



# Applied P & Ch Laboratory

# Chain of Custody

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

Please Print in pen Page 1 of 1

Client: SDTA ENVIRONMENTAL WEST. Contact: PAUL JEREZAS Tel #: 858-485-8100 Fax #: 858-485-0812  
Address: 16835 W. BEARWOOD DR. #212 City: SAN DIEGO State: CA Zip code: 92127  
Bill to: SDTA Job # 60HW019 P.O. #  
Project Name/Code: JRL APCL Quotation #  
Project Address: PASADENA, CA Sampled by: MES/JNT  
Due Date:  regular  rush: \_\_\_ days \_\_\_ hours

Field Sample ID No.	Sample Description	Date Collected	Sample Matrix	Preservation	# of Containers	Analysis Items	Remarks
TRIP BLANK		7/18/01	H <sub>2</sub> O	PER LAB	2	VOLs (524.2) PERCHLORATE (314) MS/MSD	
MW-19-5		7/18/01	H <sub>2</sub> O	PER LAB	4		ERA LEVEL IV (D)
MW-19-4		7/18/01	H <sub>2</sub> O	PER LAB	4		GA/QC
ER-19		7/18/01	H <sub>2</sub> O	PER LAB	4		
MW-19-3		7/18/01	H <sub>2</sub> O	PER LAB	8		
MW-19-2		7/18/01	H <sub>2</sub> O	PER LAB	4		
MW-19-2D		7/18/01	H <sub>2</sub> O	PER LAB	4		
MW-19-1		7/18/01	H <sub>2</sub> O	PER LAB	4		
MW-8		7/18/01	H <sub>2</sub> O	PER LAB	4		

# 4770

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data  CLP;  ACE  AFOBE  NEBSA \_\_\_ (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 # \_\_\_

Relinquished by [Signature] Date/Time 7/18/01 11:45 Received by [Signature] Date/Time 7/18/01 10:45

Relinquished by [Signature] Date/Time 7/18/01 Received by [Signature] Date/Time 7/18/01

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

# 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 #: 801-014729 Received: 07/16/01  
Collected by: MES/JNT Extracted: N/A  
Collected on: 07/16/01 Tested: 07/16-20/01  
Reported: 07/24/01

Sample Description: Water  
Project Description: Job#00HW019 JPL

## Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-20 01-04729-1	MW-20-1 01-04729-2	MW-20-2 01-04729-3
Perchlorate	E314	µg/L	4	<4	<4	<4
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	0.6	3.9
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-20	MW-20-1	MW-20-2
				01-04729-1	01-04729-2	01-04729-3
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	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
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-20-3 01-04729-4	MW-20-4 01-04729-5	Trip Blank 01-04729-6
Perchlorate	E314	µg/L	4	<4	<4	-
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	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
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-20-3 01-04729-4	MW-20-4 01-04729-5	Trip Blank 01-04729-6
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	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
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

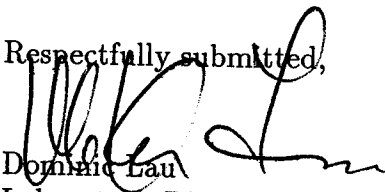
PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

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

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

Please Print in pen Page 1 of 1

Client: **SOTA ENVIRONMENTAL** Contact: **PAUL JEFFERS** Tel #: **858-485-8100** Fax #: **858-485-0812**

Address: **16835 W. BEARD RD. #212** City: **SAN DIEGO** State: **CA** Zip code: **92127**

Bill to: **SAVE AS ABOVE** Project Name/Code: **JPL** Job # **D04W019** P.O. #

Project Address: **JPL** APCL Quotation #

Due Date:  Regular  Rush: \_\_\_ days \_\_\_ hours Sampled by: **MCS/JNT**

Field Sample ID No.	Sample Description	Date Collected	Time	Sample Matrix	Preservation	# of Containers	Analysis Items				Remarks
MW-20-4		7/16/01	1035	H <sub>2</sub> O	PER LAB	5	✓	✓	✓	✓	GA/AC
MW-20-532		7/16/01	1110	H <sub>2</sub> O	PER LAB	5	✓	✓	✓	✓	REQUIREMENT
MW-20-2		7/16/01	1150	H <sub>2</sub> O	PER LAB	5	✓	✓	✓	✓	EPA LEVEL
MW-20-1		7/16/01	1225	H <sub>2</sub> O	PER LAB	5	✓	✓	✓	✓	IX (b)
ER-20		7/16/01	1125	H <sub>2</sub> O	PER LAB	5	✓	✓	✓	✓	
TRIF BLANK		7/16/01	---	H <sub>2</sub> O	HCl	2	✓	✓	✓	✓	

4729

White - With report  
Yellow - Lab copy  
Pink - Originator

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data  CLP;  ACE  APCBE  NESA \_\_\_ (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 7/16/01 11:52 Received by [Signature] Date/Time 7/16/01 13:21

Relinquished by [Signature] Date/Time 7/16/01 11:52 Received by [Signature] Date/Time 7/16/01 13:21

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Tel: (909) 590-1828 Fax: (909) 590-1498

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

# APCL Analytical Report

Service ID #: 801-014685

Received: 07/13/01

Collected by:

Extracted: N/A

Collected on: 07/13/01

Tested: 07/13-27/01

Reported: 07/27/01

Sample Description: Water

Project Description: Job#00HW019 JPL

## Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-3	MW-3-2	MW-3-3
				01-04685-1	01-04685-2	01-04685-3
Perchlorate	E314	µg/L	4	<4	<4	8.4
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	7.7
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	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
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	26.4
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-3	MW-3-2	MW-3-3
				01-04685-1	01-04685-2	01-04685-3
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	0.4J	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	<0.5	0.9
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	0.4J



# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-3-4 01-04685-4	MW-3-5 01-04685-5	Trip Blank 01-04685-6
Perchlorate	E314	µg/L	4	< 4	< 4	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	-	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	-	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	-	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	-	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	-	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	-	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	-	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	-	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	-	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	-	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	-	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Dichlorodifluoromethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,1-Dichloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dichloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,1-Dichloroethene	524.2	µg/L	0.5	<0.5	-	<0.5
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	-	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	-	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	-	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	-	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	-	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	-	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	-	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	-	<0.5
Ethylbenzene	524.2	µg/L	0.5	0.8	-	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	-	<0.5

# APCL Analytical Report

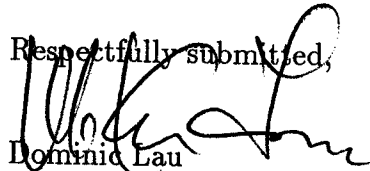
Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-3-4 01-04685-4	MW-3-5 01-04685-5	Trip Blank 01-04685-6
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	-	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	-	<0.5
Methylene chloride	524.2	µg/L	1	<1	-	2
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	-	<1
Naphthalene	524.2	µg/L	0.5	<0.5	-	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Styrene	524.2	µg/L	0.5	<0.5	-	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	-	<0.5
Toluene	524.2	µg/L	0.5	<0.5	-	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	-	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	-	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	-	<0.5
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	-	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	-	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	-	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	-	<0.5
o-Xylene	524.2	µg/L	0.5	0.5	-	<0.5
m/p-Xylene	524.2	µg/L	0.5	0.5J	-	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result			
				ER-3 01-04685-1	MW-3-2 01-04685-2	MW-3-3 01-04685-3	MW-3-4 01-04685-4
Chromium (VI)	7196	mg/L	0.01	<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.

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

# Chain of Custody

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

Please Print in pen Page 1 of 1

Client: SOTA ENVIRONMENTAL Contact: Paul Jeffers

Tel #: 858 485-8100 Fax #: 858 485-0812

Address: 11835 W. Beaumont Dr #112 City: San Diego

State: CA Zip code: 92127

Project Name/Code JP Job # 00Hw019 P.O. # \_\_\_\_\_

Project Address \_\_\_\_\_ APCL Quotation # \_\_\_\_\_

Due Date:  Regular  Rush: \_\_\_\_\_ days \_\_\_\_\_ hours Sampled by: \_\_\_\_\_

Analysis Items

White - With report  
Yellow - Lab copy  
Pink - Originator

Field Sample ID No.	Sample Description PS	Date Time Collected		Sample Matrix	Preservation	# of Containers	Analysis Items					Remarks					
	MW-3-5	7/13	0900	H <sub>2</sub> O	Refrs	1											
	MW-3-4	7/13	0925	H <sub>2</sub> O	Refrs	5											
	MW-3-3	7/13	0955	H <sub>2</sub> O	Refrs	5											
	MW-3-2	7/13	1020	H <sub>2</sub> O	Refrs	5											
	ER-3	7/13	0930	H <sub>2</sub> O	Refrs	5											
	TRIP Blank	7/13	---	H <sub>2</sub> O	HCl	2											
4685																	

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data  CLP;  ACE  AFCEE  NEBSA (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).

Reinquished by Don Nield Touse Date/Time 7/13/01 / Received by [Signature] Date/Time 7/13/01 /

Reinquished 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

**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 #: 801-014684 Received: 07/12/01  
 Collected by: Extracted: N/A  
 Collected on: 07/12/01 Tested: 07/13-17/01  
 Reported: 07/19/01  
 Sample Description: Water from UST Site 14133  
 Project Description: Job#00HW019 JPL

**Analysis of Water Samples**

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-5	MW-16
				01-04684-1	01-04684-2
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01
Dilution Factor				1	200
Perchlorate	E314	µg/L	4	<4	1,800
Volatile Organic Compounds					
Dilution Factor				1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	7.8
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	6.9
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
Dichlorodifluoromethane	524.2	µg/L	0.5	<0.5	<0.5
1,1-Dichloroethane	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dichloroethane	524.2	µg/L	0.5	<0.5	<0.5
1,1-Dichloroethene	524.2	µg/L	0.5	<0.5	0.4J
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	0.5J

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-5	MW-16
				01-04684-1	01-04684-2
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	5.6
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-5-D 01-04684-3	MW-16-D 01-04684-4	Trip Blank 01-04684-5
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	-
Dilution Factor				1	200	1
Perchlorate	E314	µg/L	4	<4	1,800	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	7.8	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	7.1	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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	0.5J	<0.5
1,1-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

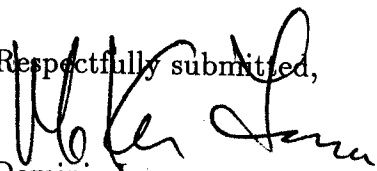
# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-5-D	MW-16-D	Trip Blank
				01-04684-3	01-04684-4	01-04684-5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	2
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	0.4J	0.3J	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	5.6	<0.5
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	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. "J": 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



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

Please Print in pen Page 1 of 1

Client: SOTA ENVIRONMENTAL Contact: Paul Jeffens Tel #: 858 485-8100 Fax #: 858 485-0812  
Address: 16835 W. BEAUMARCO DR. #1210 City: SAN DIEGO State: CA Zip code: 92127  
Bill to: SAME  
Project Name/Code: JPL Job # 00HW019 P.O. #

Project Address: \_\_\_\_\_ APCL Quotation # \_\_\_\_\_  
Due Date:  Regular  Rush: \_\_\_\_\_ days \_\_\_\_\_ hours Sampled by: \_\_\_\_\_

Field Sample ID No.	Sample Description	Date Collected	Time	Sample Matrix	Preservation	# of Containers	Analysis	Items	Remarks
	MW-5	7/12	1335	H <sub>2</sub> O	Refrigs	5	X	X	QA/QC
	MW-S-D	7/12	1335	H <sub>2</sub> O	Refrigs	5	X	X	REQUIREMENT
	TRIP BRACK	7/12	-	H <sub>2</sub> O	HCl	2	X		EPA LEVEL
	MW-1b	7/12	1450	H <sub>2</sub> O	Refrigs	5	X	X	IV (D)
	MW-1b-D	7/12	1450	H <sub>2</sub> O	Refrigs	5	X	X	
<b>4684</b>									

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data  CIP;  ACE  AFCEE  NESSA \_\_\_\_\_ (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 PAUL JEFFENS Date/Time 7/12/01 / 1700 Received by [Signature] Date/Time 7/12/01 / 1700

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

# 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 #: 801-014650  
 Collected by:  
 Collected on: 07/11/01  
 Received: 07/11/01  
 Extracted: N/A  
 Tested: 07/12-16/01  
 Reported: 07/20/01  
 Sample Description: Water from UST Site 14133  
 Project Description: 00HW019 JPL

## Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-6 01-04650-1	MW-10 01-04650-2	MW-13 01-04650-3
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01
Perchlorate	E314	µg/L	4	<4	24	216
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	0.6
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	0.4J	2.4
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	0.3J
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	0.4J	0.8	3.8
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	524.2	µg/L	0.5	0.4J	<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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	0.4J
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-6	MW-10	MW-13
				01-04650-1	01-04650-2	01-04650-3
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	0.4J
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	1.4	0.4J	0.7
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	11.9	30.3
Trichlorofluoromethane	524.2	µg/L	0.5	0.3J	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-10-D 01-04650-4	MW-20-5 01-04650-5	Trip Blank 01-04650-6
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	-
Perchlorate	E314	µg/L	4	30	<4	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	0.4J	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	0.9	<0.5	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

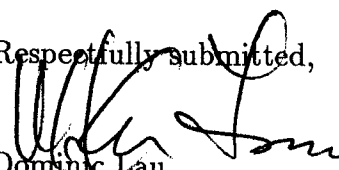
Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-10-D 01-04650-4	MW-20-5 01-04650-5	Trip Blank 01-04650-6
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	2.6
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	0.4J	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	12.6	<0.5	<0.5
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	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

# Chain of Custody

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

Please Print in pen Page 1 of 1

Client: **SOTA ENVIRONMENTAL** Contact: **PAUL JEFFENS** Tel #: **858 485-8100** Fax #: **858 485-0812**  
Address: **11835 W. BEAUMONT DR.** City: **SAN DIEGO** State: **CA.** Zip code: **92127**  
Bill to: **SAME** Project Name/Code: **JPL** Job # **00116019** P.O. #

Project Address: **APCL Quotation #**  
Due Date:  Regular  Rush: \_\_\_ days \_\_\_ hours Sampled by: **4650**  
Analysis Items: **175.2 VOC**, **200.2 TOTAL**, **1912 TMS**, **1200 TMS**, **0.5E/SE**

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Remarks
	MW-10	7/11	1207	H <sub>2</sub> O	Refrigs	5	QA/QC
	MW-10-D	7/11	1207	H <sub>2</sub> O	Refrigs	5	REQUIREMENT
	TRIP BLANK	7/11	—	H <sub>2</sub> O	NCI	2	EPA LEVEL
	MW-20-S	7/10	1235	H <sub>2</sub> O	Refrigs	5	IV (D)
	MW-13	7/11	1435	H <sub>2</sub> O	Refrigs	10	
	MW-6	7/11	1610	H <sub>2</sub> O	Refrigs	10	

# 4650

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data;  GLP;  ACE;  AFCEE;  NEBSA \_\_\_ (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;  Broken;  None. Tag # \_\_\_

Relinquished by **Paul Jeffens** Date/Time **7/11/01** / **11040** Received by **Paul Jeffens** Date/Time **7/11/01** / **11040**

Relinquished by **Paul Jeffens** Date/Time **7/11/01** / **11040** Received by **Paul Jeffens** Date/Time **7/11/01** / **11040**

APCL USE ONLY Service # **4650** Note: **4650**

Clients understand that all terms described in the proposal, 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

# 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 #: 801-014599

Collected by:

Collected on: 07/09/01

Received: 07/09/01

Extracted: N/A

Tested: 07/11-13/01

Reported: 07/20/01

Sample Description: Water

Project Description: 00HW019 JPL

## Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-21 01-04599-1	MW-21-1 01-04599-2	MW-21-2 01-04599-3
Perchlorate	E314	µg/L	4	<4	8	<4
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	1.5	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-21	MW-21-1	MW-21-2
				01-04599-1	01-04599-2	01-04599-3
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	0.8	0.9
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	15.5	<0.5
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result			
				MW-21-3 01-04599-4	MW-21-4 01-04599-5	MW-21-5 01-04599-6	Trip Blank 01-04599-7
Perchlorate	E314	µg/L	4	3J	<4	2J	-
<b>Volatile Organic Compounds</b>							
Dilution Factor				1	1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	0.4J	0.6	0.6	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	0.5J	0.4J	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	0.8	1.1	1.4	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	1.5	2.0	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	1.5	2.0	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<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-21-3 01-04599-4	MW-21-4 01-04599-5	MW-21-5 01-04599-6	Trip Blank 01-04599-7
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1	2
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	1.0	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	1.8	8.1	11.6	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	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
Trichlorofluoromethane	524.2	µg/L	0.5	0.7	0.6	0.6	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
m/p-Xylene	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

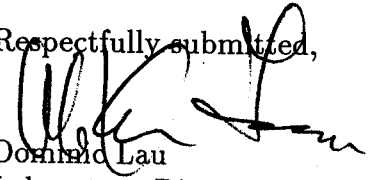
N.D.: Not Detected or less than the practical quantitation limit.

"-": 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



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

Please Print in pen Page 1 of 1

Client: **SOTA ENVIRONMENTAL** Contact: **Paul Jeffries** Tel #: **858 485-8100** Fax #: **858 485-8100 0812**  
Address: **1635 W. Branford # 212** City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_  
Bill to: **SAMB**

Project Name/Code: **JPL** Job # **60HW019** P.O. # \_\_\_\_\_  
Project Address \_\_\_\_\_ APCL Quotation # \_\_\_\_\_  
Due Date:  regular  rush: \_\_\_\_\_ days \_\_\_\_\_ hours Sampled by: \_\_\_\_\_

Field Sample ID No.	Sample Description	Date Collected	Sample Matrix	Preservation	# of Containers	Analysis Items	Remarks
MW-21-5		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	QA/QC
MW-21-4		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	REQUIREMENT
MW-21-3		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	EPA LEVEL
MW-21-2		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	IV (D)
MW-21-1		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	
EW-21		7/9	H <sub>2</sub> O	Packings	4	2.725 2024	
TRAP SPL		7/9	H <sub>2</sub> O	HCl	2	2.725 2024	

4599

QC Requirement:  Regular;  QA/QC Report;  WIP;  Raw Data;  Extended Raw Data  CLP;  ACE  AFCEE  NESA (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).

Reinquished by **Paul Jeffries** Date/Time **7/9/01 1750** Received by **Paul Jeffries** Date/Time **7-9-01/1750**

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 without delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.  
APCL Form 4-101, Ver. 4.0, Dec. 20, 1994. Root-Dir-[CUST.DAT\LAB\CHAIN-ROOT.TEX File\CUST.DAT\LAB\CHAIN\4.TEX

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

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

# APCL Analytical Report

Service ID #: 801-014565

Collected by:

Collected on: 07/06/01

Received: 07/06/01

Extracted: N/A

Tested: 07/06-11/01

Reported: 07/23/01

Sample Description: Water

Project Description: 00HW019 JPL

## Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-17 01-04565-1	MW-17-2 01-04565-2	MW-17-3 01-04565-3
Perchlorate	E314	µg/L	4	< 4	< 4	< 4
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Bromoform	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Bromomethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
n-Butylbenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
tert-Butylbenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	524.2	µg/L	0.5	< 0.5	< 0.5	0.6
Chlorobenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Chloroethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Chloroform	524.2	µg/L	0.5	< 0.5	0.4J	1.5
Chloromethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
2-Chlorotoluene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-17	MW-17-2	MW-17-3
				01-04565-1	01-04565-2	01-04565-3
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	<0.5	<0.5	0.8
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-17-4 01-04565-4	MW-17-5 01-04565-5	Trip Blank 01-04565-6
Perchlorate	E314	µg/L	4	10	22	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	0.3J	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	1	1.0	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

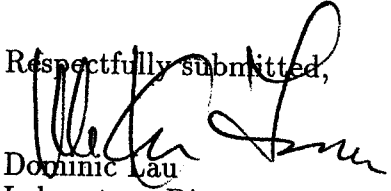
Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-17-4	MW-17-5	Trip Blank
				01-04565-4	01-04565-5	01-04565-6
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	2
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethane	524.2	µg/L	0.5	0.4J	0.5J	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	5.7	6.1	<0.5
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result			
				ER-17	MW-17-2	MW-17-3	MW-17-4
				01-04565-1	01-04565-2	01-04565-3	01-04565-4
Chromium (VI)	7196	mg/L	0.01	<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.

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

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**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 #: 801-014536

Collected by:

Collected on: 07/05/01

Received: 07/05/01

Extracted: N/A

Tested: 07/05-09/01

Reported: 07/23/01

Sample Description:

Project Description: 00HW019 JPL

**Analysis of Water Samples**

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-18	MW-18-2	MW-18-3
				01-04536-1	01-04536-2	01-04536-3
Perchlorate	E314	µg/L	4	<4	<4	<4
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	<0.5	<0.5	1.8
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	2.9	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5



# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				ER-18	MW-18-2	MW-18-3
				01-04536-1	01-04536-2	01-04536-3
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	2.9	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Methylene chloride	524.2	µg/L	1	<1	<1	<1
Methyl-t-Butyl ether (MTBE)	524.2	µg/L	1	<1	<1	<1
Naphthalene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Propylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Styrene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene	524.2	µg/L	0.5	20.6	0.8	0.4J
Trichlorofluoromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl chloride	524.2	µg/L	0.5	<0.5	<0.5	<0.5
o-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
m/p-Xylene	524.2	µg/L	0.5	<0.5	<0.5	<0.5

# APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-18-4 01-04536-4	MW-18-5 01-04536-5	Trip Blank 01-04536-6
Perchlorate	E314	µg/L	4	25	<4	-
Chromium (VI)	7196	mg/L	0.01	<0.01	<0.01	-
<b>Volatile Organic Compounds</b>						
Dilution Factor				1	1	1
Benzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Bromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
n-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	524.2	µg/L	0.5	3.7	<0.5	<0.5
Chlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chlorodibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform	524.2	µg/L	0.5	0.7	<0.5	<0.5
Chloromethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	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
cis-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene (Total)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	524.2	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	524.2	µg/L	0.5	<0.5	<0.5	<0.5