



Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710

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

March 22, 2004

GEOFON, Inc.
Attention: Brad Shojaee
22632 Golden Spring Dr Ste 270
Diamond Bar CA 91765

Dear Brad,

This package contains samples in our Service ID 04-1808 and your project : 04-4428.10 JPL-GW Mon.-1Q4.

Enclosed please find:

- (1) Original analytical report.
- (2) Original Chain of Custody.
- (3) One diskette containing EDD deliverable.
- (4) One original Level C Data Package Deliverable.

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Regina Kirakozova', is written over the typed name.

Regina Kirakozova
Associate QA/QC Director
Applied P & Ch Laboratory

Applied P & CH Laboratories

13760 Magnolia Ave. Chino CA 91710

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

APCL Analytical Report

Submitted to:
GEOFON, Inc.
Attention: Brad Shojaee
22632 Golden Spring Dr Ste 270
Diamond Bar CA 91765
Tel: (909)396-7662 Fax: (909)396-1455

Service ID #: 801-041808 Received: 02/25/04
Collected by: TM/JR Extracted: N/A
Collected on: 02/25/04 Tested: 02/25-03/05/04
Reported: 03/16/04

Sample Description: Water
Project Description: 04-4428.10 JPL-GW Mon-1Q04

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-7 04-01808-1	MW-8 04-01808-2
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01
Dilution Factor				50	1
PERCHLORATE	314.0	µg/L	4	1,630	32.6
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
2-BUTANONE	524.2	µg/L	10	<10	<10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	1.8	0.8
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	3.1	0.5J
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	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

Applied P & CH Laboratories

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result	
				MW-7	MW-8
				04-01808-1	04-01808-2
TRANS-1,2-DICHLOROETHENE	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	0.5	<0.5	<0.5
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	<10	<10
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	0.6	0.6
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
1,1,2,2-TRICHLORO-1,1,2,2-TRIFLUOROETHANE	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

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-10	MW-16	TB-10-2/25/04
				04-01808-3	04-01808-4	04-01808-5
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	-
Dilution Factor				1	200	1
PERCHLORATE	314.0	µg/L	4	5.1	7,690	-
VOLATILE ORGANIC COMPOUNDS						
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
2-BUTANONE	524.2	µg/L	10	<10	<10	<10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	94.7 (a)	<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	26.3	<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	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	0.8	<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	10.5	<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-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

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Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-10	MW-16	TB-10-2/25/04
				04-01808-3	04-01808-4	04-01808-5
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	0.5	< 0.5	< 0.5	< 0.5
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	< 1	< 1	< 1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	< 10	< 10	< 10
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	1.7	30.2	< 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	4.9	8.2	< 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
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	< 0.5	8.6	< 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.

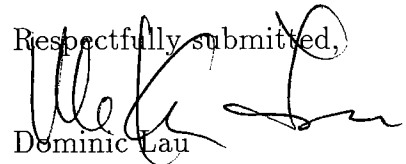
"-": Analysis is not required.

J: Reported between PQL and MDL.

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

(a) Analyzed with a dilution factor of 5.

Respectfully submitted,



Domonic Lau
Laboratory Director
Applied P & Ch Laboratory

Level C Data Package Deliverables

General Information

Project: 04-4428.10 JPL-GW Mon-1Q04

APCL Service ID: 04-1808



Applied P & Ch Laboratory

13760 Magnolia Ave. Chino, CA 91710

Telephone (909)590-1828

Fax (909)590-1498

Case Narrative

Project: JPL-GW Mon-1Q04/04-4428.10

For GEOFON, Inc.

APCL Service No: 04-1808

1. Sample Identification

The sample identifications are listed in the following table:

	GEOFON, Inc. Sample ID	APCL Sample ID
	MW-10	04-01808-3
	MW-8	04-01808-2
	MW-7	04-01808-1
	MW-16	04-01808-4
	TB-10-2/25/04	04-01808-5

2. Analytical Methodology

Samples are analyzed by EPA methods
524.2 (Volatile Organic Compounds),
7196A (Chromium (VI)),
314.0 (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,



Regina Kirakozova
Associate QA/QC Director
Applied P & Ch Laboratory



GEOFON
INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

Sharon Wells

0091

GEOFON'S LAB COORDINATOR: LAB COORDINATOR'S PHONE: LAB COORDINATOR'S FAX: LABORATORY SERVICE ID: LABORATORY CONTACT: MAIL REPORT (COMPANY NAME):

BRAD SHAPIRO 909 396 7462 909 396 1455 LABORATORY PHONE: KENNETH CHAN
PROJECT NAME: SR - GAO HON - 1004 Hls-10, Hls-8, Hls-7, Hls-9 PROJECT NUMBER: 04-4428.10 LABORATORY FAX: 909 590 1828 LABORATORY CONTACT: TONY FORD

SCOTT BAHMANN 909 396 7462 909 396 1455 PROJECT CONTACT: PROJECT PHONE NUMBER: PROJECT FAX: 13760 Magnolia Ave. ADDRESS: 22632 Golden Springs Dr., Ste 270
PROJECT ADDRESS: Pasadena, CA CLIENT: US NAVY 8MBIV CITY, STATE AND ZIP CODE: Diamond Bar, CA 91765

PROJECT MANAGER: TONY FORD PROJECT MANAGER'S PHONE: 909 396 7462 PROJECT MANAGER'S FAX: 909 396 1455 LABORATORY ADDRESS: Diamond Bar, CA 91765

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses			Comments
									521-2 (Ni/Cs)	254-0 (Cl/P)	250-8 (Co)	
1	MW-10	M	8/20/04	10:00 AM	10	III	Normal	X	X	X	MS/MSD	
2	MW-8		08/10		5			X	X	X		
3	MW-7		09/17		5			X	X	X		
4	MW-16		08/19		5			X	X	X		
5	TR-10-2/05/04				2			X				
6												
7												
8												
9												
10												

180

SAMPLES COLLECTED BY: TH + SN COURIER AND AIR BILL NUMBER: RECEIVED BY: DATE: TIME: COOLER TEMPERATURE UPON RECEIPT: SAMPLE'S CONDITION UPON RECEIPT:

REINQUISHED BY: 2-25-04 1:30 PM
2-25-04 1:45 PM

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

March 17, 2004

APR 23 2004

Kenny Chan
Applied P & Ch Laboratories
13760 Magnolia Ave.
Chino, CA 91710
TEL: (909) 590-1828
FAX: (909) 590-1498

RE: JPL-GW-Mon-IQ04, 04-4428.10

Attention: Kenny Chan

ELAP No.: 1838

NELAP No.: 02107CA

Workorder No.: 067776

Enclosed are the results for sample(s) received on March 11, 2004 by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,



Eddie F. Rodriguez
Laboratory Director

This cover letter and a case narrative are an integral part of this analytical report.

0001



Applied P & Ch Laboratories
Project: JPL-GW Mon.-IQ04, 04.4428.10

ATL Work Order: 067776

Table of Contents

ATL Work Order: 067776

Item	Pages
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Sample Receiving Items	0003-0007
Analytical Result Reports	0008-0040
Quality Control Reports	0041-0044
Raw Data:	
Method 200.8	0045-0204

CLIENT: Applied P & Ch Laboratories
Project: JPL-GW-Mon-IQ04, 04-4428.10
Lab Order: 067776

CASE NARRATIVE

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.



Applied P & Ch Laboratory

Subcontract Chain of Custody

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

Please Print in pen Page 1 of 3

Subcontract Lab: ATL Contact: Puri Tel #: (562) 989-4045 Fax #: (562) 989-4040
 Address: 3275 Walnut Avenue City: Signal Hill State: CA Zip code: 92807
 APCL Client: 04-1874 APCL Contact: Kennu Chan

Project Name/Code: JPL-GW-Mon-1204 Job #: 04-4428.10
 Analysis Items

BILL TO APCL Sub Quotation #
 Due Date: Regular Rush: days hours Sampled by: J.R.

Field Sample ID No.	Sample Description	Date	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items										Remarks		
	MW-10	2/25/04	0720	W	HNO ₃	2x500ml	X	X											White - With report Yellow - Lab copy Pink - Originator
	MW-8		0840			1x500ml	X	X											
	MW-7		0957				X	X											
	MW-16		1259				X	X											
	MW-5	2/24/04	0756			2x500ml	X	X										← MS/MSD	
	MW-15		0917			1x500ml	X	X										← MS/MSD	
	MW-13		1059				X	X											
	MW-6		1232				X	X											
	MW-12-3	2/23/04	1215				X	X											
	MW-12-2		1241				X	X											
	MW-12-1		1310				X	X											
	MW-24-2		0936			2x500ml	X	X										← MS/MSD	
	MW-22-3		0731			1x500ml	X	X											
	MW-22-2		0800				X	X											
	MW-22-1		0828				X	X											

QC Requirement: Regular; QA/QC Report; WIP; Raw Data; Extended Raw Data CLP; ACE AFCEE NEESA D (E, C or D); Other END (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 (5-6 °C).

Relinquished by [Signature] Date/Time 3/4/04 10830 Received by [Signature] Date/Time 3-11-04 1:15
 Relinquished by [Signature] Date/Time 3/13/04 1442 Received by [Signature] Date/Time 3/16/04 12:45

APCL USE ONLY Service # _____ Note:

Client understands 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.
 APCL Form 4-101, Ver. 4.0, Jan. 17, 2003.

Applied P & Ch Laboratory

Subcontract Chain of Custody

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

Please Print in pen Page 2 of 3

Subcontract Lab: ATL Contact: Ruri Tel #: (562) 989-4045 Fax #: (562) 989-4040
Address: 3235 Walnut Avenue City: Signal Hill State: CA
APCL Client: 04-1874 APCL Contact: Kennu Chan Zip code: 90807

Project Name/Code: JPL-GW-Non-1204 Job #: 04-442810
BILL TO APCL Sub Quotation #
Due Date: Regular rush: ___ days ___ hours Sampled by: J.R.

Field Sample ID No.	Sample Description	Date Time Collected		Sample Matrix	Preservation	# of Containers	Analysis Items										Remarks		
	EB-8-2/23/04	2/23/04	1227	W	HNO ₃	1x500ml													
	MW-11-3	2/19/04	1033																
	MW-11-2		1058																
	MW-11-1		1125																
	MW-4-3		0715			2x500ml													
	MW-4-2		0756			1x500ml													
	MW-4-1		0825																
	EB-6-2/19/04	✓	0810																
	MW-23-3	2/18/04	0718																
	MW-23-2		0820																
	MW-23-1		0914																
	Pupe-4-1 2004																		
	EB-5-2/18/04		0905																
	MW-23-4		0844																
	MW-24-4	2/20/04	0715	✓	✓														

White - With report
Yellow - Lab copy
Pink - Originator

Level 4 Package
and EDD

EMS/M&D

220.8Cr

QC Requirement: Regular; QA/QC Report; WIP; Raw Data; Extended Raw Data CLP; ACE AFCEE NEESA D (E, C or D); Other EDD (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 M. Chan Date/Time 3/11/04 10830 Received by Richard Steiner Date/Time 3-11-04 11:15
Relinquished by Richard Steiner Date/Time 3/11/04 11447 Received by _____ Date/Time 3/11/04 12:05

APCL USE ONLY Service # _____ Note: _____

APCL Form 4-181, Ver. 4.0 1-19-03
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.

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

Please Print in pen Page 3 of 3

Subcontract Lab: ATL Contact: Ruri Tel #: (562) 989-4045 Fax #: (562) 989-4040

Address: 3235 Walnut Avenue City: Signal Hill State: CA Zip code: 90807

APCL Client: 04-1874 APCL Contact: Kenny Chan Job #: 04-4428.10

Project Name/Code: JPL-GW-Non-1204 Sub Quotation #: _____

BILL TO APCL Due Date: Regular Rush: _____ days _____ hours Sampled by: J.R.

Analysis Items

White - With report
Yellow - Lab copy
Pink - Originator

Remarks

Field Sample ID No.	Sample Description	Date Collected	Time	Sample Matrix	Preservation	# of Containers	Analysis Items	Remarks
	MW-24-3	2/20/04	0808	W	HNO ₃	1x500ml		
	MW-24-1	↓	0128	↓	↓	↓		
	EB-7-2/20/04	↓	0849	↓	↓	↓		Level 4 Package anal EDD

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

Sample Disposition: 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 3/11/04 10830 Received by [Signature] Date/Time 3-11-04 1:15

Relinquished by [Signature] Date/Time 3/11/04 11442 Received by [Signature] Date/Time 3/11/04 12:48

APCL USE ONLY Service # _____ Note: _____

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Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories
Project: JPL-GW-Mon-IQ04, 04-4428.10
Lab Order: 067776
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
067776-001A	MW-10	Water	2/25/2004	3/11/2004	3/17/2004
067776-002A	MW-8	Water	2/25/2004	3/11/2004	3/17/2004
067776-003A	MW-7	Water	2/25/2004	3/11/2004	3/17/2004
067776-004A	MW-16	Water	2/25/2004	3/11/2004	3/17/2004
067776-005A	MW-5	Water	2/24/2004	3/11/2004	3/17/2004
067776-006A	MW-15	Water	2/24/2004	3/11/2004	3/17/2004
067776-007A	MW-13	Water	2/24/2004	3/11/2004	3/17/2004
067776-008A	MW-6	Water	2/24/2004	3/11/2004	3/17/2004
067776-009A	MW-12-3	Water	2/23/2004	3/11/2004	3/17/2004
067776-010A	MW-12-2	Water	2/23/2004	3/11/2004	3/17/2004
067776-011A	MW-12-1	Water	2/23/2004	3/11/2004	3/17/2004
067776-012A	MW-24-2	Water	2/23/2004	3/11/2004	3/17/2004
067776-013A	MW-22-3	Water	2/23/2004	3/11/2004	3/17/2004
067776-014A	MW-22-2	Water	2/23/2004	3/11/2004	3/17/2004
067776-015A	MW-22-1	Water	2/23/2004	3/11/2004	3/17/2004
067776-016A	EB-8-2/23/04	Water	2/23/2004	3/11/2004	3/17/2004
067776-017A	MW-11-3	Water	2/19/2004	3/11/2004	3/17/2004
067776-018A	MW-11-2	Water	2/19/2004	3/11/2004	3/17/2004
067776-019A	MW-11-1	Water	2/19/2004	3/11/2004	3/17/2004
067776-020A	MW-4-3	Water	2/19/2004	3/11/2004	3/17/2004
067776-021A	MW-4-2	Water	2/19/2004	3/11/2004	3/17/2004
067776-022A	MW-4-1	Water	2/19/2004	3/11/2004	3/17/2004
067776-023A	EB-6-2/19/04	Water	2/19/2004	3/11/2004	3/17/2004
067776-024A	MW-23-3	Water	2/18/2004	3/11/2004	3/17/2004
067776-025A	MW-23-2	Water	2/18/2004	3/11/2004	3/17/2004
067776-026A	MW-23-1	Water	2/18/2004	3/11/2004	3/17/2004
067776-027A	Dupe-4-1Q04	Water	2/18/2004	3/11/2004	3/17/2004
067776-028A	EB-5-2/18/04	Water	2/18/2004	3/11/2004	3/17/2004
067776-029A	MW-23-4	Water	2/18/2004	3/11/2004	3/17/2004

0003
0006
RA 3/22/04



CLIENT: Applied P & Ch Laboratories
Project: JPL-GW-Mon-IQ04, 04-4428.10
Lab Order: 067776
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
067776-030A	MW-24-4	Water	2/20/2004	3/11/2004	3/17/2004
067776-031A	MW-24-3	Water	2/20/2004	3/11/2004	3/17/2004
067776-032A	MW-24-1	Water	2/20/2004	3/11/2004	3/17/2004
067776-033A	EB-7-2/20/04	Water	2/20/2004	3/11/2004	3/17/2004



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-10

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/25/2004 7:20:00 AM

Lab ID: 067776-001A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	24		0.10	1.0	µg/L	1	3/16/2004 10:40:35 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H - Samples exceed holding time

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Results are wet unless otherwise specified

0008



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-8

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/25/2004 8:40:00 AM

Lab ID: 067776-002A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	4.0		0.10	1.0	µg/L	1	3/16/2004 10:50:54 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Page 2 of 33

Results are wet unless otherwise specified

0009



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-7

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/25/2004 9:57:00 AM

Lab ID: 067776-003A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	8.2		0.10	1.0	µg/L	1	3/16/2004 10:53:25 A

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 H-Samples exceed holding time

Results are wet unless otherwise specified

0010



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-16

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/25/2004 12:59:00 PM

Lab ID: 067776-004A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	5.7		0.10	1.0	µg/L	1	3/16/2004 10:55:56 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0011



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-5

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/24/2004 7:56:00 AM

Lab ID: 067776-005A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	5.1		0.10	1.0	µg/L	1	3/16/2004 11:18:55 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0012



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-15

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/24/2004 9:17:00 AM

Lab ID: 067776-006A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	1.3		0.10	1.0	µg/L	1	3/16/2004 10:58:28 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0013



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-13

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/24/2004 10:59:00 AM

Lab ID: 067776-007A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	63		0.10	1.0	µg/L	1	3/16/2004 11:06:10 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0014



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-6

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/24/2004 12:32:00 PM

Lab ID: 067776-008A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	10		0.10	1.0	µg/L	1	3/16/2004 11:08:43 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0015



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-12-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 12:15:00 PM

Lab ID: 067776-009A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	0.7	J	0.10	1.0	µg/L	1	3/16/2004 11:11:16 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0016



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-12-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 12:41:00 PM

Lab ID: 067776-010A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	4.4		0.10	1.0	µg/L	1	3/16/2004 11:13:50 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0017



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-12-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 1:10:00 PM

Lab ID: 067776-011A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	9.5		0.10	1.0	µg/L	1	3/16/2004 11:16:24 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-24-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 9:36:00 AM

Lab ID: 067776-012A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	2.3		0.10	1.0	µg/L	1	3/16/2004 12:18:28 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0019



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-22-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 7:31:00 AM

Lab ID: 067776-013A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	6.6		0.10	1.0	µg/L	1	3/16/2004 11:23:50 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0020



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-22-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 8:00:00 AM

Lab ID: 067776-014A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Bach: R36160			PrepDate:			
Chromium	4.7		0.10	1.0	µg/L	1	3/16/2004 11:26:18 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0021



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-22-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 8:28:00 AM

Lab ID: 067776-015A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	6.8		0.10	1.0	µg/L	1	3/16/2004 11:28:47 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0022



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: EB-8-2/23/04

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/23/2004 12:27:00 PM

Lab ID: 067776-016A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	0.3	J	0.10	1.0	µg/L	1	3/16/2004 11:36:26 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0023



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-11-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 10:33:00 AM

Lab ID: 067776-017A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	4.0		0.10	1.0	µg/L	1	3/16/2004 11:38:55 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0024



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-11-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 10:58:00 AM

Lab ID: 067776-018A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	3.4		0.10	1.0	µg/L	1	3/16/2004 11:41:26 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0025



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-11-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 11:25:00 AM

Lab ID: 067776-019A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	3.7		0.10	1.0	µg/L	1	3/16/2004 11:43:56 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0026



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-4-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 7:15:00 AM

Lab ID: 067776-020A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8	(EPA 200.8)	Analyst: NS		
RunID: ICP4_040316E	QC Batch: 17423			PrepDate: 3/15/2004			
Chromium	0.3	J	0.10	1.0	µg/L	1	3/16/2004 3:43:56 PM

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0027



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-4-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 7:56:00 AM

Lab ID: 067776-021A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	6.7		0.10	1.0	µg/L	1	3/16/2004 11:46:28 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0028



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-4-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 8:25:00 AM

Lab ID: 067776-022A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316A	QC Batch: R36160			PrepDate:			
Chromium	4.4		0.10	1.0	µg/L	1	3/16/2004 11:48:59 A

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0029



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: EB-6-2/19/04

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/19/2004 8:10:00 AM

Lab ID: 067776-023A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	1.7		0.10	1.0	µg/L	1	3/16/2004 12:28:19 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0030



Advanced Technology
Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-23-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004 7:18:00 AM

Lab ID: 067776-024A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	5.2		0.10	1.0	µg/L	1	3/16/2004 12:30:48 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0031



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-23-2

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004 8:20:00 AM

Lab ID: 067776-025A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Bach: R36161			PrepDate:			
Chromium	5.9		0.10	1.0	µg/L	1	3/16/2004 12:33:18 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0032



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-23-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004 9:14:00 AM

Lab ID: 067776-026A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8		Analyst: NS		
RunID: ICP4_040316B	QC Bach: R36161			PrepDate:			
Chromium	8.1		0.10	1.0	µg/L	1	3/16/2004 12:35:48 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0033



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: Dupe-4-1Q04

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004

Lab ID: 067776-027A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	5.0		0.10	1.0	µg/L	1	3/16/2004 12:43:26 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0034



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: EB-5-2/18/04

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004 9:05:00 AM

Lab ID: 067776-028A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	1.6		0.10	1.0	µg/L	1	3/16/2004 12:45:57 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H - Samples exceed holding time

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Results are wet unless otherwise specified

0035



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-23-4

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/18/2004 8:44:00 AM

Lab ID: 067776-029A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Bach: R36161			PrepDate:			
Chromium	3.3		0.10	1.0	µg/L	1	3/16/2004 12:48:29 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0036



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-24-4

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/20/2004 7:15:00 AM

Lab ID: 067776-030A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	1.5		0.10	1.0	µg/L	1	3/16/2004 12:51:00 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0037



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-24-3

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/20/2004 8:08:00 AM

Lab ID: 067776-031A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	3.6		0.10	1.0	µg/L	1	3/16/2004 12:53:33 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0038



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: MW-24-1

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/20/2004 7:28:00 AM

Lab ID: 067776-032A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Bach: R36161			PrepDate:			
Chromium	5.8		0.10	1.0	µg/L	1	3/16/2004 12:56:06 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

Results are wet unless otherwise specified

0039



Advanced Technology Laboratories

Date: 17-Mar-04

CLIENT: Applied P & Ch Laboratories

Client Sample ID: EB-7-2/20/04

Lab Order: 067776

Project: JPL-GW-Mon-IQ04, 04-4428.10

Collection Date: 2/20/2004 8:49:00 AM

Lab ID: 067776-033A

Matrix: WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			EPA 200.8			Analyst: NS	
RunID: ICP4_040316B	QC Batch: R36161			PrepDate:			
Chromium	1.8		0.10	1.0	µg/L	1	3/16/2004 12:58:39 P

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level H-Samples exceed holding time

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Results are wet unless otherwise specified

0040





CLIENT: Applied P & Ch Laboratories
Work Order: 067776
Project: JPL-GW-Mon-IQ04, 04-4428.10

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: MB-R36160	SampType: MBLK	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: ZZZZZ	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: MB-R36161	SampType: MBLK	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: ZZZZZ	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536531						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: MB-17423	SampType: MBLK	TestCode: 200.8_W	Units: µg/L	Prep Date: 3/15/2004	Run ID: ICP4_040316E						
Client ID: ZZZZZ	Batch ID: 17423	TestNo: EPA 200.8	(EPA 200.8)	Analysis Date: 3/16/2004	SeqNo: 536570						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									

Sample ID: LCS-R36160	SampType: LCS	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: ZZZZZ	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.34	1.0	10	0	103	85	115	0	0		

Sample ID: LCS-R36161	SampType: LCS	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: ZZZZZ	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536530						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.56	1.0	10	0	106	85	115	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits DO- Surrogate dilute out
 J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank H - Sample exceeded holding time
 R - RPD outside accepted recovery limits Calculations are based on raw values

0041



Advanced Technology
Laboratories

3275 Walnut Avenue

Signal Hill, CA 90755

Tel: 562 989-4045

Fax: 562 989-4040

CLIENT: Applied P & Ch Laboratories
Work Order: 067776
Project: JPL-GW-Mon-IQ04, 04-4428.10

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: LCS-17423	SampType: LCS	TestCode: 200.8_W	Units: µg/L	Prep Date: 3/15/2004	Run ID: ICP4_040316E						
Client ID: ZZZZZ	Batch ID: 17423	TestNo: EPA 200.8	(EPA 200.8)	Analysis Date: 3/16/2004	SeqNo: 536569						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	10.02	1.0	10	0	100	85	115	0	0		
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Sample ID: 067776-001AMS	SampType: MS	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-10	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	32.85	1.0	10	23.97	88.8	70	130	0	0		
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Sample ID: 067776-005AMS	SampType: MS	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-5	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536497						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	13.79	1.0	10	5.09	87	70	130	0	0		
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Sample ID: 067776-012AMS	SampType: MS	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: MW-24-2	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536517						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	11.58	1.0	10	2.306	92.8	70	130	0	0		
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Sample ID: 067776-020AMS	SampType: MS	TestCode: 200.8_W	Units: µg/L	Prep Date: 3/15/2004	Run ID: ICP4_040316E						
Client ID: MW-4-3	Batch ID: 17423	TestNo: EPA 200.8	(EPA 200.8)	Analysis Date: 3/16/2004	SeqNo: 536567						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	9.975	1.0	10	0.3125	96.6	70	130	0	0		
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Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits DO- Surrogate dilute out
 J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank H - Sample exceeded holding time
 R - RPD outside accepted recovery limits Calculations are based on raw values

0042

Advanced Technology
Laboratories

3275 Walnut Avenue

Signal Hill, CA 90755

Tel: 562 989-4045

Fax: 562 989-4040

CLIENT: Applied P & Ch Laboratories
Work Order: 067776
Project: JPL-GW-Mon-IQ04, 04-4428.10

ANALYTICAL QC SUMMARY REPORT**TestCode: 200.8_W**

Sample ID: 067776-001AMSD	SampType: MSD	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-10	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536498						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	32.63	1.0	10	23.97	86.7	70	130	32.85	0.657	20	

Sample ID: 067776-005AMSD	SampType: MSD	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-5	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536498						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.82	1.0	10	5.09	87.3	70	130	13.79	0.203	20	

Sample ID: 067776-012AMSD	SampType: MSD	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: MW-24-2	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536518						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.67	1.0	10	2.306	93.6	70	130	11.58	0.723	20	

Sample ID: 067776-020AMSD	SampType: MSD	TestCode: 200.8_W	Units: µg/L	Prep Date: 3/15/2004	Run ID: ICP4_040316E						
Client ID: MW-4-3	Batch ID: 17423	TestNo: EPA 200.8	(EPA 200.8)	Analysis Date: 3/16/2004	SeqNo: 536568						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	14.69	1.0	10	0.3125	144	70	130	9.975	38.2	20	SR

Sample ID: 067776-020ADUP	SampType: DUP	TestCode: 200.8_W	Units: µg/L	Prep Date: 3/15/2004	Run ID: ICP4_040316E						
Client ID: MW-4-3	Batch ID: 17423	TestNo: EPA 200.8	(EPA 200.8)	Analysis Date: 3/16/2004	SeqNo: 536571						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.56	1.0	0	0	0	0	0	0.3125	0	20	J

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

DO- Surrogate dilute out

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

H - Sample exceeded holding time

R - RPD outside accepted recovery limits

Calculations are based on raw values

0043



Advanced Technology
Laboratories

3275 Walnut Avenue

Signal Hill, CA 90755

Tel: 562 989-4045

Fax: 562 989-4040

CLIENT: Applied P & Ch Laboratories
Work Order: 067776
Project: JPL-GW-Mon-IQ04, 04-4428.10

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: 067776-001ADUP	SampType: DUP	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-10	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536572						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	24.1	1.0	0	0	0	0	0	23.97	0.524	20	
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Sample ID: 067776-005ADUP	SampType: DUP	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316A						
Client ID: MW-5	Batch ID: R36160	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536573						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	4.76	1.0	0	0	0	0	0	5.09	6.70	20	
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Sample ID: 067776-012ADUP	SampType: DUP	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: MW-24-2	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536582						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	2.452	1.0	0	0	0	0	0	2.306	6.14	20	
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Sample ID: 067776-033ADUP	SampType: DUP	TestCode: 200.8_W	Units: µg/L	Prep Date:	Run ID: ICP4_040316B						
Client ID: EB-7-2/20/04	Batch ID: R36161	TestNo: EPA 200.8		Analysis Date: 3/16/2004	SeqNo: 536583						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	1.786	1.0	0	0	0	0	0	1.838	2.87	20	
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Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values

DO- Surrogate dilute out
H - Sample exceeded holding time

0044