1701A79

#### **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

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)

### **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/25/17 10:58

**Date Prepared:** 1/25/17

**Project:** F-12279; 1205-1207 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A79
Extraction Method: SW3050B

Analytical Method: SW6020

**Unit:** mg/Kg

		Lead			
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
12FLVCT/M-1	1701A79-001A	Solid	01/24/2017	ICP-MS2	133119
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	3.4		0.62 1		01/26/2017 14:19
Surrogates	REC (%)		<u>Limits</u>		
Terbium	107		70-130		01/26/2017 14:19
Analyst(s): DVH					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FLVCS-3	1701A79-002A	Solid	01/24/2017	ICP-MS2	133119
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	5.5		0.50 1		01/26/2017 14:25
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Terbium	104		70-130		01/26/2017 14:25
Analyst(s): DVH					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW-1	1701A79-003A	Solid	01/24/2017	ICP-MS2	133119
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	38		0.50 1		01/26/2017 14:31
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
Terbium	105		70-130		01/26/2017 14:31
Analyst(s): DVH					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BE-2	1701A79-004A	Solid	01/24/2017	ICP-MS2	133119
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	3.9		0.50 1		01/26/2017 14:37
Surrogates	REC (%)		<u>Limits</u>		
Terbium	106		70-130		01/26/2017 14:37
Analyst(s): DVH					

### **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/25/17

**Date Analyzed:** 1/25/17 - 1/26/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 1205-1207 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A79

**BatchID:** 133119

**Extraction Method:** SW3050B **Analytical Method:** SW6020

**Unit:** mg/Kg

Sample ID: MB/LCS-133119

1701A98-003AMS/MSD

QC Summary Report for Metals													
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits				
Lead	ND	52.2		0.50	50	-		104	75-125				
Surrogate Recovery													
Terbium	500.7	540			500	10	00	108	70-130				
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/M:	_	RPD Limit				
Lead	55.9	57.4	50	6.816	98	101	75-12	5 2.68	20				
Surrogate Recovery													
Terbium	528	525	500		106	105	70-130	0.5	51 20				
Analyte	DLT Result			DLTRef Val				%D	%D Limit				
Lead	6.94			6.816				1.82	-				

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

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1701A79 ClientCode: SCAO

	WaterTrax	WriteOn	□EDF	Excel	EQuIS	<b></b> Email	HardCopy	ThirdParty	J-flag
Report to:				E	Bill to:		Re	quested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:	dleung@sca-env	iro.com; pgerv	asio@scae	Accounts Payal SCA Environme 1 Lakeside Driv	ental, Inc.	Da	te Received:	01/25/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; 1205-1 Rivers Svy	207 Isabel St;	MBS Twin	Oakland, CA 94 emuise@sca-io			te Logged:	01/25/2017

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
							T		1	1				T		
1701A79-001	12FLVCT/M-1	Solid	1/24/2017 00:00		Α											
1701A79-002	FLVCS-3	Solid	1/24/2017 00:00		Α											
1701A79-003	OW-1	Solid	1/24/2017 00:00		Α											
1701A79-004	BE-2	Solid	1/24/2017 00:00		Α											

#### Test Legend:

1 PBMS_TTLC_S	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.



**Client Name:** 

1701A79-002A FLVCS-3

1701A79-003A OW-1

1701A79-004A BE-2

### McCampbell Analytical, Inc.

"When Quality Counts"

Solid

Solid

Solid

SW6020 (Lead)

SW6020 (Lead)

SW6020 (Lead)

SCA ENVIRONMENTAL, INC.

in 3 days from sample submission).

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1/24/2017

1/24/2017

1/24/2017

5 days

5 days

5 days

F-12279: 1205-1207 Isabel St: MBS Twin Rivers Svv

Plastic Baggie, Small

Small Clear Plastic

Container

Small Clear Plastic

Container

#### **WORK ORDER SUMMARY**

Project:

		,			J/	,,,, -					- , , ,
Client Conta	act: Dan Leung	5							Q	C Level:	LEVEL 2
Contact's Email: dleung@sca-enviro.com; pgervasio@scaehs.com					<b>Comments:</b>				Date	Logged:	1/25/2017
		☐ WaterTrax	WriteOn	EDF	Excel	Fax <b>√</b> Email	HardCo	opyThirdParty		I-flag	
Lab ID	Client ID	Matrix	Test Name		Containers /Composites		De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1701A79-001A	12FLVCT/M-1	Solid	SW6020 (Lead)		1	Plastic Baggie, Small		1/24/2017	5 days		

1

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

- 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.

Work Order: 1701A79



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					85,						1	1,	,			Eff	luent	Sam	ple l	Requ	iring	"J"	flag	]	UST	Clea	n Up	Fun	d Pr	oject	□;	Clair	n #	
Report To: Dan I	Leung				Bil	To:	SC	A Er	viro	nme	ental	, In	c.											Ana	lysis	Req	uest			_				
Company: SCA I	Environme	ntal, In	c.																														T	
1 Lak	eside Dr.,	#215	Oakl	land.	CA	946	12	p	gerv	asio	@sc	aeh	s.co	m a	nd	1.1					ers													
Tele: (415) 867-	9544				E-I	/Iail:	dle	ung(	a)sca	-env	iro.	com	1			8015 ) MTBE		552(	_		Congeners		_							als				
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Sampler Signatur	re: Dan Le	ung														21/8		ease.	rboi	estic	roc	cide	HE	OCs	707	\Hs	020	(07)		isso				
SAMPLING MATRIX METHOD PRESERVEI			100000000000000000000000000000000000000	Gas (8021/	(5	l & Gr	ydroca	I (CI P	B's; A	P Pesti	cidic C	V) 092	S) 0.2	310 (P	9/8.00	0.8 / 60	***((	e for D	(3															
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO,	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's; Aroclors /	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)****	LUFF 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	(44	Pc8		
12FWC1/M-1		1/24		1								X		1																	*			
FLVCG - 3		1		1								X																			X			
1-110				1								×		1																	×			
88-5		1		1								X	$\neg$												-	-					×		+	-
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***MAI clients MUST disc handling by MAI staff. It *** If metals are reques Relinquished By:	lon-disclosure	amples ar	immediate	s \$250 er type	surch ls no	arge o	ind the	e clle	nt Is st	bject	to full	lego	al liab	will d	efaul	t to m	etals	Thank by E20	k yau 10.8.				nding	and f	or allo	ewing (PM d	OM!	MEN on lin	rs:	quire	d. Au	thoriz	ed to	ample
Dan Leung Palinguished By:		-	_	-	Rans	ived 1	Ru	_	_	_				_				ABSE!	_	B	-			perfo	rm F	orisi	clear	up to	mee	t the	detect	non li	nit.	
isomidusuca bj.			PPR	OPR	LATE	CON	TAI		<u></u>	_	1)	8	R	12	91	23	П	12	5															
Relinquished By:		Date:	Time		Rece	ived 1	By:							P	RES	ERV.	ATIC		AS	0&0		META H<2_	ALS				IAZA							

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; 1205-1207 Isabel St; MBS Twin River	rs Svy		Date and Time Received Date Logged: Received by:	1/25/2017 10:58 1/25/2017 Jena Alfaro
WorkOrder №: Carrier:	<b>1701A79</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Jena Alfaro
	Chain of C	Custod	y (COC) Infor	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	<b>✓</b>	No 🗌	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	✓	No 🗌	
	<u>Samp</u>	le Rec	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗸
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prop	er containers/bottles?	Yes	<b>✓</b>	No 🗆	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservati	ion and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp Bl	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples Total Chlorine	s: tested and acceptable upon receipt for EPA 522?	Yes		No 🗌	na 🗹
Free Chlorine 1 300.1, 537, 53	tested and acceptable upon receipt for EPA 218.7, 9?	, Yes		No 🗆	na 🗹
Comments:		==	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1702353

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** 

Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin Rivers Svy - 1205-1207 Isabel St.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/10/2017 by:

Angela Rydelius,

Laboratory Manager

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### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin Rivers Svy - 1205-1207 Isabel St.

**WorkOrder:** 1702353

#### **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

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)

mg/Kg

### **Analytical Report**

Unit:

Client:SCA Environmental, Inc.WorkOrder:1702353Date Received:2/6/17 9:07Extraction Method:SW3050B

**Date Prepared:** 2/6/17 **Analytical Method:** SW6020

F-12279; MBS Twin Rivers Svy - 1205-1207 Isabel

St.

**Project:** 

Lead													
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID							
WLPL-4	1702353-001A	Solid	02/02/20	)17	ICP-MS1	133762							
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed							
Lead	170		0.50	1		02/08/2017 03:03							
Surrogates	<u>REC (%)</u>		<u>Limits</u>										
Terbium	95		70-130			02/08/2017 03:03							
Analyst(s): DVH													

### **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702353Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

Matrix: Soil Unit: mg/Kg

**Project:** F-12279; MBS Twin Rivers Svy - 1205-1207 Isabel **Sample ID:** MB/LCS-133762

1702364-001AMS/MSD

	QC Sur	mmary R	eport f	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits
Lead	ND	50.9		0.50	50	-		102	75-125
Surrogate Recovery									
Terbium	510.6	526			500	10	)2	105	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit	-	D RPD Limit
Lead	53.9	57.6	50	7.809	92	100	75-12	25 6.7	6 20
Surrogate Recovery									
Terbium	522	530	500		104	106	70-13	30 1.	54 20
Analyte	DLT Result			DLTRef Val				%E	) %D Limit
Lead	7.74			7.809				8.0	84 -

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

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## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1702353 ClientCode: SCAO

(925) 252-9	9262				******	Coruc	1. 1/0	2333	Chent	Couc. St	JAU				
	1	WaterTrax	WriteOn	EDF		xcel		EQuIS	<b>✓</b> Email	ПН	lardCopy	ThirdPa	arty	☐J-fla	ig
Report to:						Е	Bill to:				Rec	uested TAT:	!	5 days;	
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215 Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 620		cc/3rd Party: PO: ProjectNo: F		oviro.com; pgervas			SCA E 1 Lake Oaklar	eside Dri nd, CA 9	iental, Inc. ve, Suite 215		Dat	te Received: te Logged:		02/06/2 02/06/2	
									Requested	d Tests (Se	e legend	below)			
ab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4 5	6	7 8	3 9	10	11	12
702353-001	WLPL-4		Solid	2/2/2017 00:00		Α									

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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.



"When Quality Counts"

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#### **WORK ORDER SUMMARY**

Client Name	: SCA ENV	TRONMENTAL, INC	·•		Project:	F-122/9	1205-1207 Isabel St.;	MBS TWIN KI	vers Svy	wor	k Oraer:	1/02353	
<b>Client Conta</b>	act: Dan Leun	g								Q	C Level:	LEVEL 2	
Contact's En	nail: dleung@s	sca-enviro.com; pgerva	sio@scaehs.com	n	<b>Comments:</b>	•				Date	Logged:	2/6/2017	
		☐WaterTrax	WriteOn	EDF	Exce	ıl	Fax <b>✓</b> Email	HardCo	ppyThirdParty		J-flag		
Lab ID	Client ID	Matrix	Test Name			ontainers omposites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold Sub	Out
1702353-001A	WLPL-4	Solid	SW6020 (Lead)	)		1	White Plastic		2/2/2017	5 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.



CHAIN	OF	CUSTOD	YE	RECC	PL
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	1534 Willow Pass Rd. / Pittsburg, CA 94565-1701 www.mccampbell.com / main@mccampbell.com Telephone: (877) 252-9262 / Fax: (925) 252-9269  Report To: Dan Leung Bill To: SCA Environmental, Inc. Company: SCA Environmental, Inc. 1 Lakeside Dr., #215 Oakland, CA 94612 pgervasio@scaehs.ce													Geo	Traci	ker E	DF [	ו כ	PDF	X	EDD		Write	e On	(DW		EQ	uIS [	AY [		10 DA	Y Q		
Report To: Dan	Leung				Bil	l To:	SC	A Er	viro	nme	ental	, In	c.								_	_		Ana	lysis	Reg	uest				_	_		
Company: SCA	Environme	ntal, In	nc.											1																				T
1 Lal	eside Dr.,	#215	Oak	land	, CA	9461	12	p	gerv	asio	@sc	aeh	s.co	m a	nd						ers													
Tele: (415) 867-	9544				E-N	Mail:	dle	ung(	a)sca	-env	iro.	com		Y	- 1	LBE		5520			lgen									als			- 1	
Project #: F-12					Pro	oject	Nan	ne:	MB	S .	MI	N	81	VET	26	) M		149	18.1		Cor		ides)			As)				met	1 1	- 1		- 1
Project Location	: 1206 - 1	707	ISABEL	SI.	Pu	rcha	se O	rder	#		C	(Vé				015		(16	s (4	ides	sus/		rbic		s)	PN	*	*		ved		- 1		
Sampler Signatu					T											1/8		ease	noq.	stic	rock	ides	He	)Cs)	00	Hs/	20)	*(02		issol	1 1			
		_	PLING				M	AT	RIX			1		THO		Gas (8021/ 8015) MTBE		& Gr	drocar	(Cl Pe	8's; A	Pestic	idie Cl	O (VC	70 (SV	10 (PA	09/87	.8 / 60	***	for D	3			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge		HCL	HNO <sub>3</sub>	Other	BTEX & TPH as Ga	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
HILPL-4		2/2		1								X																			Х			$\top$
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** If metals are reques Relinquished By:	ica ioi waiel s	Date;	Time			ived I	èu.			51 60	Jouy,	men	MIMI	_	CE/to		CIUIS	J EZU	0.0.			-		7	_	(	OMI	MENT	rs:	_			_	
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Dan Leung		-	Time		D./	ived I	1	-		_			_					BSE!		B				perfo	rm F	lorisil	clear	up to	mee	t the	detect	ion li	mit.	
Relinquished By:		Date: 2 6 1	7090	- 1	Roce	l ed		el	u	1	2.		8	TA	PPR	OPR	IATE	CON	TAI			_												
Relinquished By:		Date:	Time	:	Rece	ived I	By:							P	RES	ERV	ATIO		AS	0&0		META H<2_	LS	OTI	HER	I	IAZA	RDO	US:					

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279 1205-1207 Isabel St.; MBS Twin River	rs Svy		Date and Time Received Date Logged: Received by:	2/6/2017 09:07 2/6/2017 Maria Venegas
WorkOrder №: Carrier:	<b>1702353</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Maria Venegas
	Chain of C	ustody	(COC) Infor	<u>rmation</u>	
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	d by Client on COC?	Yes	•	No 🗌	
Date and Time of	f collection noted by Client on COC?	Yes	•	No 🗆	
Sampler's name	noted on COC?	Yes	✓	No 🗆	
	Sampl	le Rece	eipt Informati	<u>ion</u>	
Custody seals int	act on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good condition?	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	on and	Hold Time (	HT) Information	
All samples recei	ved within holding time?	Yes	✓	No 🗌	NA 🗆
Sample/Temp Bla	ank temperature		Temp:		NA 🗹
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	ecked for correct preservation?	Yes	<b>✓</b>	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 Total Chlorine t	s: tested and acceptable upon receipt for EPA 522?	Yes			NA <b>✓</b>
Free Chlorine to 300.1, 537, 539	ested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗌	NA 🗸
Commente	==========	==:	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1702355

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** 

Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin Rivers Svy - 1215-1217 Delta St.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/10/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin Rivers Svy - 1215-1217 Delta St.

WorkOrder: 1702355

#### **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

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)

### **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 2/6/17 9:07

**Date Prepared: 2/6/17** 

**Project:** F-12279; MBS Twin Rivers Svy - 1215-1217 Delta

St

WorkOrder: 1702355

**Extraction Method:** SW3050B **Analytical Method:** SW6020

**Unit:** mg/Kg

		Lead			
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
12FLVCT/M-1	1702355-001A	Solid	02/02/2017	ICP-MS1	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	1.8		0.50 1		02/08/2017 21:26
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	98		70-130		02/08/2017 21:26
Analyst(s): DVH					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FLVCS-2	1702355-002A	Solid	02/02/2017	ICP-MS1	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	5.8		0.50 1		02/08/2017 03:46
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Terbium	95		70-130		02/08/2017 03:46
Analyst(s): DVH					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
WLPL-3	1702355-003A	Solid	02/02/2017	ICP-MS1	133762
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	140		0.50 1		02/08/2017 03:52
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Terbium	102		70-130		02/08/2017 03:52
Analyst(s): DVH					

### **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702355Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

Instrument:ICP-MS3Analytical Method:SW602Matrix:SoilUnit:mg/Kg

Project: F-12279; MBS Twin Rivers Svy - 1215-1217 Delta Sample ID: MB/LCS-133762

1702364-001AMS/MSD

	QC Sur	nmary R	eport f	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits
Lead	ND	50.9		0.50	50	-		102	75-125
Surrogate Recovery									
Terbium	510.6	526			500	10	)2	105	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/M Limits	-	RPD Limit
Lead	53.9	57.6	50	7.809	92	100	75-12	5 6.76	20
Surrogate Recovery									
Terbium	522	530	500		104	106	70-13	0 1.54	20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	7.74			7.809				0.88	4 -

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

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1702355 ClientCode: SCAO

,	WaterTrax	x WriteOn	EDF	Excel	EQuIS	<b></b> Email	HardCo	opyThirdParty	J-flag
Report to:					Bill to:			Requested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:	dleung@sca-env	iro.com; pgerva	asio@scae	Accounts Paya SCA Environme 1 Lakeside Driv	ental, Inc.		Date Received:	02/06/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; MBS Tv 1217 Delta St.	win Rivers Svy	- 1215-	Oakland, CA 94 emuise@sca-io			Date Logged:	02/06/2017
						Paguastad '	Tasts (Saa lan	and halow)	

								Re	queste	d Tests (	See leg	end belo	ow)			
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1702355-001	12FLVCT/M-1	Solid	2/2/2017 00:00		Α											
1702355-002	FLVCS-2	Solid	2/2/2017 00:00		Α											
1702355-003	WLPL-3	Solid	2/2/2017 00:00		A											
						•	1	1			1					

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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.



**Client Name:** 

### McCampbell Analytical, Inc.

"When Quality Counts"

SCA ENVIRONMENTAL, INC.

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

F-12279; MBS Twin Rivers Svy - 1215-1217 Delta St.

#### **WORK ORDER SUMMARY**

**Project:** 

Client Contact: Dan Leung
Contact's Email: dleung@sca-enviro.com; pgervasio@scaehs.com
Comments:

Date Logged: 2/6/2017

WaterTrax | WriteOn | EDF | Excel | Fax | Email | HardCopy | ThirdParty | J-flag

		Waterriax	Willeon	DI LXCEI	I ax	Піаіцо	opy Initial at	ıy 🗀 s	,-nag
Lab ID	Client ID	Matrix	Test Name	Containers /Composite		De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1702355-001A	12FLVCT/M-1	Solid	SW6020 (Lead)	1	White Plastic		2/2/2017	5 days	
1702355-002A	FLVCS-2	Solid	SW6020 (Lead)	1	Yellow Plastic		2/2/2017	5 days	
1702355-003A	WLPL-3	Solid	SW6020 (Lead)	1	White Plastic		2/2/2017	5 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.

**Work Order: 1702355** 



## CHAIN OF CUSTODY RECORD

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Report To: Dan l	Leung				Bil	l To:	SC	A E	viro	nme	ental	, Inc	c.											Ana	lysis	Reg	uest							
Company: SCA I	Environme	ntal, In	c.																															T
	eside Dr.,		Oakl	and	, CA	946	12	p	gerv	asio	@sc	aehs	.co	m ar	nd						ers												- 1	
Tele: (415) 867-	9544				E-I	Mail:	dle	ung(	asca	-env	iro.	com				LBE		5520	_		ıgen		_							als			- 1	
Project #: F - 12!	279		11.00			oject				S .			81.	1 EUS	5	M (		149	18.1	_	CO		ides			As)				met	1		- 1	
Project Location:	1215 - 1	217	DELTA	8	1. Pu	rcha	se O	rder	#		Q.	YVE				8015 ) MTBE		(19	18 (4	ides	ors/	(S	rbic	_	(8)	/ PN	* * *	*		lved				- 1
Sampler Signatu	re: Dan Le	ung														21/8		ease	rboi	estic	rocl	cide	1 He	0Cs	VOC	\Hs	020)	120)		isso				
		SAMI	PLING				M	ATI	RIX					THO		s (8021/		& Gr	Iroca	(CLP	's ; A	Pesti	die C	V) 00	10 (S)	0 (P.	9/8	9/8	*	for D				
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge				Other	BTEX & TPH as Gas	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Aci	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
12FLVC1/M-1		2/2		1								X	1											_							×		1	+
FLVCG - 2				1								X	1																		×			1
WIPI.3		,		1								X	7																		×		1	$\top$
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**MAI clients MUST disc handling by MAI staff. N	lon-disclosure	Incurs an	immediate	\$250	surch	arge o	ind the	cllei	nt Is su	bject	to full	legal	liabi	ility fo	r har	m suff	ered.	Than	k you												glove	d, ope	en air, :	ample
*** If metals are reques Relinquished By:  Dan Leung	ted for water s	Date;	Time:			ived I			enain	OT CU	stody,	men	MAI	IC G	CE/t°	CO	NDIT	ION_ BSE								PM d	etecti		nit re			thoriz		
Relinquished By:		Date: 2/6/17	Time:	7-		TVed	24-7	li .	u	u.	7	_	6	Di	ECH PPR	LOR	INA	CON LAE	N LA		8	_										Vest		
Relinquished By:		Date:	Time:		Rece	ived l	Ву:							PI	RESI	ERV.	ATIO		AS	0&0	G M	IETA H<2_		OTI	IER	- F	IAZA	RDC	OUS:					

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; MBS Twin Rivers Svy - 1215-1217 De	lta St.		Date and Time Received Date Logged: Received by:	2/6/2017 09:07 2/6/2017 Maria Venegas
WorkOrder №: Carrier:	<b>1702355</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Maria Venegas
	Chain of C	ustody	/ (COC) Infor	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗌	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	<b>✓</b>	No 🗌	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗆	
Sampler's name	noted on COC?	Yes	✓	No 🗆	
	Sampl	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗸
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prope	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗌	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservation	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗆	NA 🗌
Sample/Temp Bl	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable up	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples Total Chlorine	s: tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA <b>✓</b>
Free Chlorine t 300.1, 537, 539	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
Comments	=========	==:		======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1702352

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** 

Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin Rivers Svy - 1216-1218 Delta St.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/10/2017 by:

Angela Rydelius,

Laboratory Manager

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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin Rivers Svy - 1216-1218 Delta St.

WorkOrder: 1702352

#### **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

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)

1702352

### **Analytical Report**

Client: SCA Environmental, Inc. WorkOrder:

Date Received:2/6/17 9:07Extraction Method:SW3050BDate Prepared:2/6/17Analytical Method:SW6020

**Project:** F-12279; MBS Twin Rivers Svy - 1216-1218 Delta **Unit:** mg/Kg

St.

		Lead				
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
WLPL-4	1702352-001A	Solid	02/02/20	017	ICP-MS1	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	130		0.50	1		02/08/2017 02:57
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	104		70-130			02/08/2017 02:57
Analyst(s): DVH						

### **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702352Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

Matrix:SoilUnit:mg/KgProject:F-12279; MBS Twin Rivers Svy - 1216-1218 DeltaSample ID:MB/LCS-133762

1702364-001AMS/MSD

	QC Sur	nmary R	eport fo	or Metals						
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC		LCS Limits
Lead	ND	50.9		0.50	50	-		102		75-125
Surrogate Recovery										
Terbium	510.6	526			500	10	)2	105		70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit		PD	RPD Limit
Lead	53.9	57.6	50	7.809	92	100	75-12	25 6	.76	20
Surrogate Recovery										
Terbium	522	530	500		104	106	70-13	30	1.54	20
Analyte	DLT Result			DLTRef Val				9/	6D	%D Limit
Lead	7.74			7.809				0	.884	_

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

# McCampbell Analytical, Inc. 1534 Willow Pass Rd

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1702352 ClientCode: SCAO

(925) 252-92	262					0			·								
		☐ WaterTrax	WriteOn	EDF	E	ccel	E	EQuIS	<b>✓</b> Er	mail	∏На	rdCopy	Third	Party		l-flag	
Report to:						Е	Bill to:					Req	uested TA	Γ:	5 day	/s;	
Dan Leung SCA Environmen 1 Lakeside Drive, Oakland, CA 946 (510) 645-6200	, Suite 215	cc/3rd Party: PO: ProjectNo:		viro.com; pgervas Twin Rivers Svy -	J	ae	1 Lakes Oaklan	nvironm side Dri d, CA 9	iental, In ve, Suite 4612		)scaeh	Dat	e Received e Logged:			6/2017 6/2017	
									Requ	ested Tes	ts (See	legend	below)				_
Lab ID	Client ID		Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5 (	;	7 8	9	10	11	1	12
1702352-001	WLPL-4		Solid	2/2/2017 00:00		Α									$\top$		
·					, ,				,		'	,					

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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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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

#### **WORK ORDER SUMMARY**

Client Name	: SCA ENV	VIRONMENTAL, IN	C.		Project:	F-12279;	MBS Twin Rivers Sv	y - 1216-1218	Delta St.	Wor	k Order:	1702352	
<b>Client Conta</b>	ct: Dan Leun	ng								Q	C Level:	LEVEL 2	
Contact's En	mail: dleung@s	sca-enviro.com; pgerv	vasio@scaehs.com	n	Comments	:				Date	Logged:	2/6/2017	
		☐ WaterTrax	WriteOn	EDF	Exce		Fax Fmail	HardCo	opyThirdParty		l-flag		
Lab ID	Client ID	Matrix	Test Name			ontainers omposites	<b>Bottle &amp; Preservative</b>	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOu	t
1702352-001A	WLPL-4	Solid	SW6020 (Lead)	)		1	White Plastic		2/2/2017	5 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.



1534 Willow Pass Rd / Pittsburg CA 94565-1701

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Report To: Dan	Leung				Bil	l To	SCA	E	viro	nme	ntal,	Inc		1	7									Anal	lysis	Req	uest							
Company: SCA	Environme	ntal, In	c.																															T
1 La	keside Dr.,	#215	Oak	land	, CA	946	12	p	gerv	asio(	a)sca	ehs.	con	an	d	20					ers		0										- 1	
Tele: (415) 867-											iro.c					8015) MTBE		552(	_		ngen		_							als				
Project #: F · 12	279 1	516 - 11	518 PI	ELTA	Pro	ject	Nan	ie:	MB	ć			BIN	ENG.	5	M (		64/	18.1	-	CO)		ides			(AS)				me				- 1
Project Location	: DAD - 187	36 PX	MAX EV	1.	Pu	rcha	se O	rder	#		ଚ	YY				015		91)	18 (4	ides	ors/	s)	rbic	_	(\$	/ PN	* *	4 4 4		lved				- 1
Sampler Signatu	re: Dan Le	ung														8/17		ease	rbor	estic	rocl	cide	1 He	ocs	70/	Hs	020)	20),		isso				- 1
		SAMI	PLING				M	AT	RIX					HOI	D ED	as (80	2)	il & Gr	ydroca	1 (CI P	B's; A	P Pesti	cidic C	Z60 (V	270 (S)	310 (PA	9/8/0	0.8 / 60	***(0	e for D	3			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	нсг	HNO,	Other	BTEX & TPH as Gas (8021/	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
WLPL - 4		2/2		1							1,	1	$\top$	$\top$	7																X		7	1
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**MAI clients MUST disc handling by MAI staff.	Non-disclosure	Incurs an	Immediate	\$250	surch	arge o	ind the	cller	nt is su	bject	to full l	egal	liabili	ty for	harr	m sulf	ered.	Thank	c you												glove	d, ope	n air,	sampl
Relinquished By:	sied for water s	Date:	Time:			ived l		20	·	01 003	iody, i	ilen i	WAL V	ICI GC	E/t°_	CO	TIDI	ION								PM d		on li	mit re			thoriz		
Dan Leung Relinquished By:		Date:	Time:		Rece	ived	u	ı	n	2	7-	6	6	DE AP	PRO	LOR	INA	BSEN FED I CON LAB	N LA					perfo	rm F	lorisil	clear	nup t	o mec	t the	detec	tion lir	nit.	
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### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; MBS Twin Rivers Svy - 1216-1218 De	elta St.		Date and Time Received Date Logged: Received by:	<b>2/6/2017 09:07</b> <b>2/6/2017</b> Maria Venegas
WorkOrder №: Carrier:	<b>1702352</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Maria Venegas
	Chain of C	Sustod	/ (COC) Infor	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	<b>✓</b>	No 🗌	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	•	No 🗆	
	<u>Samp</u>	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	•	No 🗌	
Samples in prop	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservati	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗆	NA 🗌
Sample/Temp Bl	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples	s:				
•	tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 1 300.1, 537, 53	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA <b>✓</b>
Comments:		==:	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701936 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1216-1222 McCarthy; MBS Twin Rivers Svy

**Project Received:** 01/23/2017

Analytical Report reviewed & approved for release on 01/27/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1216-1222 McCarthy; MBS Twin Rivers Svy

**WorkOrder:** 1701936

#### **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

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)

#### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.

### **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/23/17 14:48

**Date Prepared:** 1/23/17

**Project:** F-12279; 1216-1222 McCarthy; MBS Twin Rivers

Svy

**WorkOrder:** 1701936

**Extraction Method:** SW3050B **Analytical Method:** SW6020

Unit: mg/Kg

		Lead	I		
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW-1	1701936-001A	Solid	01/17/2017	ICP-MS1	132995
<u>Analytes</u>	Result		RL DF		Date Analyzed
Lead	2.7		0.50 1		01/24/2017 15:49
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	84		70-130		01/24/2017 15:49
Analyst(s): MIG					
Client ID	Lab ID	Matrix	<b>Date Collected</b>	Instrument	Batch ID
GR-1	1701936-002A	Solid	01/17/2017	ICP-MS1	132995
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	9.4		0.50 1		01/24/2017 15:55
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Terbium	93		70-130		01/24/2017 15:55
Analyst(s): MIG					
Client ID	Lab ID	Matrix	<b>Date Collected</b>	Instrument	Batch ID
12FLVCT/M-1	1701936-003A	Solid	01/17/2017	ICP-MS1	133005
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	ND		0.50 1		01/24/2017 16:19
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Terbium	107		70-130		01/24/2017 16:19
Analyst(s): MIG					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FLVCS-8	1701936-004A	Solid	01/17/2017	ICP-MS1	133005
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
Lead	7.4		0.50 1		01/24/2017 16:26
Surrogates	REC (%)		<u>Limits</u>		
Terbium	86		70-130		01/24/2017 16:26
Analyst(s): MIG					

# **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1701936Date Prepared:1/23/17BatchID:132995Date Analyzed:1/24/17Extraction Method:SW3050B

Instrument:ICP-MS1Analytical Method:SW6020Matrix:SoilUnit:mg/Kg

Project: F-12279; 1216-1222 McCarthy; MBS Twin Rivers Sample ID: MB/LCS-132995

1701948-001AMS/MSD 1701948-001APDS

	QC Sur	nmary R	eport fo	or Metals						
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LC Liı	S nits
Lead	ND	52.2		0.50	50	-		104	75	-125
Surrogate Recovery										
Terbium	475.9	528			500	95	5	106	70	-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS	_	PD	RPD Limit
Lead	58.5	46.6	50	8.497	100	76	75-125	5 2:	2.7,F10	20
Surrogate Recovery										
Terbium	521	391	500		104	78	70-130	) 2	28.4,F1	20
Analyte	PDS Result		SPK Val	SPKRef Val	PDS %REC		PDS Limits	<b>.</b>		
Lead	58.2		50	8.497	99		75-125	5		
Analyte	DLT Result			DLTRef Val				%	οD	%D Limit
Lead	9.02			8.497				6	.16	_

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

# **Quality Control Report**

Client: SCA Environmental, Inc.

**Date Prepared:** 1/23/17 - 1/24/17 **Date Analyzed:** 1/24/17

**Instrument:** ICP-MS1, ICP-MS2

Matrix: Soil

**Project:** F-12279; 1216-1222 McCarthy; MBS Twin Rivers

Svy

**WorkOrder:** 1701936 **BatchID:** 133005

Extraction Method: SW3050B

Analytical Method: SW6020

**Unit:** mg/Kg

**Sample ID:** MB/LCS-133005

1701985-001AMS/MSD

	QC Sur	mmary R	eport fo	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits
Lead	ND	50.1		0.50	50	-		100	75-125
Surrogate Recovery									
Terbium	491.1	494			500	98	3	99	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit		D RPD Limit
Lead	63.8	65.9	50	17.43	93	97	75-12	25 3.1	8 20
Surrogate Recovery									
Terbium	524	526	500		105	105	70-13	30 0	20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	16.8			17.43				3.6	1 20

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701936 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
Report to:				E	Bill to:		Req	uested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		dleung@sca-envi ccodemo@sca-ei		asio@scae	Accounts Paya SCA Environme 1 Lakeside Driv	ental, Inc.	Dat	e Received:	01/23/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; 1216-12 Rivers Svy	222 McCarthy;	MBS Twin	Oakland, CA 94 emuise@sca-id			e Logged:	01/23/2017

					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
		T-														
1701936-001	OW-1	Solid	1/17/2017 00:00		Α											
1701936-002	GR-1	Solid	1/17/2017 00:00		Α											
1701936-003	12FLVCT/M-1	Solid	1/17/2017 00:00		Α											
1701936-004	FLVCS-8	Solid	1/17/2017 00:00		A											
·							•	•	•		•				•	

#### Test Legend:

1 PBMS_TTLC_S	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.



### McCampbell Analytical, Inc.

"When Quality Counts"

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### **WORK ORDER SUMMARY**

Client Name:	SCA ENVIRONMENTAL, INC.	Project:	F-12279; 1216-1222 McCarthy; MBS Twin Rivers Svy	Work Order:	701936
Client Contact:	Dan Leung			QC Level: I	LEVEL 2
Contact's Email:	dleung@sca-enviro.com; pgervasio@scaehs.com	<b>Comments:</b>		Date Logged: 1	/23/2017

		WaterTrax	WriteOn	DF Excel	Fax <b>√</b> Email	HardC	opy ThirdPar	у	I-flag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1701936-001A	OW-1	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/17/2017	5 days	
1701936-002A	GR-1	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/17/2017	5 days	
1701936-003A	12FLVCT/M-1	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/17/2017	5 days	
1701936-004A	FLVCS-8	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/17/2017	5 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.

1701936

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# McCampbell Analytical, Inc.

CHAIN	OF	CUSTODY	RECORD
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, v	1534 Willow Pass Rd. / Pittsburg, CA 94565-1701 www.mccampbell.com / main@mccampbell.com Telephone: (877) 252-9262 / Fax: (925) 252-9269  eport To: Dan Leung  Bill To: SCA Environmental, Inc.										Geo	Trac	ARC ker E	DF [		PDF	M	EDD	0	Write	e On	(DW		EQ	uIS [			0 DA	Y O					
Report To: Dan I	eung				Bil	To:	SCA	\ En	viro	nme	ntal	, In	c.									_		Ana	lvsis	Req	uest		_	-		_	_	
Company: SCA I		ntal, Inc	2.							EMO	_	_	_	V120	.Co	М																		$\top$
1 Lak	eside Dr.,	#215	Oakl	and,	CA	9461	12	p	gerv	asio	a)sc	aeh	s.co	m a	nd						siers													
Tele: (415) 867-9						Mail:										MTBE		552	0		nger		-							tals				
Project #: F-12					Pro	ject	Nan	1e: N	JBO	5 /	MI	H		IVE	129	) M		964/	118.1	8	°C		cides			(AAs)	Lú			l me	ΙI			
Project Location:			McCA	1514	Pu	rcha	se O	rder	#		6	YV				8015)		e (10	ns (	icide	lors	es)	erbi	(s)	Cs)	1/ F	)***(	***		olve	1 1	- 1		
Sampler Signatur	e: Dan Le	ung		_	_							_		TENERS		)21/		reas	arbo	Pest	Aroc	ticid	CH	/0C	000	AH	6020	9020		Diss				
		SAMP	LING			MATRIX METHOD PRESERVED					8) sı		8 0	droc	5	3,8	Pes	idic	099	3) 02	10 (F	0.8	8/6	***	for	410								
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO <sub>3</sub>	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCI	EPA 507 / 8141 (NF	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 82	EPA 525.2 / 625 / 82	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (14			
1-W0		1/17										x																			×			
08-1		1		П								x																			×			
CR-1 12FLVCT/M-1				1								x																			×			
FLVCO-8		1		i								x																			×			
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**MAI clients MUST disc handling by MAI staff. N	lon-disclosure	incurs an i	Immediate	\$250	surch	arge a	nd the	clle	nt is su	bject	to full	lege	al liab	ility fo	or har	m suf	lered.	Than	k you												, glove	d, ope	en alr, s	ample
*** If metals are reques Relinquished By:	ied for water's	Date:	Time:		Rece	ived I	By:	n me	cnain	OI CUS	iody,	mei	MAI	10	CE/t°							_			_		COM			-		_	_	
Dan Leung		1/20	6:00	P	1	JP.	5											ABSE		-											d. Au			
Relinquished By:	S	Date:	Time:		_	ived I								DA	ECH PPR	OPR	IATE	TED I	IN LA		s	_									detect			
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### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; 1216-1222 McCarthy; MBS Twin Rive	rs Svy		Date and Time Received Date Logged: Received by:	1/23/2017 14:48 1/23/2017 Jena Alfaro
WorkOrder №: Carrier:	<b>1701936</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Jena Alfaro
	Chain of C	ustody	(COC) Infor	mation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗌	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗌	
Sample IDs note	d by Client on COC?	Yes	<b>✓</b>	No 🗆	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	•	No 🗌	
	<u>Samp</u> i	le Rece	eipt Informati	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prope	er containers/bottles?	Yes	•	No 🗌	
Sample containe	rs intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservation	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp Bl	ank temperature		Temp:		NA 🗹
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	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 Total Chlorine	5: tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	na 🗹
Free Chlorine t 300.1, 537, 539	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
Comments	========			=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701934 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1219-1221 Delta St; MBS Twin Rivers Svy

**Project Received:** 01/23/2017

Analytical Report reviewed & approved for release on 01/30/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1219-1221 Delta St; MBS Twin Rivers Svy

WorkOrder: 1701934

#### **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

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)

#### **Analytical Qualifiers**

a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.

h4 sulfuric acid permanganate (EPA 3665) cleanup

## **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1219-1221 Delta St; MBS Twin Rivers Svy

WorkOrder: 1701934

### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.

# **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701934Date Received:1/23/17 14:48Extraction Method:SW3550BDate Prepared:1/23/17Analytical Method:SW8082Project:F-12279; 1219-1221 Delta St; MBS Twin Rivers SvyUnit:mg/kg

	Polychlorinated Biphenyls (PCBs) Aroclors											
Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID							
Caulk-11	1701934-002A	Solid	01/19/20	17 GC23	132996							
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed							
Aroclor1016	ND		0.50	1	01/23/2017 22:56							
Aroclor1221	ND		0.50	1	01/23/2017 22:56							
Aroclor1232	ND		0.50	1	01/23/2017 22:56							
Aroclor1242	ND		0.50	1	01/23/2017 22:56							
Aroclor1248	ND		0.50	1	01/23/2017 22:56							
Aroclor1254	ND		0.50	1	01/23/2017 22:56							
Aroclor1260	ND		0.50	1	01/23/2017 22:56							
PCBs, total	ND		0.50	1	01/23/2017 22:56							
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>									
Decachlorobiphenyl	89		70-130		01/23/2017 22:56							
Analyst(s): SS			Analytical Comm	ments: a4,h4								

# **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701934Date Received:1/23/17 14:48Extraction Method:SW3050BDate Prepared:1/23/17Analytical Method:SW6020Project:F-12279; 1219-1221 Delta St; MBS Twin Rivers SvyUnit:mg/Kg

		Lead			
Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
BE-1	1701934-001A	Solid	01/19/20	017 ICP-MS1	132995
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Lead	2.7		0.50	1	01/24/2017 15:31
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	83		70-130		01/24/2017 15:31
Analyst(s): MIG					

# **Quality Control Report**

 Client:
 SCA Environmental, Inc.
 WorkOrder:
 1701934

 Date Prepared:
 1/23/17
 BatchID:
 132996

 Date Analyzed:
 1/23/17 - 1/25/17
 Extraction Method:
 SW3550B

 Instrument:
 GC22, GC23
 Analytical Method:
 SW8082

Matrix: Soil Unit: mg/kg

Project: F-12279; 1219-1221 Delta St; MBS Twin Rivers Svy Sample ID: MB/LCS/LCSD-132996

QC Summary	Report f	or SW8082
------------	----------	-----------

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	-	-	-
Aroclor1221	ND	0.050	-	-	-
Aroclor1232	ND	0.050	-	-	-
Aroclor1242	ND	0.050	-	-	-
Aroclor1248	ND	0.050	-	-	-
Aroclor1254	ND	0.050	-	-	-
Aroclor1260	ND	0.050	-	-	-
PCBs, total	ND	0.050	-	-	-

#### **Surrogate Recovery**

Decachlorobiphenyl 0.0466 0.050 93 70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.139	0.134	0.15	93	89	70-130	4.02	20
Aroclor1260	0.158	0.156	0.15	105	104	70-130	0.906	20
Surrogate Recovery								
Decachlorobiphenyl	0.0447	0.0537	0.050	89	107	70-130	18.4	20

Matrix:

Soil

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

## **Quality Control Report**

Unit:

Client:SCA Environmental, Inc.WorkOrder:1701934Date Prepared:1/23/17BatchID:132995Date Analyzed:1/24/17Extraction Method:SW3050BInstrument:ICP-MS1Analytical Method:SW6020

Project: F-12279; 1219-1221 Delta St; MBS Twin Rivers Svy Sample ID: MB/LCS-132995

1701948-001AMS/MSD 1701948-001APDS

mg/Kg

#### **QC Summary Report for Metals** SPK **Analyte** MB LCS RL MB SS **LCS** LCS %REC Result Result Val %REC Limits ND 52.2 0.50 50 104 75-125 Lead **Surrogate Recovery** 475.9 **Terbium** 528 500 95 106 70-130 Analyte MS MSD **SPK SPKRef** MS **MSD** MS/MSD **RPD RPD** %REC %REC Limit Result Result Val Val Limits 58.5 46.6 50 8.497 100 76 75-125 22.7,F10 20 Lead **Surrogate Recovery Terbium** 521 391 500 104 78 70-130 28.4,F1 20 Analyte PDS SPK **SPKRef PDS** PDS %REC Result Val Val Limits Lead 58.2 50 8.497 99 75-125 DLT **DLTRef** %D %D **Analyte** Result Val Limit Lead 9 02 8 497 6.16

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701934 ClientCode: SCAO

(923) 232 9202									
	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	⊟HardCo	pyThirdParty	J-flag
Report to:					Bill to:		F	Requested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		dleung@sca-env ccodemo@sca-e		asio@scae	Accounts Paya SCA Environme 1 Lakeside Driv	ental, Inc.	1	Date Received:	01/23/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; 1219-12 Rivers Svy	221 Delta St; M	IBS Twin	Oakland, CA 94 emuise@sca-io			Date Logged:	01/23/2017
						Poguested 7	Tanta (San Jaga	nd bolow)	

1701934-001 BE-1 Solid 1/19/2017 00:00 ☐ A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
	1701934-001	BF-1	Solid	1/19/2017 00:00			Α										
1101001 002 Caan 11	1701934-002	Caulk-11	Solid	1/19/2017 00:00		Α	7.										

#### Test Legend:

1 8082_PCB_ESL_S	2 PBMS_TTLC_S	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.



1701934-002A Caulk-11

### McCampbell Analytical, Inc.

Solid

"When Quality Counts"

SW8082 (PCBs Only)

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

1/19/2017

5 days

### **WORK ORDER SUMMARY**

Client Name	SCA ENV	/IRONMENTAL, INC	<i>.</i> .		Project:	F-12279;	1219-1221 Delta S	St; MBS Twin Ri	vers Svy	Work	Order:	1701934	
Client Conta	act: Dan Leun	g								Q	C Level:	LEVEL 2	
Contact's En	mail: dleung@s	sca-enviro.com; pgerva	asio@scaehs.com	1	<b>Comments:</b>	:				Date 1	Logged:	1/23/2017	
		☐ WaterTrax	WriteOn	EDF	Excel	I 🗆 [	Fax <b>✓</b> Emai	il HardC	opyThirdParty	/	flag		
Lab ID	Client ID	Matrix	Test Name			ontainers omposites	Bottle & Preservat	tive De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubC	)ut
1701934-001A	BE-1	Solid	SW6020 (Lead)			1	Small Clear Plastic	;	1/19/2017	5 davs			

Container

Small Clear Plastic

Container

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.

1701934

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# McCampbell Analytical, Inc.

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		- OZKITA	Linto	-	-		_	_				- 1	RES	SERV	ED	Gas	15)	Sii	Iydı	81 (0	CB's	NP F	Acid	8260	8276	8310	200.	8.00	20)*	ole f	딑			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	нсг	HNO3	Other	BTEX & TPH as	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 80	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (7	EPA 515 / 8151 (4	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 /	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200,8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
JE - 1		1/19		1								x																			×		$\neg$	
CAULK-11				1		$\vdash$						X																				×		1
CAULK - II	-	<b>√</b>		+	-	$\vdash$		-				H	$\dashv$						-		-		-			-			-		$\vdash$	-	+	+
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*MAI clients MUST disc andling by MAI staff. I ** If metals are reques	Non-disclosure	incurs an	immediate	e \$250	surch	arge a	nd the	e clie	nt Is su	bject	to ful	lega	lllab	ility fo	or har	m suf	ered.	Thank	c you												glove	d, ope	n air, s	ample
Relinquished By:	ied for water s	Date:	Time			ived I		n me	chain	JI CU	Joury	men	MAI	10	CE/tº				J.J.	_	_		_			(	COM	MEN	TS:					
		1/20		U as I		NS								G	001	CO		ION	-							PM d	etecti	on lir	nit re			thoriz		
Dan Leung Relinquished By:					_	ived I	_			_								BSE!		В	-			perfo	rm F	lorisi	clea	nup to	me	et the	defec	tion li	nit.	
cennquisned by:		Date:	Time		Rece	ived i	2	_						A	PPR	OPR	ATE	CON	TAI		5	_	1	10	( )	41	29	1	23	37	131	1		
Relinquished By:		Date:	Time	:	Rece	wed I	3v:	_						P	RES	ERV	ATIO		AS	0&0		META H<2_	LS				HAZA							

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; 1219-1221 Delta St; MBS Twin Rivers	s Svy		Date and Time Received Date Logged: Received by:	1/23/2017 14:48 1/23/2017 Jena Alfaro
WorkOrder №: Carrier:	<b>1701934</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Jena Alfaro
	Chain of C	Custod	y (COC) Info	<u>rmation</u>	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	✓	No 🗆	
Chain of custody	agrees with sample labels?	Yes	✓	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	✓	No 🗆	
Date and Time of	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	<b>✓</b>	No 🗆	
	Samp	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗆	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prop	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservati	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp B	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receiv	ed on Ice?	Yes		No 🗹	
UCMR3 Sample	s:				
	tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 300.1, 537, 53	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
====	========	==:		=======	=======
Comments:					



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701933 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy

**Project Received:** 01/23/2017

Analytical Report reviewed & approved for release on 01/30/2017 by:

Angela Rydelius,

Laboratory Manager

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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy

WorkOrder: 1701933

#### **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

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)

#### **Analytical Qualifiers**

a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.

h4 sulfuric acid permanganate (EPA 3665) cleanup

## **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy

WorkOrder: 1701933

### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.

# **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701933Date Received:1/23/17 14:48Extraction Method:SW3550BDate Prepared:1/23/17Analytical Method:SW8082Project:F-12279; 1220-1222 Delta St; MBS Twin Rivers SvyUnit:mg/kg

	Polychlorinat	ted Biphe	enyls (	PCBs) A	Aroclors	
Client ID	Lab ID	Matrix		Date (	Collected Instrument	Batch ID
Caulk-11	1701933-002A	Solid		01/18/2	017 GC23	132996
<u>Analytes</u>	<u>Result</u>	1	<u>MDL</u>	<u>RL</u>	<u>DF</u>	Date Analyzed
Aroclor1016	ND	(	0.051	0.50	1	01/23/2017 23:09
Aroclor1221	ND	(	0.33	0.50	1	01/23/2017 23:09
Aroclor1232	ND	(	0.032	0.50	1	01/23/2017 23:09
Aroclor1242	ND	(	0.035	0.50	1	01/23/2017 23:09
Aroclor1248	ND	(	0.036	0.50	1	01/23/2017 23:09
Aroclor1254	ND	(	0.022	0.50	1	01/23/2017 23:09
Aroclor1260	ND	(	0.085	0.50	1	01/23/2017 23:09
PCBs, total	ND	(	0.33	0.50	1	01/23/2017 23:09
Surrogates	<u>REC (%)</u>			<u>Limits</u>		
Decachlorobiphenyl	85			70-130		01/23/2017 23:09
Analyst(s): SS			Ana	alytical Con	nments: a4,h4	

# **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701933Date Received:1/23/17 14:48Extraction Method:SW3050BDate Prepared:1/23/17Analytical Method:SW6020

**Project:** F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy Unit: mg/Kg

		Lead			
Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
12FLVCT/M-1	1701933-001A	Solid	01/18/20	017 ICP-MS1	132995
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
Lead	ND		0.50	1	01/24/2017 15:24
Surrogates	REC (%)		<u>Limits</u>		
Terbium	95		70-130		01/24/2017 15:24
Analyst(s): MIG					

# **Quality Control Report**

 Client:
 SCA Environmental, Inc.
 WorkOrder:
 1701933

 Date Prepared:
 1/23/17
 BatchID:
 132996

 Date Analyzed:
 1/23/17 - 1/25/17
 Extraction Method:
 SW3550B

Instrument:GC22, GC23Analytical Method:SW8082Matrix:SoilUnit:mg/kg

Project: F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy Sample ID: MB/LCS/LCSD-132996

### **QC Summary Report for SW8082**

		_				
Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.033	0.050	-	-	-
Aroclor1232	ND	0.0032	0.050	-	-	-
Aroclor1242	ND	0.0035	0.050	-	-	-
Aroclor1248	ND	0.0036	0.050	-	-	-
Aroclor1254	ND	0.0022	0.050	-	-	-
Aroclor1260	ND	0.0085	0.050	-	-	-
PCBs, total	ND	0.0040	0.050	-	-	-

#### **Surrogate Recovery**

Decachlorobiphenyl 0.0466 0.050 93 70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.139	0.134	0.15	93	89	70-130	4.02	20
Aroclor1260	0.158	0.156	0.15	105	104	70-130	0.906	20
Surrogate Recovery								
Decachlorobiphenyl	0.0447	0.0537	0.050	89	107	70-130	18.4	20

Matrix:

Soil

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## **Quality Control Report**

Unit:

Client:SCA Environmental, Inc.WorkOrder:1701933Date Prepared:1/23/17BatchID:132995Date Analyzed:1/24/17Extraction Method:SW3050BInstrument:ICP-MS1Analytical Method:SW6020

Project: F-12279; 1220-1222 Delta St; MBS Twin Rivers Svy Sample ID: MB/LCS-132995

1701948-001AMS/MSD 1701948-001APDS

mg/Kg

#### **QC Summary Report for Metals** SPK **Analyte** MB LCS RL MB SS **LCS** LCS %REC Result Result Val %REC Limits ND 52.2 0.50 50 104 75-125 Lead **Surrogate Recovery** 475.9 **Terbium** 528 500 95 106 70-130 Analyte MS MSD **SPK SPKRef** MS **MSD** MS/MSD **RPD RPD** %REC %REC Limit Result Result Val Val Limits 58.5 46.6 50 8.497 100 76 75-125 22.7,F10 20 Lead **Surrogate Recovery Terbium** 521 391 500 104 78 70-130 28.4,F1 20 Analyte PDS SPK **SPKRef PDS** PDS %REC Result Val Val Limits Lead 58.2 50 8.497 99 75-125 DLT **DLTRef** %D %D **Analyte** Result Val Limit Lead 9 02 8 497 6.16

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701933 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	/ThirdParty	☐ J-flag
Report to:				i i	Bill to:		Re	equested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215 Oakland, CA 94612 (510) 645-6200 FAX: (510) 839-6200	cc/3rd Party: (PO: ProjectNo:	dleung@sca-env ccodemo@sca-e F-12279; 1220-1: Rivers Svy	nviro.com;	J	Accounts Payal SCA Environme 1 Lakeside Driv Oakland, CA 94 emuise@sca-ic	ental, Inc. re, Suite 215	D	ate Received: ate Logged:	01/23/2017 01/23/2017

					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
1701933-001	12FLVCT/M-1	Solid	1/18/2017 00:00			Α										$\overline{}$
1701933-002	Caulk-11	Solid	1/18/2017 00:00		Α											

#### Test Legend:

1	8082_PCB_ESL_S (J)	2 PBMS_TTLC_S	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.



**Client Name:** 

### McCampbell Analytical, Inc.

SCA ENVIRONMENTAL, INC.

"When Quality Counts"

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F-12279: 1220-1222 Delta St; MBS Twin Rivers Svv

### **WORK ORDER SUMMARY**

Project:

	,			J	,	,		2		
<b>Client Contact:</b>	Dan Leung								<b>QC Level:</b> LEVEL 2	
Contact's Email:	dleung@sca-enviro.com; pge	rvasio@scaehs.c	com	<b>Comments:</b>					<b>Date Logged:</b> 1/23/2017	
	☐ WaterTrax	WriteOn	EDF	Excel	Fax	<b>✓</b> Email	HardCopy	ThirdParty	J-flag	
										-

		Water rrax		Excei	rax <b>v</b> Email	Ппагас	орутпігаРап	.y	J-11ag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	<b>Bottle &amp; Preservative</b>	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1701933-001A	12FLVCT/M-1	Solid	SW6020 (Lead)	1	Small Yellow Plastic Container		1/18/2017	5 days	
1701933-002A	Caulk-11	Solid	SW8082 (PCBs Only)	1	Small Clear Plastic Container		1/18/2017	5 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.

Work Order: 1701933

1701933

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1	

# McCampbell Analytical, Inc.

CHAIN	OF	CIIST	YOO	RECO	RD
CHAIN		CU31		KLCC	$\Gamma$

· ·	ww.mcc	ampbe	ell.com	/ r	nain	Bill To: SCA Environmental, Inc.  CCODEMO @SCA-EUV CA 94612 pgervasio@scaehs.com a E-Mail: dleung@sca-enviro.com Project Name: MBO / WILL RIVE Purchase Order#  MATRIX METH PRESER										Geo	Tracl	ker E	DF [	1	PDF	X	EDD		Write	e On	(DW	) 🔲	EQ	uIS [	]	1	0 DA	Y	
Report To: Dan l	eung				Bil	l To:	SC	A En	viro	nme	ntal	, Inc	c.											Anal	ysis	Req	uest	9							
Company: SCA I		ntal, Inc	c.						_		_	_		JVI	20. C	MO																			
	eside Dr.,			land.	, CA	9461	2								-						ers														
Tele: (415) 867-	9544				E-N	Mail:	dle				_	_				LBE		5520			igen		-							als		- 1			
Project #: F-12			16.22		Pro	ject	Nan	ne: l	MBO					VET	29	8015) MTBE		547	18.1	_	Cor		ides)			As)				met		- 1	- 1		
Project Location		222	DELTA	100	(.Pu	rcha	se O	rder	#			SV.	Y			015		(19)	s (4	ides	ors/		rbic	_	(S	PN	* * *	4		ved		- 1			
Sampler Signatu																1/8		ease	rease	rbon	estic	rock	cide	He He	CS	00/	Hs	(070	20)*		isso		- 1	- 1	
			PLING				M	ATI	RIX							(8021/		G	ocaı	CI P	Y:	esti	c C	Š	(S)	(PA	19/1	09/	* 4	or D	MLC				
		JAMIL .	Line	- 1			_					-II	RES	SERV	ED	Gas	15)	S II &	lydr	81 (6	CB's	VP F	leid	8260	8270	3310	3003	8.00	*(02	ale f	7				
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO,	Other	BTEX & TPH as	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PG	EPA 507 / 8141 (7	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524,2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHS / PNAS)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8/ 6020)***	Metals (200.8 / 6020)**	Lab to Filter sample for Dissolved metals analysis	LEAD (	PcB			
2FLVC1/M-1		1/18		T								х	$\neg$																	Г	x				
CAULIC - IT		1		1								х	$\exists$																			×			
**MAI clients MUST disc andling by MAI staff. I	Non-disclosure	incurs an	Immediate	e \$250	surch	arge a	ind th	e clie	nt is su	bject	to full	lega	l liab	ility to	or har	m suff	ered.	Than	k you												, glove	d, ope	en air, s	ample	
Relinquished By: Dan Leung Relinquished By:  Control  Relinquished By:  Relinquished By:	PS	Date:	G:00	40	Rece	ceived By:						IC G H D A	CE/t° OOL EAD ECH PPR RES	O CO SPA ILOR OPR	NDIT CE A INA IATE ED IN	TION_ ABSEI TED I CON N LAI	NT_IN LA	NER	G N			perfo	rm F	PM d lorisil	etecti I clear	nup t	nit re o mee		detec	thoriz tion li					

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; 1220-1222 Delta St; MBS Twin Rivers	s Svy		Date and Time Received Date Logged: Received by:	1/23/2017 14:48 1/23/2017 Jena Alfaro
WorkOrder №: Carrier:	<b>1701933</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Jena Alfaro
	Chain of C	Sustod	y (COC) Info	<u>rmation</u>	
Chain of custody	present?	Yes	<b>✓</b>	No 🗆	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	<b>✓</b>	No 🗆	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	<b>✓</b>	No 🗆	
	Samp	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prop	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗌	
Sufficient sample	e volume for indicated test?	Yes	✓	No 🗆	
	Sample Preservati	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp Bl	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples	s:				
•	tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 1 300.1, 537, 53	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
====	=========	==:		=======	=======
Comments:					



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701A77 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1220-1226 Isabel St; MBS Twin Rivers Svy

**Project Received:** 01/25/2017

Analytical Report reviewed & approved for release on 01/31/2017 by:

Angela Rydelius,

Laboratory Manager

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WorkOrder: 1701A77

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%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

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)

#### **Analytical Qualifiers**

a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.

h4 sulfuric acid permanganate (EPA 3665) cleanup

## **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701A77Date Received:1/25/17 10:58Extraction Method:SW3550BDate Prepared:1/25/17Analytical Method:SW8082

**Project:** F-12279; 1220-1226 Isabel St; MBS Twin Rivers **Unit:** mg/kg

Svy

#### Polychlorinated Biphenyls (PCBs) Aroclors **Date Collected Instrument Client ID** Lab ID Matrix **Batch ID** Caulk-9 1701A77-003A 01/20/2017 GC23 133085 Solid **MDL Analytes** Result <u>DF</u> **Date Analyzed** <u>RL</u> Aroclor1016 ND 0.0051 0.050 01/25/2017 20:30 Aroclor1221 ND 0.033 0.050 01/25/2017 20:30 Aroclor1232 ND 0.0032 0.050 1 01/25/2017 20:30 ND Aroclor1242 0.0035 0.050 1 01/25/2017 20:30 0.0036 Aroclor1248 ND 0.050 1 01/25/2017 20:30 Aroclor1254 ND 0.0022 0.050 1 01/25/2017 20:30 ND 01/25/2017 20:30 Aroclor1260 0.0085 0.050 1 PCBs, total ND 0.033 0.050 01/25/2017 20:30 Surrogates **REC (%) Limits** Decachlorobiphenyl 82 70-130 01/25/2017 20:30 Analyst(s): SS Analytical Comments: a4,h4

# **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/25/17 10:58

**Date Prepared:** 1/25/17

**Project:** F-12279; 1220-1226 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A77

**Extraction Method:** SW3050B **Analytical Method:** SW6020

Unit: mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
12FLVCT/M-1	1701A77-001A	Solid	01/20/20	17	ICP-MS3	133119
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	ND		0.50	1		01/26/2017 00:32
<u>Surrogates</u>	REC (%)		<u>Limits</u>			
Terbium	101		70-130			01/26/2017 00:32
Analyst(s): BBO						
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
GR-1	1701A77-002A	Solid	01/20/20	17	ICP-MS3	133119
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	5.4		0.50	1		01/26/2017 00:57
Surrogates	REC (%)		<u>Limits</u>			
Terbium	107		70-130			01/26/2017 00:57
Analyst(s): BBO						

# **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1701A77Date Prepared:1/24/17BatchID:133085Date Analyzed:1/24/17Extraction Method:SW3550BInstrument:GC23Analytical Method:SW8082

**Project:** F-12279; 1220-1226 Isabel St; MBS Twin Rivers **Sample ID:** MB/LCS/LCSD-133085

Svy

Soil

### QC Summary Report for SW8082

Unit:

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.033	0.050	-	-	-
Aroclor1232	ND	0.0032	0.050	-	-	-
Aroclor1242	ND	0.0035	0.050	-	-	-
Aroclor1248	ND	0.0036	0.050	-	-	-
Aroclor1254	ND	0.0022	0.050	-	-	-
Aroclor1260	ND	0.0085	0.050	-	-	-
PCBs, total	ND	0.0040	0.050	-	-	-

#### **Surrogate Recovery**

**Matrix:** 

Decachlorobiphenyl 0.05272 0.050 105 70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.134	0.133	0.15	89	88	70-130	0.634	20
Aroclor1260	0.148	0.154	0.15	99	103	70-130	4.43	20
Surrogate Recovery								
Decachlorobiphenyl	0.0521	0.0532	0.050	104	106	70-130	1.97	20

# **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/25/17

**Date Analyzed:** 1/25/17 - 1/26/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 1220-1226 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A77

**BatchID:** 133119

**Extraction Method:** SW3050B **Analytical Method:** SW6020

**Unit:** mg/Kg

Sample ID: MB/LCS-133119

1701A98-003AMS/MSD

	QC Sur								
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LCS Limits
Lead	ND	52.2		0.50	50	-		104	75-125
Surrogate Recovery									
Terbium	500.7	540			500	10	00	108	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS Limits		RPD Limit
Lead	55.9	57.4	50	6.816	98	101	75-125	5 2.68	20
Surrogate Recovery									
Terbium	528	525	500		106	105	70-130	0.5	51 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	6.94			6.816				1.82	-

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701A77 ClientCode: SCAO

	WaterTrax	WriteOn	□ EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
Report to:				В	ill to:		Red	uested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:		713	J	Accounts Payal SCA Environme 1 Lakeside Driv	ental, Inc. ve, Suite 215		te Received:	01/25/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200	ProjectNo:	F-12279; 1220-12 Rivers Svy	226 Isabel St;	MBS Twin	Oakland, CA 94 emuise@sca-io			te Logged:	01/25/2017

				Γ	Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
			·													
1701A77-001	12FLVCT/M-1	Solid	1/20/2017 00:00			Α										
1701A77-002	GR-1	Solid	1/20/2017 00:00			Α										
1701A77-003	Caulk-9	Solid	1/20/2017 00:00		Α											

#### Test Legend:

1 8082_PCB_ESL_Solid (J)	2 PBMS_TTLC_S	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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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

### **WORK ORDER SUMMARY**

Client Name Client Conta	lient Name: SCA ENVIRONMENTAL, INC. lient Contact: Dan Leung					F-12279;			1701A77 LEVEL 2			
Contact's Email: dleung@sca-enviro.com; pgervasio@scaehs.com					Comments	:	Date	Logged:	1/25/2017			
		WaterTrax	WriteOn	EDF	Exce	el 🗌	Fax  Email	HardC	opyThirdParty	/J.	-flag	
Lab ID	Client ID	Matrix	Test Name		•	ontainers omposites	Bottle & Preservativ	ve De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOu
1701A77-001A	12FLVCT/M-1	Solid	SW6020 (Lead)			1	Small Yellow Plastic Container		1/20/2017	5 days		
1701A77-002A	GR-1	Solid	SW6020 (Lead)			1	Small Clear Plastic Container		1/20/2017	5 days		
1701A77-003A	Caulk-9	Solid	SW8082 (PCBs C	Only)		1	Small Clear Plastic		1/20/2017	5 days		

Container

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.



CHAIN	OF	CUST	ODY	REC	ORD
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Report To: Dan I	Leung				Bil	I To	SC	A E	viro	nm	enta	l, Iı	ıc.												Ana	ysis	Req	uest							
Company: SCA I	invironme	ntal, In	c.											1																					
	eside Dr.,	#215	Oak	land					gerv	-	-	_	1000	m a	nd		1	0	1	1		iers													
Tele: (415) 867-						Mail							n	Į.		LB		552	1.			nge									tals				
Project #: F-120	79				Pr	oject	Nan	ne:	MB	6				JA	25	M		1 49	2		~ l	°C		ides			(AS)				l me				
Project Location:	1550 - 1	5 36	10 y B E I	L 6	í. Pu	rcha	se O	rdei	#		(	Vé	4			8015 ) MTBE		e (16	100		cide	lors	(\$3	rbic	0	(\$2	/PA	* * *	* *		lved				
Sampler Signatur	e: Dan Le	ung												N.		21/8		reas	4		esti	roc	cide	H E	OCS	VOC	A.H.s	020	020)		)isso			- 1	
		SAME	PLING				M	IAT	RIX					SER	OD VED	/1208) si	1	& G	9000	2010	CLP	1,8 ; A	Pest	idie C	A) 09	S) 02	10 (P.	9/8/0	9 / 8	***(	for I	5	-	-	-
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other		HNO		& TPH as Ga	Diesel (80	Total Petroleum Oil & Grease (1664 / 5520	E/B&F)	rotal red oreum riy	EPA 505/ 608 / 8081 (C1 Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 82	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1991C	PCB		
12FWC/M-1		1/20		T								X			$\vdash$		+	1	+	7												×		7	1
GR-1		720		1				-				×		+			+	+	+	+	1					-		-				×		+	+
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																				1															
**MAI clients MUST disc handling by MAI staff. N																																glove	d, ope	n air,	sample
*** If metals are reques	ed for water s	amples an	od the water	ar type	a le no	enac	fled o	n the	chain	of cu	stady	the	n M A	l will e	defau	it to	netal	e hy F	200 8																
Relinquished By:  Dan Leung  Relinquished By:		Date:	Time:	P	Rece	ived l	V.	RS	)	0100	stody	, me	II MA	I C	CE/t GOO! HEAL DECH APPR	D CC D SP. HLO ROPI	ONDI ACE RINA RIAT	TIO ABS TEI E CO	N_ENT	LAI					perfo	rm F	PM d lorisi	etecti   clear	nup to	nit re	equire et the	detec	tion li		
Relinquished By:	J.	Date:	Times	_	Rece	ived	By:	J	<b>&gt;</b>					1			ATI	v		. (	0&G		IETA I<2_	Ų.	OTI	HER	12	HAZA	ARDO	S US:	712		)		

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environment	al, Inc. 26 Isabel St; MBS Twin Rivers	s Svy		Date and Time Received Date Logged: Received by:	1/25/2017 10:58 1/25/2017 Jena Alfaro
WorkOrder №: Carrier:	<b>1701A77</b> <u>UPS</u>	Matrix: Solid			Logged by:	Jena Alfaro
		Chain of C	ustody	y (COC) Info	rmation	
Chain of custody	y present?		Yes	<b>✓</b>	No 🗆	
Chain of custody	y signed when relinqu	ished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	y agrees with sample	labels?	Yes	<b>✓</b>	No 🗌	
Sample IDs note	ed by Client on COC?	•	Yes	<b>✓</b>	No 🗆	
Date and Time of	of collection noted by	Client on COC?	Yes	<b>✓</b>	No 🗆	
Sampler's name	noted on COC?		Yes	•	No 🗆	
		<u>Sampl</u>	e Rece	eipt Informat	<u>iion</u>	
Custody seals in	ntact on shipping con	tainer/cooler?	Yes		No 🗆	NA 🗹
Shipping contain	ner/cooler in good cor	ndition?	Yes	<b>✓</b>	No 🗌	
Samples in prop	er containers/bottles	?	Yes	✓	No 🗌	
Sample containe	ers intact?		Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicate	d test?	Yes	•	No 🗆	
		Sample Preservation	on and	Hold Time (	(HT) Information	
All samples rece	eived within holding ti	me?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp B	lank temperature			Temp:		NA 🗹
Water - VOA via	als have zero headspa	ace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels cl	hecked for correct pro	eservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	ıpon receipt (Metal: <	2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receiv	ved on Ice?		Yes		No 🗸	
UCMR3 Sample	<u>98:</u>					
Total Chlorine	tested and acceptab	le upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 300.1, 537, 53		e upon receipt for EPA 218.7,	Yes		No 🗆	NA <b>✓</b>
Comments:	=====	======	:	====	=======	=======



"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1702354

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** 

Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin Rivers Svy - 1225-1231 Isabel St.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/10/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin Rivers Svy - 1225-1231 Isabel St.

WorkOrder: 1702354

#### **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

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)

## **Analytical Report**

**Client:** SCA Environmental, Inc. WorkOrder:

1702354

**Date Received:** 2/6/17 9:07

**Extraction Method: SW3050B** 

**Date Prepared: 2/6/17** 

**Analytical Method:** SW6020

**Project:** 

F-12279; MBS Twin Rivers Svy - 1225-1231 Isabel

Unit:

mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	Collected	Instrument	Batch ID
FLVCS-3	1702354-001A	Solid	02/02/2	017	ICP-MS1	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	1.8		1.1	1		02/08/2017 21:02
<u>Surrogates</u>	REC (%)		<u>Limits</u>			
Terbium	93		70-130			02/08/2017 21:02
Analyst(s): DVH						

Client ID	Lab ID	Matrix	Date (	Collected	Instrument	Batch ID
WLPL-4	1702354-002A	Solid	02/02/2	2017	ICP-MS1	133762
Analytes	<u>Result</u>		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	40		0.50	1		02/08/2017 03:15
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	100		70-130			02/08/2017 03:15
Analyst(s): DVH						

## **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702354Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

Matrix:SoilUnit:mg/KgProject:F-12279; MBS Twin Rivers Svy - 1225-1231 IsabelSample ID:MB/LCS-133762

1702364-001AMS/MSD

	QC Sur	mmary R	eport fo	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LCS Limits
Lead	ND	50.9		0.50	50	-		102	75-125
Surrogate Recovery									
Terbium	510.6	526			500	10	)2	105	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS Limits		RPD Limit
Lead	53.9	57.6	50	7.809	92	100	75-125	6.76	20
Surrogate Recovery									
Terbium	522	530	500		104	106	70-130	1.54	20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	7.74			7.809				0.884	1 -

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

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## CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1702354 ClientCode: SCAO

(923) 232-9202									
	WaterTra	x WriteOn	□EDF	Excel	EQuIS	<b>✓</b> Email	HardCop	y ThirdParty	J-flag
Report to:				1	Bill to:		R	equested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:	dleung@sca-en	viro.com; pgerva	asio@scae	Accounts Payal SCA Environme 1 Lakeside Driv	ental, Inc.	D	Oate Received:	02/06/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; MBS T 1231 Isabel St.	win Rivers Svy	- 1225-	Oakland, CA 94 emuise@sca-io			Oate Logged:	02/06/2017
						Requested 1	ests (See leger	nd below)	
Lab ID Client ID		Matrix	Collection Date	Hold 1	2 3	4 5	6 7	8 9 10	0 11 1

							I				
1702354-001	FLVCS-3	Solid	2/2/2017 00:00		Α						
1702354-002	WLPL-4	Solid	2/2/2017 00:00		Α						
		<u> </u>		1		-			1	1	

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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: SCA ENVIRONMENTAL, INC. Project: F-12279; MBS Twin Rivers Svy - 1225-1231 Isabel St. Work Order: 1702354

Client Contact: Dan Leung

Contact's Email: dleung@sca-enviro.com; pgervasio@scaehs.com

Comments: Date Logged: 2/6/2017

		WaterTrax	WriteOn	EDF Excel	_Fax <b>_</b> Email	HardC	opyThirdPart	/	I-flag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1702354-001A	FLVCS-3	Solid	SW6020 (Lead)	1	Yellow Plastic		2/2/2017	5 days	
1702354-002A	WLPL-4	Solid	SW6020 (Lead)	1	White Plastic		2/2/2017	5 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.

1702354



## McCampbell Analytical, Inc.

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	www.mccampbell.com / main@mccampbell.com Telephone: (877) 252-9262 / Fax: (925) 252-9269  To: Dan Leung Bill To: SCA Environmental, Inc.  1 Lakeside Dr., #215 Oakland, CA 94612 pgervasio@scaehs (415) 867-9544 E-Mail: dleung@sca-enviro.com ct #: F - 12279 Project Name: MBS / WIN ct Location: 1225 - 1231 ISABEL Purchase Order# SAMPLING MATRIX P															Geo	Tracl	ARO cer El	DF Γ	] [	PDF	X	EDD		Write	e On	(DW		EQ	uIS [	_		0 DA	Y D
Report To: Dan	Leung				Bil	To:	SC	A En	viro	nme	ental	, In	c.				_	_						Ana	lysis	Reg	uest							
		ntal. In	c.									,																					T	T
		rironmental, Inc.  de Dr., #215 Oakland, CA 94612 pgervasio@sc.  4 E-Mail: dleung@sca-enviro.c  Project Name: MBS ANI  205 - 1931 ISABEL Purchase Order#  Dan Leung  SAMPLING  MATRIX  ocation/ eld Point Name Date Time												m ar	ha						SLIS												- 1	- 1
	7-9544 Project Name: MBS 1/2 Project Name: MBS 1/2 Purchase Order# ture: Dan Leung  SAMPLING  MATRIX  Location/ Loca												-			BE		520			gene									Ils				
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		SAIVII	LING	-	-		_			_		P	RES	SERV	/ED	Gas (8021/	15)	S II &	lydr	81 ((	CB's	VP P	Acidi	8260	8270	8310	8.002	8.00	20)*	ole fo	2		- 1	
SAMPLE ID	Field Point	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	-HNO,	Other	BTEX & TPH as	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (7	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910)	PCB		
FLVCG -3		2/2		T		$\Box$						X	7	1									П								X			1
WIPI- 4	1	1.		ti			$\neg$					X	+										$\vdash$								×		+	+
WIFT- 4		V	7	H	-	$\vdash$	$\dashv$		$\vdash$	-		+	+	+	-	-			-	-	-	-	$\vdash$			-		-	-	-	-	-	+	+
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"MAI clients MUST disc nandling by MAI staff.	Non-disclosure	Incurs an	immediate	e \$250	surch	arge a	nd the	e cller	nt Is su	bject	to full	lega	liab	lity fo	or har	m suff	ered.	Thank	c you											brief,	glove	d, ope	n air, s	ample
Relinquished By:	9.77.79	Date;	Time:	: 1	Rece	ived E	y:_	7						10	CE/to										0.7			MEN			J.		10	
Dan Leung		2/2	5:30	P	Rece	1	1	-	>								VDIT CE A	ION_ BSE	TT	-												thoriz		
Relinquished By:		Date:	Time	$\overline{}$		ived B				_			_	D	ECH	LOR	INAT	ED I	N LA		_			herro	war wi	1311	CICHI	aup it	mee	e tile	uctec	IVH III	1116.	
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Relinquished By:		Date:	Time	•	Rece	ceived By:							P	RESI	ERVA	ATIO	VO.					LS			ŀ	IAZA	RDO	US:						

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmenta F-12279; MBS Twi	ıl, Inc. n Rivers Svy - 1225-1231 Isa	bel St.		Date and Time Received Date Logged: Received by:	2/6/2017 09:07 2/6/2017 Maria Venegas
WorkOrder №: Carrier:	1702354 <u>UPS</u>	Matrix: <u>Solid</u>			Logged by:	Maria Venegas
		Chain of C	ustody	y (COC) Info	rmation	
Chain of custody	y present?		Yes	<b>✓</b>	No 🗌	
Chain of custody	y signed when relinqu	ished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	y agrees with sample	labels?	Yes	<b>✓</b>	No 🗌	
Sample IDs note	ed by Client on COC?		Yes	<b>✓</b>	No 🗌	
Date and Time o	of collection noted by	Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?		Yes	✓	No 🗆	
		<u>Sampl</u>	e Rece	eipt Informat	<u>iion</u>	
Custody seals in	ntact on shipping cont	ainer/cooler?	Yes		No 🗌	NA 🗸
Shipping contain	ner/cooler in good cor	dition?	Yes	<b>✓</b>	No 🗌	
Samples in prop	er containers/bottles?	•	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?		Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated	I test?	Yes	<b>✓</b>	No 🗌	
		Sample Preservation	on and	Hold Time (	(HT) Information	
All samples rece	eived within holding tir	ne?	Yes	<b>✓</b>	No 🗆	NA 🗌
Sample/Temp B	lank temperature			Temp:		NA 🗸
Water - VOA via	ıls have zero headspa	ice / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels cl	hecked for correct pre	eservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2	2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receiv	red on Ice?		Yes		No 🗹	
UCMR3 Sample	s:					
•		e upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 300.1, 537, 53		e upon receipt for EPA 218.7,	Yes		No 🗆	NA 🗹
Comments:	=====	======	:	====	=======	=======



"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1701A78 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1228-1230 Isabel St; MBS Twin Rivers Svy

**Project Received:** 01/25/2017

Analytical Report reviewed & approved for release on 01/31/2017 by:

Angela Rydelius,

Laboratory Manager

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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1228-1230 Isabel St; MBS Twin Rivers Svy

WorkOrder: 1701A78

#### **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

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)

### **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/25/17 10:58

**Date Prepared:** 1/25/17

**Project:** F-12279; 1228-1230 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A78
Extraction Method: SW3050B

**Analytical Method:** SW6020 **Unit:** mg/Kg

Lead Lab ID Client ID **Matrix Date Collected Instrument Batch ID** OW-1 ICP-MS2 1701A78-001A Solid 01/20/2017 133119 <u>DF</u> **Analytes** Result <u>RL</u> **Date Analyzed** Lead 41 0.50 01/26/2017 13:42 **REC (%)** Surrogates **Limits** Terbium 101 70-130 01/26/2017 13:42 Analyst(s): DVH Client ID Lab ID Matrix **Date Collected Instrument Batch ID** BR-2 1701A78-002A Solid 01/20/2017 ICP-MS2 133119 <u>DF</u> Result Date Analyzed **Analytes** <u>RL</u> 0.50 01/26/2017 14:00 Lead 2.6 1 **REC (%)** Surrogates Limits Terbium 109 70-130 01/26/2017 14:00 Analyst(s): DVH **Client ID** Lab ID Matrix **Date Collected Instrument Batch ID** 12FLVCT/M-1 1701A78-003A Solid 01/20/2017 ICP-MS2 133119 <u>RL</u> <u>DF</u> **Analytes** <u>Result</u> **Date Analyzed** Lead ND 0.50 01/26/2017 14:06 Surrogates **REC (%) Limits** Terbium 106 70-130 01/26/2017 14:06 Analyst(s): DVH Client ID Lab ID Matrix **Date Collected Instrument Batch ID** 12FLVCT/M-2 1701A78-004A Solid 01/20/2017 **ICP-MS2** 133119 Result <u>RL</u> <u>DF</u> **Analytes** Date Analyzed Lead ND 0.50 01/26/2017 14:12 **REC (%)** Surrogates **Limits** 70-130 01/26/2017 14:12 Terbium 107

Analyst(s): DVH

## **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/25/17

**Date Analyzed:** 1/25/17 - 1/26/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 1228-1230 Isabel St; MBS Twin Rivers

Svy

WorkOrder: 1701A78

**BatchID:** 133119 **Extraction Method:** SW3050B

Analytical Method: SW6020

**Unit:** mg/Kg

**Sample ID:** MB/LCS-133119

1701A98-003AMS/MSD

	QC Sur	nmary R	eport fo	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits
Lead	ND	52.2		0.50	50	-		104	75-125
Surrogate Recovery									
Terbium	500.7	540			500	10	00	108	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/M:	_	RPD Limit
Lead	55.9	57.4	50	6.816	98	101	75-12	5 2.68	20
Surrogate Recovery									
Terbium	528	525	500		106	105	70-130	0.5	51 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	6.94			6.816				1.82	-

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

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1701A78 ClientCode: SCAO

Oakland, CA 94612		WaterTra	x WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	yThirdParty	J-flag
SCA Environmental, Inc.  1 Lakeside Drive, Suite 215 Oakland, CA 94612  Cod/Grd Party:  PO:  1 Lakeside Drive, Suite 215 Oakland, CA 94612  SCA Environmental, Inc.  1 Lakeside Drive, Suite 215 Oakland, CA 94612  Date Received:  01/25/2  01/25/2	Report to:				1	Bill to:		Re	equested TAT:	5 days;
D: 0	SCA Environmental, Inc.	cc/3rd Party:	~ ~	viro.com; pgerv	asio@scae	SCA Environme	ental, Inc.	$D_{i}$	ate Received:	01/25/2017
(in a) to the contract of the	Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		•	1230 Isabel St;	MBS Twin	- ,			ate Logged:	01/25/2017

					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
1701A78-001	OW-1	Solid	1/20/2017 00:00		Α												
1701A78-002	BR-2	Solid	1/20/2017 00:00		Α												
1701A78-003	12FLVCT/M-1	Solid	1/20/2017 00:00		Α												
1701A78-004	12FLVCT/M-2	Solid	1/20/2017 00:00		A												

#### Test Legend:

1 PBMS_TTLC_S	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.



**Client Name:** 

### McCampbell Analytical, Inc.

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SCA ENVIRONMENTAL, INC.

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

F-12279; 1228-1230 Isabel St; MBS Twin Rivers Svy

#### **WORK ORDER SUMMARY**

**Project:** 

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	<b>Bottle &amp; Preservative</b>	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1701A78-001A	OW-1	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/20/2017	5 days	
1701A78-002A	BR-2	Solid	SW6020 (Lead)	1	Small Clear Plastic Container		1/20/2017	5 days	
1701A78-003A	12FLVCT/M-1	Solid	SW6020 (Lead)	1	Small Yellow Plastic Container		1/20/2017	5 days	
1701A78-004A	12FLVCT/M-2	Solid	SW6020 (Lead)	1	Small Yellow Plastic Container		1/20/2017	5 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.

Work Order: 1701A78



## CHAIN OF CUSTODY RECORD

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	Telepho									269	n	1	0,			Eff		ker El																Y 🗀
Report To: Dan I	eung				Bil	l To:	SC	A Er	viro	nme	ntal	, In	c.	W.										Ana	lysis	Req	uest							
Company: SCA I	Environme	ntal, In	c.																										-					
1 Lak	eside Dr.,	#215	Oak	land,	CA	946	12	p	gerv	asio	a)sc	aeh	s.co	m ar	nd						iers					1						- 1		
Tele: (415) 867-							dle							1		8015) MTBE		552	_		nger		_							tals			- 1	
Project #: F - 12!	279		- 0				Nan			S .				151	19	M (		64/	18.1	-	Co		ides			(AS)				me				
Project Location:	1228 - 1	230	18ABEL	51	·Pu	rcha	se O	rder	#		G	'Vô				015		(19	18 (4	ides	Ors/	s)	rbic	_	(S)	/ PN	*	**		lved			- 1	
Sampler Signatur	re: Dan Le	ung														8/17		ease	rbor	estic	rocl	cide	1 He	OCs	70/	Hs	020)	(02)		isso			- 1	
		SAMI	PLING				M	AT	RIX				ME	THO		as Gas (8021/	6	& Gr	droca	(C1 P	3's; A	Pesti	idic C	V) 09:	70 (ST	10 (PA	0.8 / 6	9 / 80	***(	for D	()			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	нсг	HNO,	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1960	PCB		
0W-1		1/20		11								П																			×			
80.2		1		1								H		1																	×		1	
12FLVC1/M-1				1		-				-		H	$\dashv$	1	Н					-		-		_		-		-			×		+	_
12 FLVC 1/M-2	-			1		-	$\vdash$	-	-	-	-	H	$\dashv$	+	-		-		_		-	_		_	-		-	-	-	$\vdash$	-	-	-	-
12FLVC1/M-2				1		_						H	-	+	-	-	-	$\vdash$				-	_			-	-	-	_	_	×	-	-	
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handling by MAI staft.	lon-disclosure	Incurs an	immediate	\$250	surch	arge o	and the	e clle	nt is su	bject	to full	lego	ıl liab	illy to	or har	m suf	fered.	Thank	k you												giore	u, ope	in uii, s	umple
*** If metals are reques	ted for water s			_				n the	chain	of cu	stody.	ther	MAI				etals	by E20	0.8.	_	_					_	OM	AFFAF	rc.	_	_		_	
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Dan Leung		17.77	1 5:30	-				7						H	EAD	SPA	CE	ABSE			_											ion li		
APP		APPROPRIATE CONTAINERSPRESERVED IN LAB																																
Relinquished By:		Date:	Time	_	Rece	ived	Ву:							P	RES	ERV	ATIC		AS	0&0	G M	1ΕΤΑ Η<2_								-				

### **Sample Receipt Checklist**

Client Name: Project Name:  WorkOrder №:	SCA Environmental, Inc. F-12279; 1228-1230 Isabel St; MBS Twin River  1701A78 Matrix: Solid	s Svy		Date and Time Received Date Logged: Received by: Logged by:	1/25/2017 10:58 1/25/2017 Jena Alfaro Jena Alfaro
Carrier:	UPS Wattix. Solid			Logged by.	Jena Aliaio
	Chain of C	Custod	(COC) Infor	rmation	
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	d by Client on COC?	Yes	✓	No 🗆	
Date and Time of	collection noted by Client on COC?	Yes	<b>✓</b>	No 🗆	
Sampler's name	noted on COC?	Yes	✓	No 🗌	
	Samp	le Rece	eipt Informat	<u>ion</u>	
Custody seals int	act on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prope	er containers/bottles?	Yes	✓	No 🗌	
Sample container	rs intact?	Yes	<b>✓</b>	No 🗌	
Sufficient sample	volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservati	on and	Hold Time (	HT) Information	
All samples recei	ved within holding time?	Yes	<b>✓</b>	No 🗆	NA 🗌
Sample/Temp Bla	ank temperature		Temp:		NA 🗹
Water - VOA vials	s have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	ecked for correct preservation?	Yes	<b>✓</b>	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>:</u>				
Total Chlorine t	ested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine to 300.1, 537, 539	ested and acceptable upon receipt for EPA 218.7, ??	Yes		No 🗆	NA <b>✓</b>
Comments:	========	==:	====	=======	=======



"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1701935 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 1231-1233 Delta St; MBS Twin Rivers Svy

**Project Received:** 01/23/2017

Analytical Report reviewed & approved for release on 01/26/2017 by:

Angela Rydelius,

Laboratory Manager

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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 1231-1233 Delta St; MBS Twin Rivers Svy

**WorkOrder:** 1701935

#### **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

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)

#### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.

## **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701935Date Received:1/23/17 14:48Extraction Method:SW3050BDate Prepared:1/23/17Analytical Method:SW6020

**Project:** F-12279; 1231-1233 Delta St; MBS Twin Rivers Svy Unit: mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	collected	Instrument	Batch ID
12FLVCT/M-1	1701935-001A	Solid	01/19/20	017	ICP-MS1	132995
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	2.8		0.50	1		01/24/2017 15:37
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
Terbium	82		70-130			01/24/2017 15:37
Analyst(s): MIG						
Client ID	Lab ID	Matrix	Date C	collected	Instrument	Batch ID
GR-1	1701935-002A	Solid	01/19/20	017	ICP-MS1	132995
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	0.98		0.50	1		01/24/2017 15:43
<u>Surrogates</u>	REC (%)		<u>Limits</u>			
Terbium	92		70-130			01/24/2017 15:43
Analyst(s): MIG						

**Matrix:** 

Soil

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

## **Quality Control Report**

Unit:

Client:SCA Environmental, Inc.WorkOrder:1701935Date Prepared:1/23/17BatchID:132995Date Analyzed:1/24/17Extraction Method:SW3050BInstrument:ICP-MS1Analytical Method:SW6020

Project: F-12279; 1231-1233 Delta St; MBS Twin Rivers Svy Sample ID: MB/LCS-132995

1701948-001AMS/MSD 1701948-001APDS

mg/Kg

	QC Sur	nmary R	eport fo	or Metals						
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LC Lir	S nits
Lead	ND	52.2		0.50	50	-		104	75	-125
Surrogate Recovery										
Terbium	475.9	528			500	95	5	106	70-	-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS Limits	SD RP	D	RPD Limit
Lead	58.5	46.6	50	8.497	100	76	75-125	22.	7,F10	20
Surrogate Recovery										
Terbium	521	391	500		104	78	70-130	28	.4,F1	20
Analyte	PDS Result		SPK Val	SPKRef Val	PDS %REC		PDS Limits			
Lead	58.2		50	8.497	99		75-125			
Analyte	DLT Result			DLTRef Val				%D		%D Limit
Lead	9.02			8.497				6.1	3	-

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

1534 Willow Pass Rd Pittsburg, CA 94565-1701

## **CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

WorkOrder: 1701935 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
Report to:				E	Bill to:		Red	quested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		cc/3rd Party: ccodemo@sca-enviro.com; SCA Environmental, Inc.							01/23/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200	ProjectNo:	F-12279; 1231-12 Rivers Svy	233 Delta St; M	IBS Twin	Oakland, CA 94 emuise@sca-id	4612 c.com;pgervasio		te Logged:	01/23/2017

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
									_							
1701935-001	12FLVCT/M-1	Solid	1/19/2017 00:00		Α											
1701935-002	GR-1	Solid	1/19/2017 00:00		Α											

#### Test Legend:

1 PBMS_TTLC_S	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.



1701935-002A GR-1

### McCampbell Analytical, Inc.

"When Quality Counts"

Solid

SW6020 (Lead)

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

1/19/2017

5 days

#### **WORK ORDER SUMMARY**

Client Name	e: SCA ENV	IRONMENTAL, INC	C.		Project:	F-12279;	1231-123	3 Delta St; M	IBS Twin Riv	ers Svy	Wor	k Order:	1701935
<b>Client Conta</b>	act: Dan Leung										Q	C Level:	LEVEL 2
Contact's En	mail: dleung@sc	a-enviro.com; pgerva	asio@scaehs.con	n	Comments	;					Date	Logged:	1/23/2017
		WaterTrax	WriteOn	EDF	Exce	I	Fax	<b></b> Email	HardCo	pyThirdParty	/ <u> </u>	J-flag	
Lab ID	Client ID	Matrix	Test Name			ontainers omposites	Bottle & l	Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOu
1701935-001A	12FLVCT/M-1	Solid	SW6020 (Lead)			1		lear Plastic ntainer		1/19/2017	5 days		

Small Clear Plastic

Container

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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CHAIN	OF	CII	OT2	DV	DEC	OPD
CHAIN	Or	-U	$\circ$	UI	KEL	$\cup$ RU

I Lakeside Dr., #215 Oakland, CA 94612 prervasio@scaehs.com and Electric Must disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangement as a result of brief, gloved, open ak, sample formal way MAI dist. Non-disclosure incur on nimodistic \$250 nuchange and the clienth subject to full legal fishilly to form undered. Thonk you for your understanding and for olowing us to work subject. Time: Received By:    Date: Time:   Date: Time:   Received By:   Date: Time:   Decilion/Name   Date: Time:   Received By:   Date: Time:   Received By:   Date: Time:   Decilion/Name   Date: Time:   Date: Time:   Received By:   Date: Time:   Decilion/Name   Date: Time:   Decilion/Name   Date: Time:   Decilion/Name   Date: Time:   Received By:   Date: Time:   Decilion/Name   Date: Time:   Decilion/Na		1534 Wil ww.mcc Telepho	llow Pa	iss Rd. / ell.com	Pitt / n	sbur nain	g, C @m	A 9	456 mp	5-17 bell	01 .cor						Geo	Trac	ARO ker E	DF [	] 1	PDF	X	EDD		Write	e On	(DW	) 🗖	EQ	uIS [		1	10 DA	Y 🗖	1
Company: SCA Environmental, Inc.  CODE MID (6 ACA SENTING COM  I Lakeside Dr., #215  Oakland, CA 94612  Derivative Scale	Report To: Dan I	eung				Ril	l To	SC	A En	viro	nme	ntal	In	c	_						-		_		Anal	lveie	Rea	nect	20					_		$\dashv$
Telle: (415) 86/79-544  E-Mail: dleung@sen-enviro.com Project Mane: M85 Mill QuyEne Project Location: [73] - [733] E-MARIX MATRIX  Project Name: M85 Mill QuyEne Sampler Signature: Dan Leung  SAMPLE ID  SAMPLE ID  Location/ Name  Date  Time: Received By:  WAA cleins MUST disclose any dangerous chemicals known to be piesen in their submitted samples in concentration. But may cause immediate harm or serious tubre headle nadangement as a result of birlet, gloved, open air, sample-heading by MAI dath. Ron-disclosure incur on immediate 5250 nuchange and the client is subject to full legal fiscility for farm undered. Thonk you by your understanding and for disording us to work sately.  PCR (  1/19			ntal. Inc	c		Dit	1 10.								100	cni	1							Τİ	Ma	1 9 313	Req	uest					Т	Т	T	$\dashv$
Tele: (415) 867-9544  E-Mail: dleung@see-enviro.com Project K: F-1927-9  Project Location: [731- 1933 DELTA & Purchase Order# Way  Sampler Signature: Dan Leung  MATRIX  METHOD PRESERVED BIO JULIA BIOLOGIA BIOLO					and	CA	9461										٠,		ΙI			LS												- 1	- 1	
PFLUCY M-1   1/19   1   X   X   X   X   X   X   X   X   X			11210	Oliki								_		_			BE		520			gene									S					
PEUCLY M-1 V/19 1 V/19 X X X X X X X X X X X X X X X X X X X															1172	9	MT		4/5	8.1)		Con		ies)			(\$1				neta			- 1		
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PEUCLY M-1 V/19 1 V/19 X X X X X X X X X X X X X X X X X X X	oumprer organica.			NI INC	П			M	ATI	RIX			Т	ME	тно	DD	8021		Gre	car	I Pe	; Ar	stic	CC	(V0	(SV	(PA)	/ 60	602	#	r Di	ر ک				
PFLUCY M-1   1/19   1   X   X   X   X   X   X   X   X   X			SAMIP	LING									1	PRE	SERV	VED	ias (	2)	38	ydro	1 (C	B's	P P	cidi	260	270	310	8.00	8.0	**(0	le fo	17				
**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious tuture health endangerment as a result of brief, gloved, open air, sample handling by MAI staft. 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 is not specified on the chain of custody, then MAI will default to metals by £200.8.  **Relinquished By:  **Date:  **I'met  **Received By:  **JAU  **Time:  **Received By:  **JAU	SAMPLE ID	Field Point	Date	Time		Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	нсг	HNO3	Other	BTEX & TPH as G	TPH as Diesel (801	Total Petroleum Oi E/B&F)	Total Petroleum H	EPA 505/ 608 / 808	EPA 608 / 8082 PC	EPA 507 / 8141 (N	EPA 515 / 8151 (A	EPA 524.2 / 624 / 8	EPA 525.2 / 625 / 8	EPA 8270 SIM / 8.	CAM 17 Metals (20	LUFT 5 Metals (20	Metals (200.8 / 602	Lab to Filter sampl analysis	LEAD (1				
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Dan Leung    1/20   6:00 P	handling by MAI staff. N	on-disclosure	incurs an i	immediate	\$250	surch	arge a	nd the	clier	nt is su	bject	to full	lega	l liab	ility fo	or har	m suff	ered.	Than	c you												glove	d, ope	en air,	sampl	е
Dan Leung 1/20 0.00 P VR HEAD SPACE ABSENT perform Florisil cleanup to meet the detection limit.  Relinquished By: Date: Time: Received By: PRESERVED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB VOAS O&G METALS OTHER HAZARDOUS:	The second secon		Date:	Time:											10	CE/tº																8 127				$\neg$
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	Relinquished By:		Date:	Time:		Rece	ived I	By:							P	RESI	ERV	ATIC		AS	0&0															

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, I F-12279; 1231-1233 [	nc. Delta St; MBS Twin Rivers	Svy		Date and Time Received Date Logged: Received by:	1/23/2017 14:48 1/23/2017 Jena Alfaro
WorkOrder №: Carrier:	1701935 UPS	Matrix: <u>Solid</u>			Logged by:	Jena Alfaro
		Chain of C	ustody	(COC) Infor	mation	
Chain of custody	present?		Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquish	ed and received?	Yes	✓	No 🗆	
Chain of custody	agrees with sample lab	els?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?		Yes	<b>✓</b>	No 🗌	
Date and Time of	of collection noted by Clie	ent on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?		Yes	<b>✓</b>	No 🗆	
		<u>Sampl</u>	e Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping contain	er/cooler?	Yes		No 🗆	NA 🗹
Shipping contain	ner/cooler in good conditi	on?	Yes	<b>✓</b>	No 🗆	
Samples in prop	er containers/bottles?		Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?		Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated te	st?	Yes	<b>✓</b>	No 🗆	
		Sample Preservation	on and	Hold Time (	HT) Information	
All samples rece	eived within holding time?	,	Yes	<b>✓</b>	No 🗆	NA 🗌
Sample/Temp B	lank temperature			Temp:		NA 🗸
Water - VOA via	ls have zero headspace	/ no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	hecked for correct prese	rvation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 5	22: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
Samples Receiv	ed on Ice?		Yes		No 🗹	
UCMR3 Sample	s:					
		pon receipt for EPA 522?	Yes		No 🗆	NA 🗹
Free Chlorine 300.1, 537, 53		oon receipt for EPA 218.7,	Yes		No 🗆	NA 🗹
=====	=====:	======	==:	====	=======	=======
Comments:						



"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1702356

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin River Svy - 360-370 Mint St.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/13/2017 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

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin River Svy - 360-370 Mint St.

**WorkOrder:** 1702356

#### **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

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)

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin River Svy - 360-370 Mint St.

**WorkOrder:** 1702356

#### **Analytical Qualifiers**

a1 sample diluted due to matrix interference

a4 reporting limits raised due to the sample's matrix prohibiting a full volume extraction.

a12 reporting limit raised due to high non-reported metals content.

h4 sulfuric acid permanganate (EPA 3665) cleanup

## **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1702356Date Received:2/6/17 9:07Extraction Method:SW3550BDate Prepared:2/6/17Analytical Method:SW8082

**Project:** F-12279; MBS Twin River Svy - 360-370 Mint St. **Unit:** mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors											
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID					
CAULK-11	1702356-002A	Solid	01/31/20	017	GC23	133723					
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed					
Aroclor1016	ND		1.0	2		02/07/2017 18:17					
Aroclor1221	ND		1.0	2		02/07/2017 18:17					
Aroclor1232	ND		1.0	2		02/07/2017 18:17					
Aroclor1242	ND		1.0	2		02/07/2017 18:17					
Aroclor1248	ND		1.0	2		02/07/2017 18:17					
Aroclor1254	ND		1.0	2		02/07/2017 18:17					
Aroclor1260	ND		1.0	2		02/07/2017 18:17					
PCBs, total	ND		1.0	2		02/07/2017 18:17					
Surrogates	REC (%)		<u>Limits</u>								
Decachlorobiphenyl	108		70-130			02/07/2017 18:17					
Analyst(s): SS			Analytical Com	ments:	a1,a4,h4						

## **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 2/6/17 9:07

**Date Prepared:** 2/6/17

**Project:** 

F-12279; MBS Twin River Svy - 360-370 Mint St.

WorkOrder:

1702356

**Extraction Method: SW3050B** 

**Analytical Method: SW6020** 

**Unit:** mg/Kg

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Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
FLVCS-3	1702356-001A	Solid	01/31/2017 ICP-MS3	133762
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed
Lead	9.0		3.7 5	02/09/2017 03:20
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Terbium	107		70-130	02/09/2017 03:20
Analyst(s): DB			Analytical Comments: a12	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
PK-1	1702356-003A	Solid	01/31/20	17 ICP-MS3	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Lead	2.8		0.50	1	02/09/2017 14:51
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Terbium	107		70-130		02/09/2017 14:51
Analyst(s): DB					

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
WLPL-4	1702356-004A	Solid	01/31/20	17 ICP-MS3	133762
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Lead	14		0.50	1	02/09/2017 15:15
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
Terbium	106		70-130		02/09/2017 15:15
Analyst(s): DB					

NR

NR

## **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702356Date Prepared:2/6/17BatchID:133723Date Analyzed:2/7/17Extraction Method:SW3550BInstrument:GC23Analytical Method:SW8082

Matrix: Soil Unit: mg/kg

NR

NR

**Project:** F-12279; MBS Twin River Svy - 360-370 Mint St. **Sample ID:** MB/LCS-133723

1702308-009AMS/MSD

Analyte	МВ	LCS		RL	SPK	М	B SS I	LCS	LCS
	Result	Result			Val	%l	REC '	%REC	Limits
Aroclor1016	ND	0.128		0.050	0.15	-	8	35	70-130
Aroclor1221	ND	-		0.050	-	-		-	-
Aroclor1232	ND	-		0.050	-	-		•	-
Aroclor1242	ND	-		0.050	-	-	-		-
Aroclor1248	ND	-		0.050	-	-	-		-
Aroclor1254	ND	-		0.050	-	-	-		-
Aroclor1260	ND	0.125		0.050	0.15	-	8	33	70-130
PCBs, total	ND	-		0.050	-	-		•	-
Surrogate Recovery									
Decachlorobiphenyl	0.03954	0.0357			0.050	79	·	71	70-130
Analyte	MS	MSD	SPK	SPKRef	MS	MSD	MS/MS	D RPD	
	Result	Result	Val	Val	%REC	%REC	Limits		Limit
Aroclor1016	NR	NR		ND<0.25	NR	NR	-	NR	
Aroclor1260	NR	NR		ND<0.25	NR	NR	-	NR	

NR

Decachlorobiphenyl

## **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702356Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

Matrix:SoilUnit:mg/KgProject:F-12279; MBS Twin River Svy - 360-370 Mint St.Sample ID:MB/LCS-133762

1702364-001AMS/MSD

	QC Summary Report for Metals														
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits						
Lead	ND	50.9		0.50	50	-		102	75-125						
Surrogate Recovery															
Terbium	510.6	526			500	10	)2	105	70-130						
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit	-	D RPD Limit						
Lead	53.9	57.6	50	7.809	92	100	75-12	25 6.7	6 20						
Surrogate Recovery															
Terbium	522	530	500		104	106	70-13	30 1.	54 20						
Analyte	DLT Result			DLTRef Val				%E	) %D Limit						
Lead	7.74			7.809				8.0	84 -						

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

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1702356 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
Report to:				E	Bill to:		Re	quested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:	dleung@sca-envi	ro.com; pgerv	asio@scae	Accounts Payal SCA Environme 1 Lakeside Driv	ental, Inc.	Da	ate Received:	02/06/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200	ProjectNo:	F-12279; MBS Tv Mint St.	vin River Svy -	360-370	Oakland, CA 94 emuise@sca-io			te Logged:	02/06/2017

								Re	quested	l Tests (	See leg	end bel	ow)			
Lab ID	Client ID	Matrix	Collection Date I	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1702356-001	FLVCS-3	Solid	1/31/2017 00:00			Α										
1702356-002	CAULK-11	Solid	1/31/2017 00:00		Α											
1702356-003	PK-1	Solid	1/31/2017 00:00			Α										
1702356-004	WLPL-4	Solid	1/31/2017 00:00			Α										

#### Test Legend:

1	8082_PCB_Solid	2 PBMS_TTLC_S	3	4
5		6	7	8
9		10	11	12

Prepared by: Maria Venegas

#### **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**

Lab ID	Client ID	Matı	rix Test Name			ontainers Bottle omposites	& Preservative	De- chlorinated	Collection Date & Time	TAT Sediment Content	t Hold SubOu
		WaterTrax	WriteOn	EDF	Excel	∏Fax	<b>y</b> Email	HardCo	pyThirdParty	J-flag	
Contact's E	Email: dleung@	sca-enviro.com; pge	ervasio@scaehs.co	om	<b>Comments:</b>					Date Logged:	2/6/2017
<b>Client Cont</b>	tact: Dan Lei	ıng								QC Level:	LEVEL 2
Client Nam	ie: SCA EN	IVIRONMENTAL, I	INC.		Project:	F-122/9; MBS	I win River Svy	- 360-370 Mii	nt St.	Work Order:	1/02356

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	<b>Bottle &amp; Preservative</b>	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1702356-001A	FLVCS-3	Solid	SW6020 (Lead)	1	Yellow Plastic		1/31/2017	5 days	
1702356-002A	CAULK-11	Solid	SW8082 (PCBs Only)	1	White Plastic		1/31/2017	5 days	
1702356-003A	PK-1	Solid	SW6020 (Lead)	1	White Plastic		1/31/2017	5 days	
1702356-004A	WLPL-4	Solid	SW6020 (Lead)	1	White Plastic		1/31/2017	5 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.

1702356



## McCampbell Analytical, Inc.

CHAIN	OF	CUSTODY	RECORD
		0001001	IL COIL

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Report To: Dan	Leung				Bil	l To:	SC	4 En	viro	nme	ental	, In	c.											Ana	lysis	Req	uest							
Company: SCA	Environme	ntal, In	ic.					2000	EMO	00	CL-	NA	180	COL	1																			
	keside Dr.,		Oak	land	, CA	9461			gerv												ers											- 1		
Tele: (415) 867-	9544				E-I	Mail:	dle	ing(	gsca-	-env	iro.	com				LBE		552(	_		ıgen		_							als		- 1		
Project #: F-12	279				Pre	ject	Nan	ne: I	MBO	ò.				1 ELL	19	) M		64/	18.1	-	Col		ides			(AS)				met				
Project Location	: 360 - 37	0 M	111 6	(.	Pu	rcha	se O	rder	#		C	(Vi				8015 ) MTBE		91)	18 (4	ides	ors/	(S	rbic	_	(\$)	/ PN	4 4 4	***		lved		- 1		
Sampler Signatu	re: Dan Le	ung														11/8		ease	rbor	estic	rocl	cide	1 He	OCs	700	Hs	020)	(02)		isso				
		SAMI	PLING				M	ATI	RIX			,		THO		s (802		& Gr	froca	(CI P	's; A	Pesti	die C	V) 08	S) 02	0 (P.	9/8'	9 / 8	***	for D	5			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge			HNO,		BTEX & TPH as Gas	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP	EPA 515 / 8151 (Aci	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFF 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
FLVC6 - 3	1	1/31		1								X	7																		X		1	
CAULK - II		1		1								x		1																		X		
DK-1				1								X	$\exists$																		X		+	-
WIPL-4		1		1	-	$\vdash$	$\dashv$			-	-	X	-				_		-			-				-					x	$\dashv$	+	-
WITE-4		<b>V</b>		Ľ																											~			
																																	+	+
**MAI clients MUST dis- handling by MAI staff.	Non-disclosure	Incurs an	immediate	e \$250	surch	arge a	nd the	e ciler	nt Is su	bject	to ful	lega	I liab	ility fo	or har	m suf	lered.	Than	k you												glove	d, ope	n alr, s	ample
Relinquished By: Dan Leung		Date;	Time 5:30	· p	Rece	ived I	P	5						G H	OOI EAD	CO SPA	NDIT	ION	NT_	-					The second second	PM d	etecti		hit re			thoriz		
Relinquished By:		Date: 2/6/1	Time: Received By:							PPR	OPR	ATE	CON LAE	ITAL		S	_																	
Relinquished By:		Date:	Time	: ,	Reco	ived I	Ву:							P	RES	ERV.	ATIO		AS	0&0		META H<2_		OTI	IER	I	IAZA	RDO	US:					

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; MBS Twin River Svy - 360-370 Mint S	t.		Date and Time Received Date Logged: Received by:	2/6/2017 09:07 2/6/2017 Maria Venegas
WorkOrder №: Carrier:	<b>1702356</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Maria Venegas
	Chain of C	ustod	y (COC) Infor	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗆	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	ed by Client on COC?	Yes	<b>✓</b>	No 🗆	
Date and Time o	f collection noted by Client on COC?	Yes	•	No 🗌	
Sampler's name	noted on COC?	Yes	<b>✓</b>	No 🗆	
	<u>Samp</u> i	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prope	er containers/bottles?	Yes	<b>✓</b>	No 🗆	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	•	No 🗆	
	Sample Preservation	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp Bl	lank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable up	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples Total Chlorine	s: tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA <b>✓</b>
Free Chlorine 1 300.1, 537, 539	tested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
Comments:	=========	:	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1702351

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** 

Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; MBS Twin Rivers Svy - 380-382 Dos Rios

Blvd.

**Project Received:** 02/06/2017

Analytical Report reviewed & approved for release on 02/10/2017 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.



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## **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; MBS Twin Rivers Svy - 380-382 Dos Rios Blvd.

WorkOrder: 1702351

#### **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

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)

## **Analytical Report**

**Client:** SCA Environmental, Inc.

1702351

**Date Received:** 2/6/17 9:07

**Extraction Method: SW3050B** 

**Date Prepared: 2/6/17** 

**Analytical Method:** SW6020

WorkOrder:

**Project:** 

F-12279; MBS Twin Rivers Svy - 380-382 Dos Rios

Unit:

mg/Kg

Blvd.

		Lead				
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument	Batch ID
12FLVCT/M-1	1702351-001A	Solid	02/02/20	17	ICP-MS1	133735
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	ND		0.50	1		02/08/2017 20:56
Surrogates	REC (%)		<u>Limits</u>			
Terbium	98		70-130			02/08/2017 20:56
<u>Analyst(s):</u> DVH						
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument	Batch ID
FLVCS-3	1702351-002A	Solid	02/02/20	17	ICP-MS1	133735
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	20		0.50	1		02/08/2017 02:38
Surrogates	REC (%)		<u>Limits</u>			
Terbium	101		70-130			02/08/2017 02:38
Analyst(s): DVH						
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument	Batch ID
WLPL-4	1702351-003A	Solid	02/02/20	17	ICP-MS1	133762
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	200		0.50	1		02/08/2017 02:45
Surrogates	REC (%)		<u>Limits</u>			
Terbium	83		70-130			02/08/2017 02:45
<u>Analyst(s):</u> DVH						
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument	Batch ID
BE-1	1702351-004A	Solid	02/02/20	17	ICP-MS1	133762
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	43		0.50	1		02/08/2017 02:51
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
Terbium	100		70-130			02/08/2017 02:51
Analyst(s): DVH						

## **Quality Control Report**

 Client:
 SCA Environmental, Inc.
 WorkOrder:
 1702351

 Date Prepared:
 2/6/17
 BatchID:
 133735

 Date Analyzed:
 2/6/17 - 2/7/17
 Extraction Method:
 SW3050F

Date Analyzed:2/6/17 - 2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020Matrix:SoilUnit:mg/Kg

**Project:** F-12279; MBS Twin Rivers Svy - 380-382 Dos Rios Sample ID: MB/LCS-133735

Blvd. 1702313-002AMS/MSD

	QC Sur	mmary R	eport fo	or Metals						
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %RE(		LCS Limits
Lead	ND	51.5		0.50	50	-		103		75-125
Surrogate Recovery										
Terbium	551.8	571			500	11	10	114		70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit	_	RPD	RPD Limit
Lead	83.0	82.2	50	24.49	117	116	75-12	25	0.908	20
Surrogate Recovery										
Terbium	593	626	500		119	125	70-13	30	5.38	20
Analyte	DLT Result			DLTRef Val					%D	%D Limit
Lead	24.5			24.49					0.0408	3 20

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

**Matrix:** 

Soil

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mg/Kg

## **Quality Control Report**

Client:SCA Environmental, Inc.WorkOrder:1702351Date Prepared:2/6/17BatchID:133762Date Analyzed:2/7/17Extraction Method:SW3050BInstrument:ICP-MS3Analytical Method:SW6020

**Project:** F-12279; MBS Twin Rivers Svy - 380-382 Dos Rios **Sample ID:** MB/LCS-133762

Blvd. 1702364-001AMS/MSD

Unit:

	QC Sur	nmary R	eport f	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	LCS Limits
Lead	ND	50.9		0.50	50	-		102	75-125
Surrogate Recovery									
Terbium	510.6	526			500	10	)2	105	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N	_	D RPD Limit
Lead	53.9	57.6	50	7.809	92	100	75-12	25 6.7	6 20
Surrogate Recovery									
Terbium	522	530	500		104	106	70-1	30 1.	54 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	7.74			7.809				0.8	84 -

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1702351 ClientCode: SCAO

(>20) 202 >202	☐ WaterTrax	k ∏WriteOn	□EDF	□Excel	<b>■ EQuIS</b>	<b>∠</b> Email	∏HardCor	oy □ThirdParty	□ J-flag
	VVatorilax	VVIIICOII		LXCCI		Linaii			o-nag
Report to:				1	Bill to:		R	Requested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215	Email: cc/3rd Party: PO:	dleung@sca-env	iro.com; pgerv	asio@scae	Accounts Payal SCA Environme 1 Lakeside Driv	ental, Inc.	I	Date Received:	02/06/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200	ProjectNo:	F-12279; MBS TV Dos Rios Blvd.	vin Rivers Svy	- 380-382	Oakland, CA 94 emuise@sca-ic			Date Logged:	02/06/2017

								Re	questec	l Tests (	See leg	end bel	ow)			
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1702351-001	12FLVCT/M-1	Solid	2/2/2017 00:00		Α											
1702351-002	FLVCS-3	Solid	2/2/2017 00:00		Α											
1702351-003	WLPL-4	Solid	2/2/2017 00:00		Α											
1702351-004	BE-1	Solid	2/2/2017 00:00		Α											

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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.



1702351-004A BE-1

## McCampbell Analytical, Inc.

Solid

SW6020 (Lead)

"When Quality Counts"

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2/2/2017

5 days

#### **WORK ORDER SUMMARY**

Client Name	SCA ENV	IRONMENTAL, IN	C.		Project:	F-12279;	MBS Twin	Rivers Svy	- 380-382 Do	s Rios Blvd.	Wor	k Order:	1702351	
Client Conta	act: Dan Leung	5									Q	C Level:	LEVEL 2	
Contact's Eı	mail: dleung@sc	ea-enviro.com; pgerva	asio@scaehs.cor	n	<b>Comments:</b>						Date	Logged:	2/6/2017	
		☐ WaterTrax	WriteOn	EDF	Excel		Fax [	<b>y</b> Email	HardCo	pyThirdPart	yJ	l-flag		
Lab ID	Client ID	Matrix	Test Name			ntainers omposites	Bottle & Pro	eservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold Sub	Out
1702351-001A	12FLVCT/M-1	Solid	SW6020 (Lead)			1	Yellow I	Plastic		2/2/2017	5 days			
1702351-002A	FLVCS-3	Solid	SW6020 (Lead)			1	Yellow I	Plastic		2/2/2017	5 days			
1702351-003A	WI DI _4	Solid	SW6020 (Lead)			1	White P	lactic		2/2/2017	5 days			

White Plastic

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: Dan I	Leung				Bil	l To:	SC	A Er	iviro	nme	enta	, In	c.											Ana	lysis	Req	uest							
Company: SCA I	Environme	ntal, In	c.											0																				
1 Lak	eside Dr.,	#215	Oak	land	, CA	9461	12	р	gerv	asio	@sc	aeh	s.co	ma	nd						iers													
Tele: (415) 867-9						Mail:										TBF		552	_		nger					100				tals		- 1	- 1	
Project #: F-127						ject				Ĝ.	MI	N	RI	1 EL	25	M (	-	94/	18.1	-	C0		ides			(AS)				me			- 1	
Project Location:	380 - 38	35 DO	18 BIC	16		rcha	se O	rder	#		0	176	1			015		91) :	1s (4	ides	ors	(8)	rbic	(	(\$	/PN	*	*		Ived		- 1	- 1	
Sampler Signatur	e: Dan Le	ung	В	LVD												21/8		ease	rbor	estic	rocl	cide	1 He	ocs	70/	Hs	020	(07)		isso			- 1	
		SAMI	PLING				M	AT	RIX			1	ME PRE	THO		Gas (8021/ 8015 ) MTBE	2)	I& Gr	droca	(CIP	B's; A	P Pesti	idic C	(V)	10 (SI	10 (PA	0.8 / 6	09 / 87	)***	e for D	3			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO,	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
12FLVC1/M-1		2/2		1								×																			×		$\forall$	
FLVCB - 3		1		1								X																			X			
WLPL-4				1								X																			X			
BE-1		1		1								x																-			x			+
DL 1		-		-												-	-										-		-		-		+	+
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**MAI clients MUST disc handling by MAI staff. N	lon-disclosure	Incurs an	Immediate	e \$250	surch	arge a	nd the	clle	nt Is su	bject	to ful	lego	ıl liab	ility to	or har	m suf	ered.	Than	k you												glove	d, ope	en alt,	sample
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Dan Leung		2/2	5:30	P		1	P	5									NDIT	ION	VT	-											d. Au			
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Relinquished By:		Date:	Time	:	Rece	ived I	By:							P	RES	ERV.	ATIO		AS	0&0		ΛΕΤΑ H<2_	LS	ОТІ	HER	- I	HAZA	RDC	US:					

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; MBS Twin Rivers Svy - 380-382 Dos F	Rios Bl	vd.	Date and Time Received Date Logged:	2/6/2017 09:07 2/6/2017
WorkOrder №: Carrier:	<b>1702351</b> Matrix: <u>Solid</u> <u>UPS</u>			Received by: Logged by:	Maria Venegas Maria Venegas
	Chain of C	ustody	/ (COC) Info	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗆	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗌	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	d by Client on COC?	Yes	<b>✓</b>	No 🗆	
Date and Time of	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗆	
Sampler's name	noted on COC?	Yes	✓	No 🗆	
	Sampl	le Rece	eipt Informat	<u>ion</u>	
Custody seals int	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in prope	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	rs intact?	Yes	<b>✓</b>	No 🗌	
Sufficient sample	e volume for indicated test?	Yes	✓	No 🗆	
	Sample Preservation	on and	Hold Time (	HT) Information	
All samples recei	ived within holding time?	Yes	<b>✓</b>	No 🗆	NA $\square$
Sample/Temp Bla	ank temperature		Temp:		NA 🗹
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗆	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	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 Total Chlorine	s: tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA <b>✓</b>
Free Chlorine t 300.1, 537, 539	ested and acceptable upon receipt for EPA 218.7, 9?	Yes		No 🗆	NA 🗹
		<u></u> -	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701D21 **Amended:** 02/24/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 431-433 Mint St; MBS Twin Rivers Svy

**Project Received:** 01/31/2017

Analytical Report reviewed & approved for release on 02/06/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

"When Quality Counts"

## **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 431-433 Mint St; MBS Twin Rivers Svy

WorkOrder: 1701D21

#### **Glossary Abbreviation**

%D Serial Dilution Percent Difference

95% Confident Interval 95% Interval

**Dilution Factor** DF

(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

Relative Difference RD

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**

В analyte detected in the associated Method Blank and in the sample

## **Analytical Report**

Client:SCA Environmental, Inc.WorkOrder:1701D21Date Received:1/31/17 9:19Extraction Method:SW3050BDate Prepared:1/31/17Analytical Method:SW6020

**Project:** F-12279; 431-433 Mint St; MBS Twin Rivers Svy Unit: mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	Collected	Instrument	Batch ID
GR-1	1701D21-001	A Solid	01/30/20	017	ICP-MS2	133384
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	18	В	5.0	10		01/31/2017 23:38
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	112		70-130			01/31/2017 23:38
Analyst(s): DVH						

1701D21

## **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/30/17

**Date Analyzed:** 1/31/17 - 2/1/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 431-433 Mint St; MBS Twin Rivers Svy

**BatchID:** 133384 **Extraction Method:** SW3050B

WorkOrder:

**Analytical Method:** SW6020

 Unit:
 mg/Kg

 Sample ID:
 MB/LCS-133384

1701D13-003AMS/MSD

	QC Sur	nmary R	eport fo	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LCS Limits
Lead	0.7838	51.2		0.50	50	-	,	102	75-125
Surrogate Recovery									
Terbium	481	522			500	96	) ·	104	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS Limits	D RPD	) RPD Limit
Lead	63.1	63.1	50	9.790	107	107	75-125	0	20
Surrogate Recovery									
Terbium	553	550	500		111	110	70-130	0.5	80 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	10.0			9.790				2.15	; -

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

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

## CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701D21 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b></b> Email	HardC	;ору [	ThirdParty	J-flag
Report to:					Bill to:			Reques	sted TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		dleung@sca-envi ccodemo@sca-ei		asio@scae	Accounts Paya SCA Environme 1 Lakeside Driv	ental, Inc.		Date R	Received:	01/31/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; 431-433 Rivers Svy	3 Mint St; MBS	Twin	Oakland, CA 94 emuise@sca-io			Date L	ogged:	01/31/2017
						Poguested 7	Footo (Soo los	and hal	ow)	

Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12	
1701D21-001	GR-1	Solid	1/30/2017 00:00		Α												

#### **Test Legend:**

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

Prepared by: Maria Venegas

#### **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	SCA E	NVIRONMENTAL, INC	C.		Project:	F-12279;	431-433 Mint	t St; MBS	Twin Rivers	Svy	Wor	k Order:	1701D21	
<b>Client Conta</b>	act: Dan Le	ung									Q	C Level:	LEVEL 2	
Contact's En	nail: dleung(	@sca-enviro.com; pgerva	asio@scaehs.co	m	Comments	:					Date	Logged:	1/31/2017	
		WaterTrax	WriteOn	□EDF	Exce		Fax 🗸	]Email	HardCo	pyThirdParty		l-flag		
Lab ID	Client ID	Matrix	Test Name			ontainers omposites	Bottle & Prese		De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOu	ıt
1701D21-001A	GR-1	Solid	SW6020 (Lead	)		1	White Plas	stic		1/30/2017	5 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.



CHAIN	OF	CHST	YOO	RECO	RD
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														3								-										Clair	n #	
Report To: Dan	Leung				Bil	I To:	SC	A Ei	iviro	nme	enta	l, In	c.											Ana	lysis	Req	uest							
Company: SCA	Environme	ntal, In	c.					CC	ODEN	100	9 60	A - 1	EHV	180.	CON	1																		
1 Lal	keside Dr.,	#215	Oak	land	, CA	9461	12	p	gerv	asio	@sc	aeh	s.co	m a	nd	1 - 3 1					iers											- 1		
Tele: (415) 867-						Mail:										TBE		552			nger		_							tals				
Project #: F-12						ject				Ś	M	M		1 EL	25	) M		964/	118.1	(S	/ C0		cides			(AAs)				l me				
Project Location			IN1 BY	(	Pu	rcha	se O	rder	#		- (	176	1			8015) MTBE		e (16	ns (4	cide	lors	(SS	erbi	8	Zs)	/ P!	***	* * *		lvec		- 1		
Sampler Signatu	re: Dan Le	ung		_								_						reas	rpo	Pesti	roc	icid	H	0C	VOC	AHS	020	020)		Disse		- 1		
		SAME	PLING				M	AT	RIX			,		SERV		as Gas (8021/	6	8 G	droca	(CI)	8's; /	Pest	idic (	A) 09	S) 02	10 (P.	0.8 / 6	9/8/	***(	for l	5			
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO,	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PC	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1910	PCB		
GR-1		1/30		1								X		1																	X			
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	1											Ц																						
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**MAI clients MUST disc handling by MAI staff.	Non-disclosure	Incurs an	immediate	\$250	surch	arge a	nd the	e clle	nt Is su	bject	to ful	lego	ıl liab	ility fo	or har	m suf	lered.	Than	k you												glove	d, ope	n alr, so	imple
*** If metals are reques Relinquished By:  Dan Leung	ited for water s	Date;	Time:	: 1		ived I	èv.	P		of CU	stody	ther	MAI	G	CE/t°	CO	NDIT	TION_ ABSE								PM d		on lin	nit re			thoriz		
Relinquished By:		Bate:	7 091		Rece	ived H				ECH PPR	OPR	IATE	TED I	N LA		_	_		3															
Relinquished By:		Date:	Time	_	Rece	ived I	By:					RES	ERV	ATIO		AS	0&0		ИЕТ <i>А</i> Н<2_		ОТІ	HER	F	IAZA	RDC	US:								

### **Sample Receipt Checklist**

Client Name: Project Name:	SCA Environmental, Inc. F-12279; 431-433 Mint St; MBS Twin Rivers Sv	у		Date and Time Received Date Logged: Received by:	1/31/2017 09:19 1/31/2017 Maria Venegas
WorkOrder №: Carrier:	<b>1701D21</b> Matrix: <u>Solid</u> <u>UPS</u>			Logged by:	Maria Venegas
	Chain of C	ustod	/ (COC) Infor	rmation	
Chain of custody	present?	Yes	<b>✓</b>	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	<b>✓</b>	No 🗆	
Chain of custody	agrees with sample labels?	Yes	<b>✓</b>	No 🗆	
Sample IDs note	d by Client on COC?	Yes	<b>✓</b>	No 🗆	
Date and Time o	f collection noted by Client on COC?	Yes	<b>✓</b>	No 🗌	
Sampler's name	noted on COC?	Yes	•	No 🗆	
	<u>Samp</u>	le Rece	eipt Informat	<u>ion</u>	
Custody seals in	tact on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping contain	er/cooler in good condition?	Yes	•	No 🗌	
Samples in prop	er containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containe	ers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample	e volume for indicated test?	Yes	<b>✓</b>	No 🗆	
	Sample Preservati	on and	Hold Time (	HT) Information	
All samples rece	ived within holding time?	Yes	<b>✓</b>	No 🗌	NA 🗌
Sample/Temp Bl	ank temperature		Temp:		NA 🗹
Water - VOA via	ls have zero headspace / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	<b>✓</b>	No 🗌	
pH acceptable u	pon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🗹	
UCMR3 Samples Total Chlorine	s: tested and acceptable upon receipt for EPA 522?	Yes		No 🗆	NA <b>✓</b>
	tested and acceptable upon receipt for EPA 218.7,			No 🗆	NA 🗹
Comments:	========	==:	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701D22 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 451-453 Mint St; MBS Twin Rivers Svy

**Project Received:** 01/31/2017

Analytical Report reviewed & approved for release on 02/06/2017 by:

Angela Rydelius,

Laboratory Manager

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### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 451-453 Mint St; MBS Twin Rivers Svy

WorkOrder: 1701D22

#### **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

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)

#### **Analytical Qualifiers**

B analyte detected in the associated Method Blank and in the sample

## **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/31/17 9:19

**Date Prepared:** 1/31/17

**Project:** F-12279; 451-453 Mint St; MBS Twin Rivers Svy

WorkOrder: 1701D22

**Extraction Method:** SW3050B

**Analytical Method:** SW6020

**Unit:** mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
12FLVCT/M-1	1701D22-001	A Solid	01/30/20	)17	ICP-MS2	133384
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	2.1	В	0.50	1		01/31/2017 23:26
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
Terbium	110		70-130			01/31/2017 23:26
Analyst(s): DVH						
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
BE-1	1701D22-002A	A Solid	01/30/20	)17	ICP-MS2	133384
<u>Analytes</u>	Result	Qualifiers	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	6.6	В	0.50	1		01/31/2017 23:32
Surrogates	REC (%)		<u>Limits</u>			
Terbium	112		70-130			01/31/2017 23:32
Analyst(s): DVH						

## **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/30/17

**Date Analyzed:** 1/31/17 - 2/1/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 451-453 Mint St; MBS Twin Rivers Svy

**WorkOrder:** 1701D22 **BatchID:** 133384

Extraction Method: SW3050B

Analytical Method: SW6020

**Unit:** mg/Kg

Sample ID: MB/LCS-133384

1701D13-003AMS/MSD

	QC Sur	mmary R	eport f	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val			CS 6REC	LCS Limits
Lead	0.7838	51.2		0.50	50	-	1	02	75-125
Surrogate Recovery									
Terbium	481	522			500	96	5 1	04	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSI Limits	D RPD	RPD Limit
Lead	63.1	63.1	50	9.790	107	107	75-125	0	20
Surrogate Recovery									
Terbium	553	550	500		111	110	70-130	0.58	30 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	10.0			9.790				2.15	-

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

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# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701D22 ClientCode: SCAO

(723) 232 7202									
	☐ WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCopy	ThirdParty	J-flag
Report to:					Bill to:		Re	quested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		dleung@sca-envi ccodemo@sca-ei		asio@scae	Accounts Paya SCA Environmon 1 Lakeside Driv	ental, Inc.	Da	ite Received:	01/31/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200	-	F-12279; 451-453 Rivers Svy	B Mint St; MBS	Twin	Oakland, CA 94 emuise@sca-id			te Logged:	01/31/2017
						Requested 1	Tests (See legend	d below)	

Lab ID	Client ID	Matrix	Collection Date	Hold	1	2		3	4	5	6	7	8	9	10	11	12
1701D22-001	12FLVCT/M-1	Solid	1/30/2017 00:00		Α												
1701D22-002	BE-1	Solid	1/30/2017 00:00		Α												
				_			,	U.		<u>'</u>					I.		

#### Test Legend:

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

Prepared by: Maria Venegas

#### **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.



"When Quality Counts"

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

#### **WORK ORDER SUMMARY**

Client Name:	: SCA ENVI	RONMENTAL, INC	C.		Project:	F-12279;	451-453 M	int St; MBS	Twin Rivers	Svy	Wor	k Order:	1701D22	
Client Conta	ct: Dan Leung										Q	C Level:	LEVEL 2	
Contact's En	nail: dleung@sca	a-enviro.com; pgerva	asio@scaehs.con	1	<b>Comments:</b>	;					Date	Logged:	1/31/2017	
Lab ID	Client ID	□ WaterTrax  Matrix	WriteOn  Test Name	□ EDF		ontainers	Fax  Bottle & Pi	<b>✓</b> Email reservative	20	Collection Date	TAT		Hold Sub	Out
					/Co	omposites			chlorinated	& Time		Content		
1701D22-001A	12FLVCT/M-1	Solid	SW6020 (Lead)			1	Yellow	Plastic		1/30/2017	5 days	·		
1701D22-002A	BE-1	Solid	SW6020 (Lead)			1	White 1	Plastic		1/30/2017	5 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.

1701022



# McCampbell Analytical, Inc.

CHAIN OF	CUST	ODY	REC	ORD
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Report To: Dan	Leung				Bil	l To:	SC	A Er	iviro	nme	enta	l, In	ıc.											Anal	ysis	Req	uest								1
Company: SCA	Environme	ntal, In	c.					000	DEN	10 @	00	1-E	ועעו	RD .	MOS																				
1 Lal	ceside Dr.,	#215	Oak	land	, CA	946	12	р	gerv	asio	@sc	aeh	s.co	m a	nd			_			ers														1
Tele: (415) 867-	9544					Mail:										LBE		552(	_		ıgen		_							als					1
Project #: F-12						oject				S				151	26	M (		64/	18.1	_	CO		ides			As)				met			- 1		1
Project Location	: 451-45	3 M	IN1 G	1.	Pu	rcha	se O	rder	#		0	<b>'V</b> 6	1			8015) MTBE		91)	15 (4	ides	ors/	(\$	rbic	_	(S)	/ PN	*	**		lved					-
Sampler Signatu	re: Dan Le	ung														11/8		ease	rbon	estic	rock	cide	He	CS	70C	Hs	120)	20)*		isso			- 1		1
SAMPLING MATRIX MET PRESI						Gas (8021/	2)	1& Gr	droca	I (CI P	B's; A	P Pesti	cidic C	V) 092	270 (S)	10 (PA	0.8 / 6	0.8 / 60	***(	e for D	3														
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	HCL	HNO,	Other	BTEX & TPH as G	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFF 5 Metals (200.8 / 6020)"""	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1991C	PCB			
12FLVCY/M-1		1/30		1								x		T																	x			+	1
BE-1		4		1							1	x																			X				
**MAI clients MUST disc handling by MAI staff.	Non-disclosure	Incurs an	Immediate	\$250	surch	arge o	ind the	e clie	nt is su	bject	to ful	lego	al liab	ility to	or har	m suff	ered.	Than	k you												glove	ed, ope	en air,	sample	
Relinquished By:  Dan Leung  Relinquished By:	ted for water s	Date:	Time	P	Rece	ived I	Sy:	2	5				MAI	G H D A	CE/P OOD EAD ECH PPR	SPA LOR	NDITI CE A INA		NT_ N LA		- 3					PM d		on lir	nit re			thoriz			
Relinquished By: Date: Time: Received By:			P	RESI	ERV	ATIO		AS	0&0	G M	ÆTΑ H<2_	LS	ОТІ	IER	- F	IAZA	RDC	OUS:																	

### **Sample Receipt Checklist**

Client Name: SCA Environmental, Inc.  Project Name: F-12279; 451-453 Mint St; MBS Twin Rivers Sv  WorkOrder №: 1701D22 Matrix: Solid	ry		Date and Time Received Date Logged: Received by: Logged by:	1/31/2017 09:19 1/31/2017 Maria Venegas Maria Venegas
Carrier: <u>UPS</u>				
Chain of C	ustod	(COC) Infor	<u>rmation</u>	
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	<b>✓</b>	No 🗆	
Date and Time of collection noted by Client on COC?	Yes	✓	No 🗌	
Sampler's name noted on COC?	Yes	<b>✓</b>	No 🗆	
Samp	le Rece	eipt Informat	<u>ion</u>	
Custody seals intact on shipping container/cooler?	Yes		No 🗆	NA 🗹
Shipping container/cooler in good condition?	Yes	<b>✓</b>	No 🗌	
Samples in proper containers/bottles?	Yes	<b>✓</b>	No 🗌	
Sample containers intact?	Yes	<b>✓</b>	No 🗆	
Sufficient sample volume for indicated test?	Yes	✓	No 🗆	
Sample Preservati	on and	Hold Time (	HT) Information	
All samples received within holding time?	Yes	<b>✓</b>	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	<b>✓</b>	No 🗌	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
Samples Received on Ice?	Yes		No 🗹	
UCMR3 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 🗹
	==:	====	=======	=======



"When Quality Counts"

# **Analytical Report**

**WorkOrder:** 1701D23 **Amended:** 02/22/2017

**Report Created for:** SCA Environmental, Inc.

1 Lakeside Drive, Suite 215

Oakland, CA 94612

**Project Contact:** Dan Leung

**Project P.O.:** 

**Project Name:** F-12279; 560-562 Eliza St; MBS Twin Rivers Svy

**Project Received:** 01/31/2017

Analytical Report reviewed & approved for release on 02/06/2017 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.



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CA ELAP 1644 ♦ NELAP 4033ORELAP

### **Glossary of Terms & Qualifier Definitions**

**Client:** SCA Environmental, Inc.

**Project:** F-12279; 560-562 Eliza St; MBS Twin Rivers Svy

WorkOrder: 1701D23

#### **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

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)

#### **Analytical Qualifiers**

B analyte detected in the associated Method Blank and in the sample

## **Analytical Report**

**Client:** SCA Environmental, Inc.

**Date Received:** 1/31/17 9:19

**Date Prepared:** 1/31/17

**Project:** F-12279; 560-562 Eliza St; MBS Twin Rivers Svy

WorkOrder: 1701D23

**Extraction Method:** SW3050B

**Analytical Method:** SW6020

**Unit:** mg/Kg

		Lead				
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
OW-1	1701D23-001	A Solid	01/25/20	)17	ICP-MS2	133384
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	290	В	5.0	10		01/31/2017 22:49
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	93		70-130			01/31/2017 22:49
Analyst(s): DVH						
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
12FLVCT/M-1	1701D23-002/	A Solid	01/25/20	)17	ICP-MS2	133384
<u>Analytes</u>	Result	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	0.53	В	0.50	1		02/01/2017 13:20
Surrogates	REC (%)		<u>Limits</u>			
Terbium	102		70-130			02/01/2017 13:20
Analyst(s): BBO						
Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
FLVCS-3	1701D23-003/	A Solid	01/25/20	)17	ICP-MS2	133384
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>DF</u>		Date Analyzed
Lead	21	В	5.0	10		01/31/2017 23:01
Surrogates	REC (%)		<u>Limits</u>			
Terbium	111		70-130			01/31/2017 23:01
Analyst(s): DVH						

## **Quality Control Report**

**Client:** SCA Environmental, Inc.

**Date Prepared:** 1/30/17

**Date Analyzed:** 1/31/17 - 2/1/17 **Instrument:** ICP-MS2, ICP-MS3

Matrix: Soil

**Project:** F-12279; 560-562 Eliza St; MBS Twin Rivers Svy

**WorkOrder:** 1701D23 **BatchID:** 133384

Extraction Method: SW3050B

**Analytical Method:** SW6020

**Unit:** mg/Kg

Sample ID: MB/LCS-133384

1701D13-003AMS/MSD

	QC Sur	mmary R	eport f	or Metals					
Analyte	MB Result	LCS Result		RL	SPK Val			CS 6REC	LCS Limits
Lead	0.7838	51.2		0.50	50	-	1	02	75-125
Surrogate Recovery									
Terbium	481	522			500	96	5 1	04	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSI Limits	D RPD	RPD Limit
Lead	63.1	63.1	50	9.790	107	107	75-125	0	20
Surrogate Recovery									
Terbium	553	550	500		111	110	70-130	0.58	30 20
Analyte	DLT Result			DLTRef Val				%D	%D Limit
Lead	10.0			9.790				2.15	-

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

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of

WorkOrder: 1701D23 ClientCode: SCAO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>✓</b> Email	HardCo	opy ThirdParty	J-flag
Report to:				1	Bill to:			Requested TAT:	5 days;
Dan Leung SCA Environmental, Inc. 1 Lakeside Drive, Suite 215		dleung@sca-envi ccodemo@sca-ei		asio@scae	Accounts Paya SCA Environment 1 Lakeside Driv	ental, Inc.		Date Received:	01/31/2017
Oakland, CA 94612 (510) 645-6200 FAX: (510) 839- 6200		F-12279; 560-562 Rivers Svy	2 Eliza St; MBS	S Twin	Oakland, CA 94 emuise@sca-id	4612		Date Logged:	01/31/2017
						Poguestod "	Fosts (Soo log	and halow)	

Requested Tests (See legerid below)																	
Lab ID	Client ID	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	1	5	6	7	8	9	10	11	12
1701D23-001	OW-1	Solid	1/25/2017 00:00		Α												$\overline{}$
1701D23-002	12FLVCT/M-1	Solid	1/25/2017 00:00		Α												
1701D23-003	FLVCS-3	Solid	1/25/2017 00:00		Ā												
						•	•	•				•	•	•		•	

#### **Test Legend:**

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

Prepared by: Maria Venegas

#### **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.



**Client Name:** 

## McCampbell Analytical, Inc.

"When Quality Counts"

SCA ENVIRONMENTAL, INC.

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

F-12279; 560-562 Eliza St; MBS Twin Rivers Svy

#### **WORK ORDER SUMMARY**

**Project:** 

Client Contact: Dan Leung
Contact's Email: dleung@sca-enviro.com; pgervasio@scaehs.com
Comments:

Date Logged: 1/31/2017

		VValerriax	VilleOn	□ EDL □ Excel	гах		Бору Піпинаг	ty	J-11ay
Lab ID	Client ID	Matrix	Test Name	Contai /Comp		eservative De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1701D23-001A	OW-1	Solid	SW6020 (Lead)	1	White P	lastic	1/25/2017	5 days	
1701D23-002A	12FLVCT/M-1	Solid	SW6020 (Lead)	1	Baş	g	1/25/2017	5 days	
1701D23-003A	FLVCS-3	Solid	SW6020 (Lead)	1	Baş	g	1/25/2017	5 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.

Work Order: 1701D23



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Report To: Dan Leung Bill To: SCA Environmental, Inc.													_	_	_	_	_	_		Ana	lysis	Reg	uest				_			-				
Company: SCA Environmental, Inc. CCODE MORGOL - ENVIRO.																													T					
1 Lal	eside Dr.,	#215	Oak	land	, CA	946	12		gerv						nd						ers													
													MO			552(	18.1)		ugen									als						
Project #: F-12279 Project Name: MBS AWIN RIVE												25	) M		64/	~		C01		ides			(AS)				met							
Project Location: 560 - 562 ELIZA GT. Purchase Order# 6VY												1015		91)	ns (4	cides	ors/	(\$	rbic		(\$2)	/ PN	* *	* * *		Ived								
Sampler Signatu	re: Dan Le	ung														21/8		rease	rboı	estic	rocl	cide	1 He	ocs	V00	\Hs	020)	,(020		isso			- 1	
SAMPLING MATRIX METHOD PRESENTED PRE										as (8021/	6	& G	droca	(C1 P	3's; A	Pesti	idie C	A) 09	Z) 02	10 (P.	0.8/6	9/8/	***(	for I	3									
SAMPLE ID	Location/ Field Point Name	Date	Time	# Containers	Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	нсг	HNO	Other	BTEX & TPH as Gas TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664/5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)***	LUFT 5 Metals (200.8 / 6020)***	Metals (200.8 / 6020)***	Lab to Filter sample for Dissolved metals analysis	LEAD (1991C)	PCB			
0W-1		1/25		II								x		1																	X			
12 FLVC/M-1		1		1								x		1					- 4												X		1	
FLV C6 - 3		1		1								x																			x		-	+
111000		V																																
**MAI clients MUST disc handling by MAI staff. I	ion-disclosure	Incurs ar	immediat	e \$250	surch	arge o	and the	e clle	nt Is su	bject	to ful	lego	ıl llat	oility f	or har	m sut	fered.	Than	k you												, glove	ed, ope	en alr,	ample
Relinquished By: Dan Leung	Date:   Time:   Received By:   S : 30 P   Received By:   Received By:   S : 30 P   Received By:   Received By:										I G	CE/t° GOOI IEAL	COMMENTS: OD CONDITION PCBs: 1 PPM detection limit required. Authorized to perform Florisil cleanup to meet the detection limit.																					
Relinquished By:	10000										/ A	PPR	CHLORINATED IN LAB PROPRIATE CONTAINERS ESERVED IN LAB																					
Relinquished By:	Date:	Time	me: Received By:									P	RES	VOAS O&G METALS OTHER HAZARDOUS:  ESERVATIONPH<2																				

### **Sample Receipt Checklist**

WorkOrder №: <b>1701D23</b> Matrix: Solid  Carrier: UPS	<u>tody</u> ′es		Logged by:	Maria Venegas										
Chain of Custody (COC) Information														
Chain of custody present?		✓	No 🗆											
Chain of custody signed when relinquished and received?	'es	✓	No 🗆											
Chain of custody agrees with sample labels?	'es	✓	No 🗆											
Sample IDs noted by Client on COC?	'es	✓	No 🗆											
Date and Time of collection noted by Client on COC?	'es	<b>✓</b>	No 🗆											
Sampler's name noted on COC?	'es	✓	No 🗆											
Sample R	Recei	ipt Informati	<u>on</u>											
Custody seals intact on shipping container/cooler?	'es		No 🗌	NA 🗹										
Shipping container/cooler in good condition?	'es	<b>✓</b>	No 🗌											
Samples in proper containers/bottles?	'es	<b>✓</b>	No 🗆											
Sample containers intact?	'es	<b>✓</b>	No 🗆											
Sufficient sample volume for indicated test?	'es	✓	No 🗆											
Sample Preservation and Hold Time (HT) Information														
All samples received within holding time?	'es	✓	No 🗆	NA 🗌										
Sample/Temp Blank temperature		Temp:		NA 🗹										
Water - VOA vials have zero headspace / no bubbles?	'es		No 🗆	NA 🗹										
Sample labels checked for correct preservation?	'es	<b>✓</b>	No 🗌											
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	'es		No 🗆	NA 🗹										
Samples Received on Ice?	'es		No 🗹											
UCMR3 Samples:														
Total Chlorine tested and acceptable upon receipt for EPA 522? Yes	es		No 🗆	NA 🗹										
Free Chlorine tested and acceptable upon receipt for EPA 218.7, Ye 300.1, 537, 539?	es		No 🗌	NA 🗹										
	==	====	=======	=======										