APCL

Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel. (909) 590-1828 Fax (909) 590-1498

April 29, 2002

SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr. Suite 212
San Diego CA 92127

Dear Yu,

This package contains samples in our Service ID 02-2462 and your project is 00HW019 JPL. Enclosed please find:

(1) One original report.
(2) One original Chain of Custody.
(3) One diskette containing EDD Deliverable.
(4) One original of Level D Data Package Deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr, Ste. 212
San Diego CA 92127
Tel: (858)485-8100 Fax: (858)485-0812

Service ID #: 801-022462
Collected by: JNT/TAM
Collected on: 04/17/02

Received: 04/17/02
Extracted: N/A
Tested: 04/19-22/02
Reported: 04/23/02

Sample Description: Water from Pasadena, CA
Project Description: 00HW019 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result ER-19 02-02462-1	MW-19-1 02-02462-2	MW-19-2 02-02462-3
Dilution Factor				1	1	1
PERCHLORATE	E314	µg/L	4	<4	<4	<4
VOLATILE ORGANIC COMPOUNDS						
Dilution Factor				1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	<0.5	0.6
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1	0.5J	0.5J	0.5J
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	0.8
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	1.7
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-19-3 02-02462-4	MW-19-4 02-02462-5	MW-19-5 02-02462-6	TB-19 02-02462-7
Dilution Factor				1	1	1	1
PERCHLORATE	E314	µg/L	4	<4	<4	<4	-
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	0.8	3.8	0.7	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1	-	0.4J	0.5J	2

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-19-3 02-02462-4	MW-19-4 02-02462-5	MW-19-5 02-02462-6	TB-19 02-02462-7
TETRACHLOROETHENE	524.2	µg/L	0.5	3.0	<0.5	3.3	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	1.1	0.3J	0.6	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
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Case Narrative

Project: JPL/00HW019

For SOTA Environmental

APCL Service No: 02-2462

1. Sample Identification

The sample identifications are listed in the following table:

SOTA Environmental Sample ID	APCL Sample ID
TB-19	02-02462-7
MW-19-5	02-02462-6
MW-19-4	02-02462-5
MW-19-3	02-02462-4
MW-19-2	02-02462-3
MW-19-1	02-02462-2
ER-19	02-02462-1

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
E314 (Perchlorate, low level),

3. Holding Time

All samples were extracted, digested and analyzed within the holding times defined by the appropriate EPA methods of the analyses.

4. Preservation

All samples were preserved and stored according to the appropriate EPA methods.

5. Tele-log

None.

6. Anomaly

None.

"I certify that these data are technically accurate, complete, and in compliance with the terms and conditions of the contract, for other than the conditions detailed above. Release of the data contained in the hardcopy data package and its electronic data deliverable submitted on diskette had been authorized by the Laboratory Manager or her/his designee, as verified by the following signature."

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory

APCL

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Chain of Custody

Please Print in pen Page 1 of 1

Client: SOTA ENVR. TECH INC. Contact: MIKE SAYRE Tel #: 858-485-8100 Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DRIVE #212 City: SAN DIEGO State: CA Zip code: 92127

Bill to: SOTA

Project Name/Code JPL Job # 00HW019 P.O. #

Project Address PASADENA, CALIFORNIA APCL Quotation #

Due Date: [X] regular [ ] rush: ____ days ____ hours Sampled by: JNT / TAM

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: VOC's (524.2)	Analysis Items: Perchlorate (314.0)	Remarks
TB-19	TRIP BLANK	4/17/02	1046	WATER	HCl	2	X		
MW-19-5	MW-19-5		1120		HCl	3	X		
MW-19-5	MW-19-5		1120		—	1		X	
MW-19-4	MW-19-4		1156		HCl	~~3~~ 9	X		MS/MSD
MW-19-4	MW-19-4		1156		—	~~1~~ 2		X	MS/MSD
MW-19-3	MW-19-3		1234		HCl	3	X		
MW-19-3	MW-19-3		1234		—	1		X	LEVEL IV
MW-19-2	MW-19-2		1423		HCl	3	X		DATA PACKAGE
MW-19-2	MW-19-2		1423		—	1		X	
MW-19-1	MW-19-1		1501		HCl	3	X		
MW-19-1	MW-19-1		1501		—	1		X	
ER-19	~~ER-19~~ EQUIP. RINSATE		1438		HCl	3	X		
ER-19	~~EQUI~~ EQUIP. RINSATE		1438		—	1		X	

2462

QC Requirement: [ ] Regular; [ ] QA/QC Report; [ ] WIP; [ ] Raw Data; [ ] Extended Raw Data [ ] CLP; [ ] ACE [ ] AFCEE [ ] NEESA ___ (E, C or D); [ ] Other _____ (Please specify)

Sample Disposal: [ ] Return [ ] Disposal by APCL [ ] Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: [ ] Intact; [ ] Broken. Cooler Seal: [ ] Intact; [ ] Broken; [ ] None . Tag # _____ Temperature: [ ] Room [ ] Cold (_____ °C).

Relinquished by [signature] Date/Time 4/17/02 / 1538 Received by [signature] Date/Time 4/17/02 1538

Relinquished by [signature] Date/Time / Received by [signature] Date/Time 4/18/02 1050

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

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Sample Receiving Checklist

APCL ServiceID: 2462 Client Name/Project: Sta Environmental

1. Sample Arrival

Date/Time Received 4/17/02 1538 Date/Time Opened 4/18/02 0800 By (name): Paul
Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Greg

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☐ Signed, dated? By: ____
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold ____ # Received ____
☑ CoC/Docs Zip-Locked under lid? ☐ Compos.#: __ ☑ #Samples OK? ____
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs): ____

3. Shipping Container/Cooler

☑ Cooler Used? # of 1 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 2.4 ____ ____ ____ ____ ____
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = ____ Preserved by: ☐ Client ☐ APCL ☐ Third Party ____

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☐ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number: ____
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☑ RUSH TAT: 5 day ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: ____
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:____)Date/Time:____
Received/Checked by: Paul Date: 17 Apr 2002 Time: 8:13 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [ncal.texfiles]smprcl.tex

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Sample Login: Check List

02-02462 (1288_ 345) (4858100_ 345)

04/18/02

Part 1: General Information

☐ Company Information	Name:	*SOTA Environmental*
	Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
☐ Project Information	Project Description:	*JPL*
	Project #:	*00HW019*
☐ Billing Information	P.O. #:	
	Bill Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
	Lab Project ID:	*2002_0002*
	Client Database #:	*01*
☐ Receiving Information	Who Received Sample?	*Paul*
	Receiving Date/Time:	*04/17/02 1538*
	COC No.	
☐ Shipping Information	Shipping Company	*APCL pick up*
	Packing Information:	*Cooler/Ice Chester*
	Cooler Temperature:	*2.4 °C*
☐ Container Information	Container Provider:	*Client*
☐ Sampling Information	Sampling Person:	*JNT/TAM*
	Sampling Company:	*Client*
☐ Turn-Around-Time Option:		*Rush 5 working day(s)*
☐ QC Option:		*NEESA D*
☐ Disposal Option:		*Not specify*

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Container	Preservative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	TB-19	524.2	02-02462-7	W	V	C	40	2	G	041702	N	0	7	☐
2	MW-19-5	524.2	02-02462-6-α	W	V	C	40	3	G	041702	N	0	7	☐
	MW-19-5	Perchl	02-02462-6-β	W	P		500	1	G	041702	N	0	7	☐
3	MW-19-4	524.2	02-02462-5-α	W	V	C	40	9	G	041702	N	0	7	☐
	MW-19-4	Perchl	02-02462-5-β	W	P		500	2	G	041702	N	0	7	☐
4	MW-19-3	524.2	02-02462-4-α	W	V	C	40	3	G	041702	N	0	7	☐
	MW-19-3	Perchl	02-02462-4-β	W	P		500	1	G	041702	N	0	7	☐
5	MW-19-2	524.2	02-02462-3-α	W	V	C	40	3	G	041702	N	0	7	☐
	MW-19-2	Perchl	02-02462-3-β	W	P		500	1	G	041702	N	0	7	☐
6	MW-19-1	524.2	02-02462-2-α	W	V	C	40	3	G	041702	N	0	7	☐
	MW-19-1	Perchl	02-02462-2-β	W	P		500	1	G	041702	N	0	7	☐
7	ER-19	524.2	02-02462-1-α	W	V	C	40	3	G	041702	N	0	7	☐
	ER-19	Perchl	02-02462-1-β	W	P		500	1	G	041702	N	0	7	☐

Part 3: Analysis Information

Test Items:

☒	*524.2*	Volatile Organic Compounds
☐	*7196*	Chromium (VI)
☒	*300.0*	Perchlorate, low level
☐	*200.7/6010*	Sodium, Na, by ICP
☐	*200.7/6010*	Potassium, K, by ICP
☐	*200.7/6010*	Calcium, Ca, by ICP
☐	*200.7/6010*	Magnesium, Mg, by ICP
☐	*200.7/6010*	Iron, Fe, by ICP
☐	*300.0*	Sulfate (SO_4^{--}), by IC
☐	*300.0/SM4500NO3C*	Nitrate (NO_3^-) as N by IC
☐	*300.0*	Chloride Cl^- by IC
☐	*SM2320B*	Carbonate
☐	*SM2320B*	Bicarbonate
☐	*9040/150.1*	pH
☐	*160.1*	Solids, Total Dissolved (TDS)
☐	*206.2/7060*	Arsenic, As, by GFAA
☐	*310.1*	Alkalinity
☐	*PAH-SIM*	PAH (NOAA)

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCHL	NA	K	CA	MG	FE	
1	TB-19	524.2	02-02462-7	W	X								☐
2	MW-19-5	524.2	02-02462-6-α	W	X								☐
	MW-19-5	Perchl	02-02462-6-β	W			X						☐
3	MW-19-4	524.2	02-02462-5-α	W	X								☐
	MW-19-4	Perchl	02-02462-5-β	W			X						☐
4	MW-19-3	524.2	02-02462-4-α	W	X								☐
	MW-19-3	Perchl	02-02462-4-β	W			X						☐
5	MW-19-2	524.2	02-02462-3-α	W	X								☐
	MW-19-2	Perchl	02-02462-3-β	W			X						☐
6	MW-19-1	524.2	02-02462-2-α	W	X								☐
	MW-19-1	Perchl	02-02462-2-β	W			X						☐
7	ER-19	524.2	02-02462-1-α	W	X								☐
	ER-19	Perchl	02-02462-1-β	W			X						☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	SO4	NO3	CL	CARBONATE	BICARBON	PH	TDS	AS	
1	TB-19	524.2	02-02462-7	W									☐
2	MW-19-5	524.2	02-02462-6-α	W									☐
	MW-19-5	Perchl	02-02462-6-β	W									☐
3	MW-19-4	524.2	02-02462-5-α	W									☐
	MW-19-4	Perchl	02-02462-5-β	W									☐
4	MW-19-3	524.2	02-02462-4-α	W									☐
	MW-19-3	Perchl	02-02462-4-β	W									☐
5	MW-19-2	524.2	02-02462-3-α	W									☐
	MW-19-2	Perchl	02-02462-3-β	W									☐
6	MW-19-1	524.2	02-02462-2-α	W									☐
	MW-19-1	Perchl	02-02462-2-β	W									☐
7	ER-19	524.2	02-02462-1-α	W									☐
	ER-19	Perchl	02-02462-1-β	W									☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	ALKALIN	SIM	
1	TB-19	524.2	02-02462-7	W			☐
2	MW-19-5	524.2	02-02462-6-α	W			☐
	MW-19-5	Perchl	02-02462-6-β	W			☐
3	MW-19-4	524.2	02-02462-5-α	W			☐
	MW-19-4	Perchl	02-02462-5-β	W			☐
4	MW-19-3	524.2	02-02462-4-α	W			☐
	MW-19-3	Perchl	02-02462-4-β	W			☐
5	MW-19-2	524.2	02-02462-3-α	W			☐
	MW-19-2	Perchl	02-02462-3-β	W			☐
6	MW-19-1	524.2	02-02462-2-α	W			☐

	MW-19-1	Perchl	02-02462-2-β	W		☐
7	ER-19	524.2	02-02462-1-α	W		☐
	ER-19	Perchl	02-02462-1-β	W		☐

☐ Client's Requirement: **PLEASE RUN MS/MSD ON SAMPLE #5**

☐ **IF ENOUGH SAMPLE**

☐ **FOR 8270SIM, PLEASE INCLUDE 1,4-DIOXANE**

Login By En-Yu Paul Kou

Check By DY

APCL

Applied Physics & Chemistry Laboratory

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April 25, 2002

SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr. Suite 212
San Diego CA 92127

Dear Yu,

This package contains samples in our Service ID 02-2442 and your project is 00HW019 JPL. Enclosed please find:

(1) One original report.
(2) One original Chain of Custody.
(3) One diskette containing EDD Deliverable.
(4) One original of Level D Data Package Deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr. Ste. 212
San Diego CA 92127
Tel: (858)485-8100 Fax: (858)485-0812

Service ID #: 801-022442
Collected by: JNT/TAM
Collected on: 04/16/02

Received: 04/16/02
Extracted: N/A
Tested: 04/17-18/02
Reported: 04/19/02

Sample Description: Water from Pasadena, CA
Project Description: 00HW019 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result ER-20 02-02442-1	MW-20-1 02-02442-2	MW-20-2 02-02442-3	MW-20-3 02-02442-4
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01	<0.01
Dilution Factor				1	1	1	1
PERCHLORATE	E314	µg/L	4	<4	<4	<4	<4
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	0.5	2.9	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-20-4 02-02442-5	MW-20-5 02-02442-6	MW-20-4D 02-02442-7	TB-20 02-02442-8
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01	-
Dilution Factor				1	1	1	1
PERCHLORATE	E314	µg/L	4	30.0	<4	13.3	-
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1	-	-	-	0.6J
STYRENE	524.2	µg/L	0.5	-	0.5J	-	-

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-20-4 02-02442-5	MW-20-5 02-02442-6	MW-20-4D 02-02442-7	TB-20 02-02442-8
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Case Narrative

Project: JPL/Pasadena, CA/00HW019

For SOTA Environmental

APCL Service No: 02-2442

1. Sample Identification

The sample identifications are listed in the following table:

SOTA Environmental Sample ID	APCL Sample ID
TB-20	02-02442-8
MW-20-5	02-02442-6
MW-20-4	02-02442-5
MW-20-4D	02-02442-7
MW-20-3	02-02442-4
MW-20-2	02-02442-3
MW-20-1	02-02442-2
ER-20	02-02442-1

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
7196 (Chromium (VI)),
E314 (Perchlorate, low level),

3. Holding Time

All samples were extracted, digested and analyzed within the holding times defined by the appropriate EPA methods of the analyses.

4. Preservation

All samples were preserved and stored according to the appropriate EPA methods.

5. Tele-log

None.

6. Anomaly

None.

60800

"I certify that these data are technically accurate, complete, and in compliance with the terms and conditions of the contract, for other than the conditions detailed above. Release of the data contained in the hardcopy data package and its electronic data deliverable submitted on diskette had been authorized by the Laboratory Manager or her/his designee, as verified by the following signature."

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory

APCL

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chain of Custody

Please Print in pen Page 1 of 2

Client: SOTA ENVR. TECH INC Contact: MIKE SAYRE Tel #: 858-485-8100 Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DRIVE #212 City: SAN DIEGO State: CA Zip code: 92127

Bill to: SOTA

Project Name/Code JPL Job # 00HW019 P.O. #

Project Address PASADENA, CALIFORNIA APCL Quotation #

Due Date: [X] regular [ ] rush: ___ days ___ hours Sampled by: JNT / TAM

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	VOC's (524.2)	TOT Cr (200.8)	Cr VI (7196)	PERCHLORATE (314.0)	Remarks
TB-20	TRIP BLANK	4/16/02	0914	WATER	HCl	2	X				LEVEL IV
MW-20-5	MW-20-5		0925		HCl	3	X				DATA PACKAGE
MW-20-5	MW-20-5		0925		HNO_3	1		X			
MW-20-5	MW-20-5		0925		—	1			X	X	
MW-20-4	MW-20-4		1005		HCl	3	X				
MW-20-4	MW-20-4		1005		HNO_3	1		X			
MW-20-4	MW-20-4		1005		—	1			X	X	
MW-20-4D	MW-20-4D		1005		HCl	3	X				
MW-20-4D	MW-20-4D		1038		HNO_3	1		X			
MW-20-4D	MW-20-4D		1038		—	1			X	X	
MW-20-3	MW-20-3		1110		HCl	3	X				
MW-20-3	MW-20-3		1110		HNO_3	1		X			
MW-20-3	MW-20-3		1110		—	1			X	X	

Analysis Items

White – With report
Yellow – Lab copy
Pink – Originator

2442

QC Requirement: [ ] Regular; [ ] QA/QC Report; [ ] WIP; [ ] Raw Data; [ ] Extended Raw Data [ ] CLP; [ ] ACE [ ] AFCEE [ ] NEESA ___ (E, C or D); [ ] Other _____ (Please specify)

Sample Disposal: [ ] Return [ ] Disposal by APCL [ ] Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: [ ] Intact; [ ] Broken. Cooler Seal: [ ] Intact; [ ] Broken; [ ] None . Tag # _____ Temperature: [ ] Room [ ] Cold (_____ °C).

Relinquished by [signature] Date/Time 4/16/02 1508 Received by [signature] Date/Time 4/16/02 1515

Relinquished by [signature] Date/Time 4/16/02 1640 Received by [signature] Date/Time 4/16/02 1640

APCL USE ONLY Service # Note:

...nts understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right ... service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

... 20, 1994.

Root-file:[CUST.DATA.LAB]CHAIN_ROOT.TEX File:[CUST.DATA.LAB]CHAIN4.TEX

Applied P & Ch Laboratory

APCL

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chain of Custody

Please Print in pen Page 2 of 2

Client: SOTA ENVR TECH INC | Contact: MIKE SAYRE | Tel #: 858-485-8100 | Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DRIVE #212 | City: SAN DIEGO | State: CA | Zip code: 92127

Bill to: SOTA

Project Name/Code JPL | Job # 00HW019 | P.O. #

Project Address PASADENA, CALIFORNIA | APCL Quotation #

Due Date: [X] regular [ ] rush: ___ days ___ hours | Sampled by: JNT/TAM

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	VOC's (524.2)	TDT Cr (200.8)	Cr VI (7196)	Perchlorate (314.0)	Remarks
MW-20-2	MW-20-2	4/16/02	1335	WATER	HCl	3	X				LEVEL IV
MW-20-2	MW-20-2		1335		HNO_3	1		X			DATA PACKAGE
MW-20-2	MW-20-2		1335		—	1			X	X	
MW-20-1	MW-20-1		1428		HCl	3	X				
MW-20-1	MW-20-1		1428		HNO_3	1		X			
MW-20-1	MW-20-1		1428		—	1			X	X	
ER-20	EQUIP. RINSATE		1343		HCl	3	X				
ER-20	EQUIP. RINSATE		1343		HNO_3	1		X			
ER-20	EQUIP. RINSATE		1343		—	1			X	X	

2442

QC Requirement: [ ] Regular; [ ] QA/QC Report; [ ] WIP; [ ] Raw Data; [ ] Extended Raw Data [ ] CLP; [ ] ACE [ ] AFCEE [ ] NEESA ___ (E, C or D); [ ] Other _____ (Please specify)

Sample Disposal: [ ] Return [ ] Disposal by APCL [ ] Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: [ ] Intact; [ ] Broken. Cooler Seal: [ ] Intact; [ ] Broken; [ ] None . Tag # _____ Temperature: [ ] Room [ ] Cold (_____ °C).

Relinquished by _____ Date/Time 4/16/02 / 1508 Received by _____ Date/Time 4/16/02 / 1508

Relinquished by _____ Date/Time 4/16/02 / 1640 Received by _____ Date/Time 4/16/02 / 1640

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Applied P & Ch Laboratory
13760 Magnolia Ave., Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Receiving Checklist

APCL ServiceID: 2412 Client Name/Project: Soil Environmental

1. Sample Arrival

Date/Time Received 4/16/02 1640 Date/Time Opened 4/16/02 1640 By (name): Kim
Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Greg

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☐ Signed, dated? By:
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold # Received 8
☑ CoC/Docs Zip-Locked under lid? ☐ Compos.#: ☑ #Samples OK?
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs):

3. Shipping Container/Cooler

☑ Cooler Used? #of 1 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 3.9
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = Preserved by: ☐ Client ☐ APCL ☐ Third Party

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☑ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number:
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☑ RUSH TAT: 5days ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other:
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:)Date/Time:

Received/Checked by: Kim Date: 16 Apr 2002 Time: 8:20 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [neal.texfiles]smprcl.tex.

060802

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Login: Check List

02-02442 (1288_ 343) (4858100_ 343)

04/17/02

Part 1: General Information

☐ Company Information	Name:	*SOTA Environmental*
	Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
☐ Project Information	Project Description:	*JPL*
	Project #:	*00HW019*
☐ Billing Information	P.O. #:	
	Bill Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
	Lab Project ID:	*2002_0002*
	Client Database #:	*01*
☐ Receiving Information	Who Received Sample?	*Kenny*
	Receiving Date/Time:	*04/16/02 1508*
	COC No.	
☐ Shipping Information	Shipping Company	*APCL pick up*
	Packing Information:	*Cooler/Ice Chester*
	Cooler Temperature:	*3.9 °C*
☐ Container Information	Container Provider:	*Client*
☐ Sampling Information	Sampling Person:	*JNT/TAM*
	Sampling Company:	*Client*
☐ Turn-Around-Time Option:		*Rush 5 working day(s)*
☐ QC Option:		*NEESA D*
☐ Disposal Option:		*Not specify*

608 3

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Container	Preservative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	TB-20	524.2	02-02442-8	W	V	C	40	2	G	041602	N	0	7	☐
2	MW-20-5	524.2	02-02442-6-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-5	CRVI/Perch	02-02442-6-β	W	P		500	1	G	041602	N	0	7	☐
3	MW-20-4	524.2	02-02442-5-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-4	CRVI/Perch	02-02442-5-β	W	P		500	1	G	041602	N	0	7	☐
4	MW-20-4D	524.2	02-02442-7-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-4D	CRVI/Perch	02-02442-7-β	W	P		500	1	G	041602	N	0	7	☐
5	MW-20-3	524.2	02-02442-4-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-3	CRVI/Perch	02-02442-4-β	W	P		500	1	G	041602	N	0	7	☐
6	MW-20-2	524.2	02-02442-3-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-2	CRVI/Perch	02-02442-3-β	W	P		500	1	G	041602	N	0	7	☐
7	MW-20-1	524.2	02-02442-2-α	W	V	C	40	3	G	041602	N	0	7	☐
	MW-20-1	CRVI/Perch	02-02442-2-β	W	P		500	1	G	041602	N	0	7	☐
8	ER-20	524.2	02-02442-1-α	W	V	C	40	3	G	041602	N	0	7	☐
	ER-20	CRVI/Perch	02-02442-1-β	W	P		500	1	G	041602	N	0	7	☐

Part 3: Analysis Information

Test Items:

☑ *524.2*	Volatile Organic Compounds
☑ *7196*	Chromium (VI)
☑ *300.0*	Perchlorate, low level
☐ *200.7/6010*	Sodium, Na, by ICP
☐ *200.7/6010*	Potassium, K, by ICP
☐ *200.7/6010*	Calcium, Ca, by ICP
☐ *200.7/6010*	Magnesium, Mg, by ICP
☐ *200.7/6010*	Iron, Fe, by ICP
☐ *300.0*	Sulfate (SO_4^{--}), by IC
☐ *300.0/SM4500NO3*	Nitrate (NO_3^-) as N by IC
☐ *300.0*	Chloride Cl^- by IC
☐ *SM2320B*	Carbonate
☐ *SM2320B*	Bicarbonate
☐ *9040/150.1*	pH
☐ *160.1*	Solids, Total Dissolved (TDS)
☐ *206.2/7060*	Arsenic, As, by GFAA
☐ *310.1*	Alkalinity

☐ *PAH-SIM* PAH (NOAA)

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCHL	NA	K	CA	MG	FE	
1	TB-20	524.2	02-02442-8	W	X								☐
2	MW-20-5	524.2	02-02442-6-α	W	X								☐
	MW-20-5	CRVI/Perch	02-02442-6-β	W		X	X						☐
3	MW-20-4	524.2	02-02442-5-α	W	X								☐
	MW-20-4	CRVI/Perch	02-02442-5-β	W		X	X						☐
4	MW-20-4D	524.2	02-02442-7-α	W	X								☐
	MW-20-4D	CRVI/Perch	02-02442-7-β	W		X	X						☐
5	MW-20-3	524.2	02-02442-4-α	W	X								☐
	MW-20-3	CRVI/Perch	02-02442-4-β	W		X	X						☐
6	MW-20-2	524.2	02-02442-3-α	W	X								☐
	MW-20-2	CRVI/Perch	02-02442-3-β	W		X	X						☐
7	MW-20-1	524.2	02-02442-2-α	W	X								☐
	MW-20-1	CRVI/Perch	02-02442-2-β	W		X	X						☐
8	ER-20	524.2	02-02442-1-α	W	X								☐
	ER-20	CRVI/Perch	02-02442-1-β	W		X	X						☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	SO4	NO3	CL	CARBONATE	BICARBON	PH	TDS	AS	
1	TB-20	524.2	02-02442-8	W									☐
2	MW-20-5	524.2	02-02442-6-α	W									☐
	MW-20-5	CRVI/Perch	02-02442-6-β	W									☐
3	MW-20-4	524.2	02-02442-5-α	W									☐
	MW-20-4	CRVI/Perch	02-02442-5-β	W									☐
4	MW-20-4D	524.2	02-02442-7-α	W									☐
	MW-20-4D	CRVI/Perch	02-02442-7-β	W									☐
5	MW-20-3	524.2	02-02442-4-α	W									☐
	MW-20-3	CRVI/Perch	02-02442-4-β	W									☐
6	MW-20-2	524.2	02-02442-3-α	W									☐
	MW-20-2	CRVI/Perch	02-02442-3-β	W									☐
7	MW-20-1	524.2	02-02442-2-α	W									☐
	MW-20-1	CRVI/Perch	02-02442-2-β	W									☐
8	ER-20	524.2	02-02442-1-α	W									☐
	ER-20	CRVI/Perch	02-02442-1-β	W									☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	ALKALIN	SIM	
1	TB-20	524.2	02-02442-8	W			☐
2	MW-20-5	524.2	02-02442-6-α	W			☐
	MW-20-5	CRVI/Perch	02-02442-6-β	W			☐
3	MW-20-4	524.2	02-02442-5-α	W			☐

	MW-20-4	CRVI/Perch	02-02442-5-β	W	☐
4	MW-20-4D	524.2	02-02442-7-α	W	☐
	MW-20-4D	CRVI/Perch	02-02442-7-β	W	☐
5	MW-20-3	524.2	02-02442-4-α	W	☐
	MW-20-3	CRVI/Perch	02-02442-4-β	W	☐
6	MW-20-2	524.2	02-02442-3-α	W	☐
	MW-20-2	CRVI/Perch	02-02442-3-β	W	☐
7	MW-20-1	524.2	02-02442-2-α	W	☐
	MW-20-1	CRVI/Perch	02-02442-2-β	W	☐
8	ER-20	524.2	02-02442-1-α	W	☐
	ER-20	CRVI/Perch	02-02442-1-β	W	☐

☐ Client's Requirement: PLEASE ~~RUN MS/MSD ON SAMPLE~~ #

☐ IF ENOUGH SAMPLE

☐ FOR 8270SIM, PLEASE INCLUDE 1,4-DIOXANE

Login By En-Yu Paul Kou

Check By BY

6 8 6

APCL

Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel. (909) 590-1828 Fax (909) 590-1498

April 23, 2002

SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr. Suite 212
San Diego CA 92127

Dear Yu,

This package contains samples in our Service ID 02-2349 and your project is 00HW019 JPL. Enclosed please find:

(1) One original report.
(2) One original Chain of Custody.
(3) One diskette containing EDD Deliverable.
(4) One original of Level D Data Package Deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr, Ste. 212
San Diego CA 92127
Tel: (858)485-8100 Fax: (858)485-0812

Service ID #: 801-022349
Collected by: JNT/TAM
Collected on: 04/09/02

Received: 04/09/02
Extracted: N/A
Tested: 04/11-15/02
Reported: 04/15/02

Sample Description: Water from Pasadena, CA
Project Description: 00HW019 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result ER-21 02-02349-1	MW-21-1 02-02349-2	MW-21-2 02-02349-3	MW-21-3 02-02349-4
Dilution Factor				1	1	1	1
PERCHLORATE	E314	μg/L	4	<4	<4	<4	<4
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
BROMODICHLOROMETHANE	524.2	μg/L	0.5	-	-	-	0.6
CARBON TETRACHLORIDE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	μg/L	0.5	<0.5	1.7	0.5J	1.5
1,1-DICHLOROETHANE	524.2	μg/L	0.5	<0.5	0.4J	<0.5	0.3J
1,2-DICHLOROETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	524.2	μg/L	0.5	-	-	-	0.5J
TRANS-1,2-DICHLOROETHENE	524.2	μg/L	0.5	-	-	-	0.4J
METHYLENE CHLORIDE	524.2	μg/L	1	2.2	2.4	2.6	2.6
TETRACHLOROETHENE	524.2	μg/L	0.5	<0.5	0.8	1.6	4.2
TRICHLOROETHENE	524.2	μg/L	0.5	<0.5	8.3	0.4J	1.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-21-4 02-02349-5	MW-21-5 02-02349-6	SB-1 02-02349-7	TB-21 02-02349-8
Dilution Factor				1	1	1	1
PERCHLORATE	E314	μg/L	4	<4	<4	-	-
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
BROMODICHLOROMETHANE	524.2	μg/L	0.5	0.4J	0.7	-	-
CARBON TETRACHLORIDE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	μg/L	0.5	1.5	3.4	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	μg/L	0.5	<0.5	0.4J	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	524.2	μg/L	0.5	0.7	3.3	-	-
METHYLENE CHLORIDE	524.2	μg/L	1	2.2	2.7	2.6	2.5
TETRACHLOROETHENE	524.2	μg/L	0.5	5.8	28.6	<0.5	<0.5

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-21-4 02-02349-5	MW-21-5 02-02349-6	SB-1 02-02349-7	TB-21 02-02349-8
TRICHLOROETHENE	524.2	µg/L	0.5	0.3J	1.3	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Case Narrative

Project: JPL/Pasadena, CA/00HW019

For SOTA Environmental

APCL Service No: 02-2349

1. Sample Identification

The sample identifications are listed in the following table:

SOTA Environmental Sample ID	APCL Sample ID
TB-21	02-02349-8
MW-21-5	02-02349-6
MW-21-4	02-02349-5
MW-21-3	02-02349-4
MW-21-2	02-02349-3
MW-21-1	02-02349-2
ER-21	02-02349-1
SB-1	02-02349-7

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
E314 (Perchlorate, low level),

3. Holding Time

All samples were extracted, digested and analyzed within the holding times defined by the appropriate EPA methods of the analyses.

4. Preservation

All samples were preserved and stored according to the appropriate EPA methods.

5. Tele-log

None.

6. Anomaly

None.

59400

"I certify that these data are technically accurate, complete, and in compliance with the terms and conditions of the contract, for other than the conditions detailed above. Release of the data contained in the hardcopy data package and its electronic data deliverable submitted on diskette had been authorized by the Laboratory Manager or her/his designee, as verified by the following signature."

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

APCL

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chain of Custody

Please Print in pen Page 1 of 1

Client: SOTA ENVIR. TECH., INC. Contact: MIKE SAYRE Tel #: 858-485-8100 Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DR. #212 City: SAN DIEGO State: CA Zip code: 92127

Bill to: SOTA

Project Name/Code JPL Job #00HW019 P.O. #

Project Address PASADENA, CALIFORNIA APCL Quotation #

Due Date: [X] regular [ ] rush: ___ days ___ hours Sampled by: JNT/TAM

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	VOCs (524.2)	PEACHLORATE (314.0)	Remarks
TB-21	TRIP BLANK	4/9/02	1040	WATER	HCl	2	X		
MW-21-5	MW-21-5		1125		HCl	3	X		
MW-21-5	MW-21-5		1125		—	1		X	
MW-21-4	MW-21-4		1201		HCl	3	X		
MW-21-4	MW-21-4		1201		—	1		X	
MW-21-3	MW-21-3		1228		HCl	3	X		
MW-21-3	MW-21-3		1228		—	1		X	
ER-21	EQUIP. RINSATE		1248		HCl	3	X		
MW-21-2	MW-21-2		1257		HCl	3	X		
MW-21-2	MW-21-2		1257		—	1		X	
MW-21-1	MW-21-1		1300 (JNT)	1400	HCl	3	X		
MW-21-1	MW-21-1		1300 (JNT)	1400	—	1		X	
SB-1	SOURCE BLANK		1248		HCl	2	X		
ER-21	EQUIP. RINSATE		1249		—	1		X	

Analysis Items

White – With report
Yellow – Lab copy
Pink – Originator

2349

QC Requirement: [ ] Regular; [ ] QA/QC Report; [ ] WIP; [ ] Raw Data; [ ] Extended Raw Data [ ] CLP; [ ] ACE [ ] AFCEE [ ] NEESA ___ (E, C or D); [ ] Other _____ (Please specify)

Sample Disposal: [ ] Return [ ] Disposal by APCL [ ] Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: [ ] Intact; [ ] Broken. Cooler Seal: [ ] Intact; [ ] Broken; [ ] None. Tag # _____ Temperature: [ ] Room [ ] Cold (_____ °C).

Relinquished by [signature] Date/Time 4/9/02 1534 Received by [signature] Date/Time 4/9/02 1537

Relinquished by [signature] Date/Time 4/9/02 1430 Received by [signature] Date/Time 4/9/02 1630

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Applied P & Ch Laboratory
13760 Magnolia Ave., Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Receiving Checklist

APCL ServiceID: 2349 Client Name/Project: Sota

1. Sample Arrival

Date/Time Received 4/9/02 1630 Date/Time Opened 4/9/02 1630 By (name): Kenny

Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Roy

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☐ Signed, dated? By:
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold ____ # Received 14
☑ CoC/Docs Zip-Locked under lid? ☐ Compos.#: ___ ☑ #Samples OK? ____
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs): ____

3. Shipping Container/Cooler

☑ Cooler Used? # of 1 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 4.0 ____ ____ ____ ____ ____
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = ____ Preserved by: ☐ Client ☐ APCL ☐ Third Party ____

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☐ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number: ____
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☑ RUSH TAT: 5days ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: ____
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:____)Date/Time:____

Received/Checked by: Kenny Date: 9 Apr 2002 Time: 9:17 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [neal.texfiles]smprcl.tex.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Login: Check List

02-02349 (1288_ 339) (4858100_ 339)

04/10/02

Part 1: General Information

☐ Company Information	Name:	*SOTA Environmental*
	Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
☐ Project Information	Project Description:	*JPL*
	Project #:	*00HW019*
☐ Billing Information	P.O. #:	
	Bill Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
	Lab Project ID:	*2002_0002*
	Client Database #:	*01*
☐ Receiving Information	Who Received Sample?	*Kenny*
	Receiving Date/Time:	*04/09/02 1534*
	COC No.	
☐ Shipping Information	Shipping Company	*APCL pick up*
	Packing Information:	*Cooler/Ice Chester*
	Cooler Temperature:	*4.0 °C*
☐ Container Information	Container Provider:	*Client*
☐ Sampling Information	Sampling Person:	*JNT/TAM*
	Sampling Company:	*Client*
☐ Turn-Around-Time Option:		*Rush 5 working day(s)*
☐ QC Option:		*NEESA D*
☐ Disposal Option:		*Not specify*

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Container	Preservative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	TB-21	524.2	02-02349-8	W	V	C	40	2	G	040902	N	0	7	☐
2	MW-21-5	524.2	02-02349-6-α	W	V	C	40	3	G	040902	N	0	7	☐
	MW-21-5	Perchl	02-02349-6-β	W	P		500	1	G	040902	N	0	7	☐
3	MW-21-4	524.2	02-02349-5-α	W	V	C	40	3	G	040902	N	0	7	☐
	MW-21-4	Perchl	02-02349-5-β	W	P		500	1	G	040902	N	0	7	☐
4	MW-21-3	524.2	02-02349-4-α	W	V	C	40	3	G	040902	N	0	7	☐
	MW-21-3	Perchl	02-02349-4-β	W	P		500	1	G	040902	N	0	7	☐
5	MW-21-2	524.2	02-02349-3-α	W	V	C	40	3	G	040902	N	0	7	☐
	MW-21-2	Perchl	02-02349-3-β	W	P		500	1	G	040902	N	0	7	☐
6	MW-21-1	524.2	02-02349-2-α	W	V	C	40	3	G	040902	N	0	7	☐
	MW-21-1	Perchl	02-02349-2-β	W	P		500	1	G	040902	N	0	7	☐
7	ER-21	524.2	02-02349-1-α	W	V	C	40	3	G	040902	N	0	7	☐
	ER-21	Perchl	02-02349-1-β	W	P		500	1	G	040902	N	0	7	☐
8	SB-1	524.2	02-02349-7	W	V	C	40	2	G	040902	N	0	7	☐

Part 3: Analysis Information

Test Items:

☐ *524.2*	Volatile Organic Compounds
☐ *7196*	Chromium (VI)
☐ *300.0*	Perchlorate, low level
☐ *200.7/6010*	Sodium, Na, by ICP
☐ *200.7/6010*	Potassium, K, by ICP
☐ *200.7/6010*	Calcium, Ca, by ICP
☐ *200.7/6010*	Magnesium, Mg, by ICP
☐ *200.7/6010*	Iron, Fe, by ICP
☐ *300.0*	Sulfate (SO_4^{--}), by IC
☐ *300.0/SM4500NO3C*	Nitrate (NO_3^-) as N by IC
☐ *300.0*	Chloride Cl^- by IC
☐ *SM2320B*	Carbonate
☐ *SM2320B*	Bicarbonate
☐ *9040/150.1*	pH
☐ *160.1*	Solids, Total Dissolved (TDS)
☐ *206.2/7060*	Arsenic, As, by GFAA
☐ *310.1*	Alkalinity
☐ *PAH-SIM*	PAH (NOAA)

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCHL	NA	K	CA	MG	FE	
1	TB-21	524.2	02-02349-8	W	X								☐
2	MW-21-5	524.2	02-02349-6-α	W	X								☐
	MW-21-5	Perchl	02-02349-6-β	W			X						☐
3	MW-21-4	524.2	02-02349-5-α	W	X								☐
	MW-21-4	Perchl	02-02349-5-β	W			X						☐
4	MW-21-3	524.2	02-02349-4-α	W	X								☐
	MW-21-3	Perchl	02-02349-4-β	W			X						☐
5	MW-21-2	524.2	02-02349-3-α	W	X								☐
	MW-21-2	Perchl	02-02349-3-β	W			X						☐
6	MW-21-1	524.2	02-02349-2-α	W	X								☐
	MW-21-1	Perchl	02-02349-2-β	W			X						☐
7	ER-21	524.2	02-02349-1-α	W	X								☐
	ER-21	Perchl	02-02349-1-β	W			X						☐
8	SB-1	524.2	02-02349-7	W	X								☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	SO4	NO3	CL	CARBONATE	BICARBON	PH	TDS	AS	
1	TB-21	524.2	02-02349-8	W									☐
2	MW-21-5	524.2	02-02349-6-α	W									☐
	MW-21-5	Perchl	02-02349-6-β	W									☐
3	MW-21-4	524.2	02-02349-5-α	W									☐
	MW-21-4	Perchl	02-02349-5-β	W									☐
4	MW-21-3	524.2	02-02349-4-α	W									☐
	MW-21-3	Perchl	02-02349-4-β	W									☐
5	MW-21-2	524.2	02-02349-3-α	W									☐
	MW-21-2	Perchl	02-02349-3-β	W									☐
6	MW-21-1	524.2	02-02349-2-α	W									☐
	MW-21-1	Perchl	02-02349-2-β	W									☐
7	ER-21	524.2	02-02349-1-α	W									☐
	ER-21	Perchl	02-02349-1-β	W									☐
8	SB-1	524.2	02-02349-7	W									☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	ALKALIN	SIM	
1	TB-21	524.2	02-02349-8	W			☐
2	MW-21-5	524.2	02-02349-6-α	W			☐
	MW-21-5	Perchl	02-02349-6-β	W			☐
3	MW-21-4	524.2	02-02349-5-α	W			☐
	MW-21-4	Perchl	02-02349-5-β	W			☐
4	MW-21-3	524.2	02-02349-4-α	W			☐
	MW-21-3	Perchl	02-02349-4-β	W			☐

5	MW-21-2	524.2	02-02349-3-α	W	☐
	MW-21-2	Perchl	02-02349-3-β	W	☐
6	MW-21-1	524.2	02-02349-2-α	W	☐
	MW-21-1	Perchl	02-02349-2-β	W	☐
7	ER-21	524.2	02-02349-1-α	W	☐
	ER-21	Perchl	02-02349-1-β	W	☐
8	SB-1	524.2	02-02349-7	W	☐

☐ Client"s Requirement: **PLEASE ~~RUN MS/MSD ON SAMPLE~~ #**

☐ **IF ENOUGH SAMPLE**

☐ **FOR 8270SIM, PLEASE INCLUDE 1,4-DIOXANE**

Login By En-Yu Paul Kou

Check By DY

APCL

Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel. (909) 590-1828 Fax (909) 590-1498

April 25, 2002

SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr. Suite 212
San Diego CA 92127

Dear Yu,

This package contains samples in our Service ID 02-2404 and your project is 00HW019 JPL. Enclosed please find:

(1) One original report.
(2) One original Chain of Custody.
(3) One diskette containing EDD Deliverable.
(4) One original of Level D Data Package Deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
SOTA Environmental
Attention: Yu Zeng
16835 W. Bernardo Dr, Ste. 212
San Diego CA 92127
Tel: (858)485-8100 Fax: (858)485-0812

Service ID #: 801-022404
Collected by: JNT/TAM
Collected on: 04/12/02

Received: 04/12/02
Extracted: N/A
Tested: 04/12-18/02
Reported: 04/19/02

Sample Description: Water from Pasadena, CA
Project Description: 00HW019 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result ER-22 02-02404-1	FB-22 02-02404-2	MW-22-1 02-02404-3	MW-22-2 02-02404-4
Dilution Factor				1	1	1	1
PERCHLORATE	E314	µg/L	4	<4	-	<4	<4
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	<0.5	0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	0.6	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1	-	-	-	0.3J
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	2.7	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	0.4J	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-22-3 02-02404-5	MW-22-4 02-02404-6	MW-22-3D 02-02404-7	TB-22 02-02404-8
Dilution Factor				1	1	1	1
PERCHLORATE	E314	µg/L	4	<4	<4	<4	-
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1	-	-	0.4J	2.7
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5
112TRICHLORO-122TRIFLUOROTHANE	524.2	µg/L	0.5	<0.5	-	<0.5	<0.5

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result ER-22 02-02404-1	MW-22-1 02-02404-3	MW-22-2 02-02404-4
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

† All results are reported on dry basis for soil samples.

Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Case Narrative

Project: JPL/00HW019

For SOTA Environmental

APCL Service No: 02-2404

1. Sample Identification

The sample identifications are listed in the following table:

SOTA Environmental Sample ID	APCL Sample ID
MW-22-4	02-02404-6
MW-22-3	02-02404-5
MW-22-3D	02-02404-7
ER-22	02-02404-1
TB-22	02-02404-8
FB-22	02-02404-2
MW-22-2	02-02404-4
MW-22-1	02-02404-3

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
7196 (Chromium (VI)),
E314 (Perchlorate, low level),

3. Holding Time

All samples were extracted, digested and analyzed within the holding times defined by the appropriate EPA methods of the analyses.

4. Preservation

All samples were preserved and stored according to the appropriate EPA methods.

5. Tele-log

None.

6. Anomaly

(1) SW8260B:

Methylene Chloride was detected in the Method Blank of batch02G2133 in the amount of 2.5 μg/L, exceeding 1 μg/L reporting limit. Methylene Chloride was also detected in the only affected sample TB-22 in the amount of 2.7 μg/L, due to lab contamination.

61000

"I certify that these data are technically accurate, complete, and in compliance with the terms and conditions of the contract, for other than the conditions detailed above. Release of the data contained in the hardcopy data package and its electronic data deliverable submitted on diskette had been authorized by the Laboratory Manager or her/his designee, as verified by the following signature."

Respectfully submitted,

Kevin Xie, Ph.D.,
QA/QC Director
Applied P & Ch Laboratory

61601

Applied P & Ch Laboratory

APCL

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chain of Custody

Please Print in pen Page 1 of 2

Client: SOTA ENV. TECH INC. Contact: MIKE SAYRE Tel #: 858-485-8100 Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DR. STE. 212 City: SAN DIEGO State: CA Zip code: 92127

Bill to: SOTA

Project Name/Code JPL Job # 00HW019 P.O. #

Project Address PASADENA, CALIFORNIA APCL Quotation #

Due Date: ☒regular ☐rush: ___ days ___ hours Sampled by: JNT/TAM

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: VOC's (5242)	Perchlorate (314.0)	TOT Cr (200.8)	Cr (VI) (7196)	Remarks
MW-22-4	MW-22-4	4/12/02	1107	WATER	—	1		X			LEVEL IV
MW-22-3	MW-22-3		1139		HCl	3	X				DATA PACKAGE
MW-22-3	MW-22-3		1139		—	1		X			
MW-22-3D	MW-22-3 Duplicates		1139		HCl	3	X				
MW-22-3D	MW-22-3 Duplicates		1139		—	1		X			
ER-22	EQUIP. RINSATE		1202		HCl	3	X				
ER-22	EQUIP. RINSATE		1202		HNO_3	1			X		
ER-22	EQUIP. RINSATE		1202		—	1		X		X	
TB-22	TRIP BLANK		1056		HCl	2	X				
FB-22	FIELD BLANK		1247		HCl	2	X				
MW-22-2	MW-22-2		1210		HCl	3	X				
MW-22-2	MW-22-2		1210		HNO_3	1			X		
MW-22-2	MW-22-2		1210		—	1		X		X	

2404

QC Requirement: ☐Regular; ☐QA/QC Report; ☐WIP; ☐Raw Data; ☐Extended Raw Data ☐CLP; ☐ACE ☐AFCEE ☐NEESA ___ (E, C or D); ☐Other _____ (Please specify)

Sample Disposal: ☐Return ☐Disposal by APCL ☐Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: ☐Intact; ☐Broken. Cooler Seal: ☐Intact; ☐Broken; ☐None. Tag # _____ Temperature: ☐Room ☐Cold (_____ °C).

Relinquished by [signature] Date/Time 4/12/02 / 1320 Received by [signature] Date/Time 4/12/02 / 1320

Relinquished by Date/Time / Received by Date/Time /

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Applied P & Ch Laboratory

APCL

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chain of Custody

Please Print in pen Page 2 of 2

Client: SOTA ENV. TECH INC. Contact: MIKE SAYRE Tel #: 858-485-8100 Fax #: 858-485-0812

Address: 16835 WEST BERNARDO DR. STE 212 City: SAN DIEGO State: CA Zip code: 92127

Bill to: SOTA

Project Name/Code JPL Job # 00HW019 P.O. #

Project Address PASADENA, CALIFORNIA APCL Quotation #

Due Date: [X] regular [ ] rush: ___ days ___ hours Sampled by: JNT/TAM

Field Sample ID No.	Sample Description	Date Collected	Time	Sample Matrix	Preservation	# of Containers	VOC's (5242)	Perchlorate (314.0)	Tot Cr (200.8)	Cr VI (7196)	Remarks
MW-22-1	MW-22-1	4/12/02	1241	WATER	HCl	3	X				LEVEL IV DATA
MW-22-1	MW-22-1		1241	~~HNO3~~	HNO_3	1			X		PACKAGE
MW-22-1	MW-22-1		1241		—	1		X		X	

Analysis Items

White – With report
Yellow – Lab copy
Pink – Originator

2104

QC Requirement: [ ] Regular; [ ] QA/QC Report; [ ] WIP; [ ] Raw Data; [ ] Extended Raw Data [ ] CLP; [ ] ACE [ ] AFCEE [ ] NEESA ___ (E, C or D); [ ] Other _____ (Please specify)

Sample Disposal: [ ] Return [ ] Disposal by APCL [ ] Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: [ ] Intact; [ ] Broken. Cooler Seal: [ ] Intact; [ ] Broken; [ ] None . Tag # _____ Temperature: [ ] Room [ ] Cold (_____ °C).

Relinquished by [signature] Date/Time 4/12/02 1320 Received by [signature] Date/Time 4/12/02 1320

Relinquished by Date/Time / Received by Date/Time /

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Applied P & Ch Laboratory
13760 Magnolia Ave., Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Receiving Checklist

APCL ServiceID: 2404 Client Name/Project: Sota

1. Sample Arrival

Date/Time Received 4/12/02 1320 Date/Time Opened 4/12/02 1320 By (name): Kenny

Custody Transfer: ☑ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☐ APCL Empl

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☐ Signed, dated? By:
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold ____ # Received 8
☑ CoC/Docs Zip-Locked under lid? ☐ Compos.#: _ ☑ #Samples OK?
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs):

3. Shipping Container/Cooler

☑ Cooler Used? # of 1 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 4.0

(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).

Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = ____ Preserved by: ☐ Client ☐ APCL ☐ Third Party

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☑ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number:
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☐ RUSH TAT: ____ ☑ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other:
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:_____)Date/Time:_____

Received/Checked by: Kenny Date: 12 Apr 2002 Time: 7:46 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [ucal.texfiles]smprcl.tex.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Login: Check List

02-02404 (1288_ 342) (4858100_ 342)

04/12/02

Part 1: General Information

☐ Company Information	Name:	*SOTA Environmental*
	Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
☐ Project Information	Project Description:	*JPL*
	Project #:	*00HW019*
☐ Billing Information	P.O. #:	
	Bill Address:	*16835 W. Bernardo Dr, Ste. 212 ,San Diego ,CA 92127*
	Lab Project ID:	*2002_0002*
	Client Database #:	*01*
☐ Receiving Information	Who Received Sample?	*Kenny*
	Receiving Date/Time:	*04/12/02 1320*
	COC No.	
☐ Shipping Information	Shipping Company	*by Client*
	Packing Information:	*Cooler/Ice Chester*
	Cooler Temperature:	*4.0 °C*
☐ Container Information	Container Provider:	*Client*
☐ Sampling Information	Sampling Person:	*JNT/TAM*
	Sampling Company:	*Client*
☐ Turn-Around-Time Option:		*Rush 5 working day(s)*
☐ QC Option:		*NEESA D*
☐ Disposal Option:		*Not specify*

61613

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Cont-tainer	Preser-vative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	MW-22-4	Perch	02-02404-6	W	P		500	1	G	041202	N	0	7	☐
2	MW-22-3	VOC	02-02404-5-α	W	V	C	40	3	G	041202	N	0	7	☐
	MW-22-3	Perch	02-02404-5-β	W	P		500	1	G	041202	N	0	7	☐
3	MW-22-3D	VOC	02-02404-7-α	W	V	C	40	3	G	041202	N	0	7	☐
	MW-22-3D	Perch	02-02404-7-β	W	P		500	1	G	041202	N	0	7	☐
4	ER-22	VOC	02-02404-1-α	W	V	C	40	3	G	041202	N	0	7	☐
	ER-22	CRVI/Perch	02-02404-1-β	W	P		500	1	G	041202	N	0	7	☐
5	TB-22	VOC	02-02404-8	W	V	C	40	2	G	041202	N	0	7	☐
6	FB-22	VOC	02-02404-2	W	V	C	40	2	G	041202	N	0	7	☐
7	MW-22-2	VOC	02-02404-4-α	W	V	C	40	3	G	041202	N	0	7	☐
	MW-22-2	CRVI/Perch	02-02404-4-β	W	P		500	1	G	041202	N	0	7	☐
8	MW-22-1	VOC	02-02404-3-α	W	V	C	40	3	G	041202	N	0	7	☐
	MW-22-1	CRVI/Perch	02-02404-3-β	W	P		500	1	G	041202	N	0	7	☐

Part 3: Analysis Information

Test Items:

☐	*524.2*	Volatile Organic Compounds
☐	*7196*	Chromium (VI)
☐	*300.0*	Perchlorate, low level
☐	*200.7/6010*	Sodium, Na, by ICP
☐	*200.7/6010*	Potassium, K, by ICP
☐	*200.7/6010*	Calcium, Ca, by ICP
☐	*200.7/6010*	Magnesium, Mg, by ICP
☐	*200.7/6010*	Iron, Fe, by ICP
☐	*300.0*	Sulfate (SO_4^{--}), by IC
☐	*300.0/SM4500NO3C*	Nitrate (NO_3^-) as N by IC
☐	*300.0*	Chloride Cl^- by IC
☐	*SM2320B*	Carbonate
☐	*SM2320B*	Bicarbonate
☐	*9040/150.1*	pH
☐	*160.1*	Solids, Total Dissolved (TDS)
☐	*206.2/7060*	Arsenic, As, by GFAA
☐	*310.1*	Alkalinity
☐	*PAH-SIM*	PAH (NOAA)

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCHL	NA	K	CA	MG	FE	
1	MW-22-4	Perch	02-02404-6	W			X						☐
2	MW-22-3	VOC	02-02404-5-α	W	X								☐
	MW-22-3	Perch	02-02404-5-β	W			X						☐
3	MW-22-3D	VOC	02-02404-7-α	W	X								☐
	MW-22-3D	Perch	02-02404-7-β	W			X						☐
4	ER-22	VOC	02-02404-1-α	W	X								☐
	ER-22	CRVI/Perch	02-02404-1-β	W		X	X						☐
5	TB-22	VOC	02-02404-8	W	X								☐
6	FB-22	VOC	02-02404-2	W	X								☐
7	MW-22-2	VOC	02-02404-4-α	W	X								☐
	MW-22-2	CRVI/Perch	02-02404-4-β	W		X	X						☐
8	MW-22-1	VOC	02-02404-3-α	W	X								☐
	MW-22-1	CRVI/Perch	02-02404-3-β	W		X	X						☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	SO4	NO3	CL	CARBONATE	BICARBON	PH	TDS	AS	
1	MW-22-4	Perch	02-02404-6	W									☐
2	MW-22-3	VOC	02-02404-5-α	W									☐
	MW-22-3	Perch	02-02404-5-β	W									☐
3	MW-22-3D	VOC	02-02404-7-α	W									☐
	MW-22-3D	Perch	02-02404-7-β	W									☐
4	ER-22	VOC	02-02404-1-α	W									☐
	ER-22	CRVI/Perch	02-02404-1-β	W									☐
5	TB-22	VOC	02-02404-8	W									☐
6	FB-22	VOC	02-02404-2	W									☐
7	MW-22-2	VOC	02-02404-4-α	W									☐
	MW-22-2	CRVI/Perch	02-02404-4-β	W									☐
8	MW-22-1	VOC	02-02404-3-α	W									☐
	MW-22-1	CRVI/Perch	02-02404-3-β	W									☐

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	ALKALIN	SIM	
1	MW-22-4	Perch	02-02404-6	W			☐
2	MW-22-3	VOC	02-02404-5-α	W			☐
	MW-22-3	Perch	02-02404-5-β	W			☐
3	MW-22-3D	VOC	02-02404-7-α	W			☐
	MW-22-3D	Perch	02-02404-7-β	W			☐
4	ER-22	VOC	02-02404-1-α	W			☐
	ER-22	CRVI/Perch	02-02404-1-β	W			☐
5	TB-22	VOC	02-02404-8	W			☐
6	FB-22	VOC	02-02404-2	W			☐
7	MW-22-2	VOC	02-02404-4-α	W			☐

	MW-22-2	CRVI/Perch	02-02404-4-β	W	☐
8	MW-22-1	VOC	02-02404-3-α	W	☐
	MW-22-1	CRVI/Perch	02-02404-3-β	W	☐

☐ Client's Requirement: PLEASE ~~RUN MS/MSD ON SAMPLE #~~

☐ IF ENOUGH SAMPLE

☐ FOR 8270SIM, PLEASE INCLUDE 1,4-DIOXANE

Login By En-Yu Paul Kou

Check By

616 . 6